

INNOVATION IN AMERICA (PART I AND II)

HEARINGS BEFORE THE SUBCOMMITTEE ON COURTS, INTELLECTUAL PROPERTY, AND THE INTERNET OF THE COMMITTEE ON THE JUDICIARY HOUSE OF REPRESENTATIVES ONE HUNDRED THIRTEENTH CONGRESS FIRST SESSION

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INNOVATION IN AMERICA (PART I): THE ROLE OF COPYRIGHTS

THURSDAY, JULY 25, 2013

HOUSE OF REPRESENTATIVES

SUBCOMMITTEE ON COURTS, INTELLECTUAL PROPERTY,
AND THE INTERNET

COMMITTEE ON THE JUDICIARY

Washington, DC.

The Subcommittee met, pursuant to call, at 9:35 a.m., in room 2141, Rayburn House Office Building, the Honorable Bob Goodlatte presiding.

Present: Representatives Marino, Goodlatte, Poe, Chaffetz, Farenthold, Holding, Collins, DeSantis, Smith of Missouri, Watt, Conyers, Chu, Deutch, Bass, Richmond, DelBene, Jeffries, Nadler, Lofgren, and Jackson Lee.

Staff Present: (Majority) Joe Keeley, Chief Counsel; Olivia Lee, Clerk; and (Minority) Stephanie Moore, Minority Counsel.

Mr. GOODLATTE. Good morning. The Subcommittee on Courts, Intellectual Property, and the Internet will come to order.

And, without objection, the Chair is authorized to declare recesses of the Subcommittee at any time.

And we welcome all of our witnesses today.

I will say a word about our Subcommittee Chairman, my dear friend, Howard Coble, who had a hernia operation earlier this week. And so we have him in our prayers and expect to see him back here very soon.

I will start with my opening statement and then turn to the Ranking Member of the Subcommittee, Mr. Watt, for his opening statement.

This morning, the Subcommittee will hear from several individuals involved in the creation of copyrighted works. Next week, the Subcommittee will hear from those involved in the technology sector. These two important components of our economy have a unique symbiotic relationship and are responsible for significant innovation in America. Today, we focus on the role of copyrights in U.S. innovation.

To be sure, according to the Framers of our Nation, the very purpose of granting copyrights was to promote innovation. Article 1, Section 8, Clause 8 of the United States Constitution contains the foundation of our Nation's copyright laws. It allows Congress to

provide to creators for limited times the right to exclusively use their writings and inventions.

The copyright clause was not a controversial provision. In *Federalist* No. 43, James Madison declared that “the utility of this power will scarcely be questioned.” Indeed, this provision was one of the few that were unanimously adopted by the Constitutional Convention. The Framers firmly believed that granting authors exclusive rights would establish the incentive for them to innovate. They believed that this financial incentive was necessary to promote the progress of science and useful arts. And they were right.

Today, America is the most innovative and creative Nation in the world, thanks in no small part to the Framers’ foresight. U.S. copyright owners have created millions of high-skilled, high-paying U.S. jobs, have contributed billions to our economy, and have led to a better quality of life with rich entertainment and cultural experiences for citizens.

However, from time to time, it is important to stop and listen to what our Nation’s creators have to say about whether the incentives are still working to encourage innovation. This Committee’s review of U.S. copyright laws provides the perfect opportunity to do just that. During today’s hearing, we will take testimony from copyright owners who continue to produce the fruit of innovation that was envisioned when the Framers planted the first seed.

I thank the witnesses for coming today and look forward to hearing their testimonies.

And I am now pleased to recognize the Ranking Member, the gentleman from North Carolina, Mr. Watt.

Mr. WATT. Thank you, Mr. Chairman.

And I also want to thank you for launching this comprehensive review of the U.S. copyright law and the challenges of the digital age. I believe that this is a very important undertaking and that we have a unique opportunity to not only advance the debate in this area but to guide it in the right direction.

In my mind, a comprehensive review starts with a fundamental appreciation of the constitutional framework of copyright law and policy. By reexamining the first principles that gave life to copyright protection, we can better develop policy that ensures that those principles are honored.

Today’s panel represents individual authors and creators from diverse segments of America that rely on copyright. It is not only helpful but important that we hear directly from creators on how copyright law and policy is working for them.

There can be little doubt that creativity and innovation are at an apex in the 21st century and that many economic interests are intertwined with the interests and livelihoods of creators. But copyright law and policy should not be about preserving existing business models, nor should it be about accommodating emerging business models. Ensuring that the intellectual labor of our creative communities is appropriately stimulated and compensated will guarantee that the public will continue to benefit from the enrichment the creators provide.

Recognizing that policy should develop around the creator is sometimes easier said than done. We would be naive to not acknowledge that there are entrenched interests that cannot be dis-

regarded in this review. But a careful examination of the constitutional and historical underpinnings of U.S. copyright law is a start.

My vision of this comprehensive review also includes an assessment of the international copyright framework. Appreciating that framework in this global digital environment will equip us with a better understanding of how best to reinforce our constitutional objectives. It also provides perspective on how and why our policies have developed historically and where and why those policies may have gone astray.

One area where copyright law has strayed from both our constitutional foundations and international norms concerns the recognition of a performance right in sound recordings. I and other members of this panel have long advocated for, and have the scars to show for it, a historical correction of this anomaly.

That is why today I am announcing my intention to introduce and circulate to my colleagues and ask them to join me as original co-sponsors of a bill that simply recognizes a performance right in sound recordings. And I plan to do this before the August recess.

We have been talking about this for a while, and I think it is time for us to act on it. I believe that doing so will highlight how the law can take the wrong turn if policymakers fail to embrace the principles embodied in the constitutional protection of intellectual property.

The story of performance rights, although related to the field of music, is instructive in other areas of copyright, as well. As we continue our comprehensive review of copyright, I think that that story is a compelling one, one that reflects a departure from centering policy development on the intellectual labors of artists and responding instead to market forces that, while relevant, should not be in a position to completely extinguish rights recognized and honored internationally.

On my travel day, I usually pick up my iPod and move it from Washington back to North Carolina, from North Carolina back to Washington. And I was reminded this morning when I picked it up to put it in my pocket, I love this iPod, but it is just a piece of metal unless it has some content on it. It is critical, it is important, but without the creative content to put on it, it is worthless.

So we need to get on with recognizing the performance right, and I think it will have some real impact for American musical artists. And it won't be extreme; it will be just a fair thing to do.

This lack of recognition denies artists access to performance rights royalties already earned offshore. These funds sit unclaimed due to our inability to simply afford these artists what they deserve: legal recognition of a performance right.

I think, as we continue our review, we will see that in other areas, as well. When we have robust protections for the rights of the creators, this will incentivize the parties to negotiate in good faith, enter into compensation agreements domestically, and heighten the public's access and enjoyment of the products of the creative community.

I look forward to this discussion and the coming discussions that we will be having with other aspects of tech and content. And I thank the Chair again for convening the hearing.

I yield back.

Mr. GOODLATTE. I thank the gentleman for his opening statement and for his substantial interest in this issue and the contributions that he has made.

We have a very distinguished panel today, and I will begin by swearing in our witnesses, as is the custom of this Committee.

So if you would all please rise.

[Witnesses sworn.]

Mr. GOODLATTE. Let the record reflect that the witnesses answered in the affirmative.

They may be seated.

Each witness' written statement will be entered into the record in its entirety, and I ask that each witness summarize their testimony in 5 minutes or less.

To help you stay within that time, there is a timing light on your table. When the light switches from green to yellow, you will have 1 minute to conclude your testimony. When the light turns red, it signals the witness' 5 minutes have expired.

Our first witness today is Ms. Sandra Aistars, Executive Director of the Copyright Alliance, a nonprofit, nonpartisan organization established in 2006. Prior to joining the Alliance in January of 2011, Ms. Aistars served as Vice President and Associate General Counsel at Time Warner for 7 years, where she coordinated the company's intellectual property strategies. Before her time at Time Warner, she spent 12 years as an attorney working on intellectual property and technology issues at Weil, Gotshal & Manges. Ms. Aistars received her J.D. from the University of Baltimore School of Law and her bachelors degree in political science, history, and philosophy from Bard College.

Our second witness is Mr. Gene Mopsik, Executive Director of the American Society of Media Photographers, where he oversees the Society's membership, financial, and legislative matters. He represents ASMP at events throughout the country and internationally and works closely with the Society's board of directors. Mr. Mopsik received his bachelors degree in economics from Wharton School at the University of Pennsylvania.

Our third witness is Mr. Tor Hansen, co-owner and co-founder of Redeye Distribution and Yep Roc Records. Redeye Distribution was founded in 1996 and has grown to be one of the largest independently owned music distribution companies in the United States. Yep Roc Records was founded a year later in 1997. Prior to starting his own company, Mr. Hansen worked as Director of Merchandising at Rounder Records Distribution, Hear Music, and Planet Music/Borders Group. Mr. Hansen received his bachelors degree from West Chester University in West Chester, Pennsylvania.

Our fourth witness today is Mr. John Lapham, Senior Vice President and General Counsel of Getty Images, Incorporated, where he manages the global team and counsels the company on issues regarding disputes, transactions, and intellectual property. Mr. Lapham previously served as Vice President of Business and Legal Affairs at Getty Images, where he managed the company's licensing and intellectual property matters. He received his J.D. from the University of Washington School of Law and his bachelor's degree in political science from Southern Illinois University.

Our fifth and final witness is Mr. William Sherak, President of Stereo D, a 2D-to-3D movie conversion company. The company was recently named as one of the world's most innovative companies in March 2013. Mr. Sherak co-founded Stereo D in 2009 and, in less than 3 years, grew the company from only 15 employees to an international staff of more than 1,000. Prior to starting his own company, Mr. Sherak worked at Blue Star Entertainment and received his education from the University of Denver.

Welcome to you all. Apologize to any of you whose names I mispronounced.

And, Ms. Aistars, do I have your name right or——

Ms. AISTARS. You have my name right.

Mr. GOODLATTE. Correct. Wonderful. We will start with you.

Ms. AISTARS. Thanks very much.

Mr. GOODLATTE. You want to hit that button on the microphone.

**TESTIMONY OF SANDRA AISTARS, EXECUTIVE DIRECTOR,
COPYRIGHT ALLIANCE**

Ms. AISTARS. Thanks very much. I thank Chairman Goodlatte, Subcommittee Chairman Coble, Ranking Member Watt for this opportunity to testify. And we send our wishes for a speedy recovery to the Subcommittee Chairman.

Our members commend the Committee for undertaking this review. And, as Chairman Goodlatte mentioned, today you are hearing about the creative community's contributions to innovation, and next week you will hear about technology's contributions.

And while I believe it is important to hear separately from all the stakeholders, I want to say at the outset that the creative community does not view copyright and technology as warring concepts in need of balancing. To the contrary, we are partners and collaborators with the technology community. And, in many instances, we are both authors of creative works and technology innovators ourselves.

A robust and up-to-date Copyright Act is important to all of us. And we must not lose sight of the fact that the ultimate beneficiary of such an act is the public at large. Semantic arguments aside, society cannot benefit from cultural works if the primary investors in these works, the authors themselves, are not served and protected.

Copyright, in this regard, is a unique form of property because it comes from an individual's own creativity, their hard work, and their talents. It is not something that you inherit through the happenstance of birth or good fortune. And, in many ways, it therefore embodies the American dream.

And I can speak to this personally because I am a first-generation American, and my parents were refugees to the United States. My father is a visual artist and an author, and he supported our family in a middle-class household through his work as a visual artist.

Most copyright owners in the United States are people just like my father. They are neither famous nor wealthy. They are just normal people trying to make a living or supplement a basic living by using their talents. And they make our communities, our Nation, and the whole world a much richer place to live.

But, unfortunately, the experiences of these people are the ones that are least often heard. Eric Hart, who is one of our grassroots members, is a prop maker from Burlington, North Carolina. And he invested several years of research and photographed over 500 images to publish his first book, entitled, “The Prop Building Guidebook: For Theatre, Film, and TV.” He made much of the information available on his Web site for free, and, unfortunately, but not surprisingly, as soon as the book was released, it began to be pirated and distributed on sites for free download, with advertising dollars coming from the most famous brands in America supporting those sites.

I don’t know any way to define Eric’s experience other than “exploitative.” We need to maintain a framework of laws that makes it worthwhile for people like Eric to invest the time, labor, and talent to share his knowledge with others.

And I personally have chosen to defend copyright because, in my mind, it is the body of law that turbocharges the First Amendment. Justice Sandra Day O’Connor put it a little bit more eloquently, calling it the “engine of free expression.” But by granting the individual author the rights to his work, you lay the groundwork for new voices to thrive without having to rely on outside subsidies or outside influences in their writing and creating.

I think there is little argument that copyright and the First Amendment together have produced extraordinary works of cultural and economic value. And that was the goal of the Founders. The Supreme Court has repeatedly said that, by first focusing on the author, the copyright law ultimately benefits all of society.

And to benefit society, copyright law needs to do two things. First, it needs to encourage the creation of works, and, second, it needs to promote the distribution of works. This requires respecting both the author’s economic interests in being compensated, but, also, it requires understanding that many creators will not broadly disseminate their works unless they feel safe doing so on other noneconomic grounds.

So take, for example, the outrage that was spawned last year when Instagram changed its terms of service. Ordinary people across the country were rightly concerned that their personal photos would be used by others in unexpected ways and without their permission. Many professional creators have these same concerns.

And I have had the experience of talking to civil-rights-era photographer Matt Herron, who once explained to me that the reason copyright is so important to him is not for the economic reasons that you might expect but because it gives him the right to keep his collection of photographs of the Selma to Montgomery March together as one, intact, single body of work. And that ensures that the piece of history that he captured will be passed down to future generations as a coherent story and in the proper context.

My written testimony catalogs a number of examples of how the creative industries are a major source of innovative ideas and new product developments and new services. We are using new technologies in new ways. We are spurring the development of new technologies through our own creative work, and we are creating new technologies ourselves. This ultimately benefits amateur cre-

ators, as well, with the diffusion of affordable software and hardware.

Let me conclude by saying that a focus on and a respect for creators' rights reflects the values our country was built on, and it benefits all of us. I hope you will keep this in mind as you examine the Copyright Act during the review process. And I thank you for your attention.

Mr. GOODLATTE. Thank you very much.

[The prepared statement of Ms. Aistars follows:]



Testimony of Sandra Aistars, Executive Director, Copyright Alliance

Committee on the Judiciary

Subcommittee on Courts, Intellectual Property and the Internet

U.S. House of Representatives

“Innovation in America: The Role of Copyrights”

July 25, 2013

Testimony by Sandra Aistars, Executive Director, Copyright Alliance
Innovation in America: The Role of Copyrights
Before the Judiciary Committee's Subcommittee on Courts, Intellectual
Property and the Internet

July 25, 2013

The Copyright Alliance is a non-profit, public interest and educational organization made up of artists, creators, and innovators of all types. Our members include artist membership organizations and associations, unions, companies and guilds, representing millions of creative individuals. We also collaborate with and speak for thousands of independent artists and creators and small businesses who are part of our one voice activists network. On core issues of copyright policy there is more that unites creators and innovators than there is that divides us, which is why I can represent such a diverse cross section of creative people and businesses in one organization.

I am grateful for the Subcommittee's invitation to testify, and our members commend the Committee for undertaking this review. It is fitting that in an age of rapid technological advances we review our laws to make sure they are up to the task of encouraging creativity and dissemination of works, for the benefit not only of the creators, but also the general public. As the Committee approaches this challenge, however, we urge you to take a measured approach. The copyright laws, on the whole, are working and have helped to make this country the leading producer and exporter of creative and innovative goods in the world. Care must be taken to ensure the balanced intellectual property protections we currently enjoy not be sacrificed in the hope that weakening protections will spur technological innovation.

This hearing focuses on copyright and the creative community's contribution to innovation; next week's hearing will be on technology's contributions. And while it is important to hear separately from various stakeholders, I want to underscore that the creative community does not view copyright and technology as warring concepts, whose interests must be balanced to further the public good. Rather our members view

ourselves as partners and collaborators with the technology community. Indeed, in many instances individual creators and companies alike are playing dual roles both as authors of creative works and as technology innovators who themselves develop new technologies or who adopt and drive demand for technologies necessary to the creation and distribution of their works. Increasingly technology companies also play dual roles, often straddling both the creative and tech communities. Numerous members of the Copyright Alliance, such as the Business Software Alliance, the Entertainment Software Association and the Software and Information Industry Association are comprised of technology companies with significant copyright interests.

When people hear that Congress is reviewing the copyright laws, the tendency is to think that the focus will be on revising Title 17. But some of the most important work this Committee can do has nothing at all to do with rewriting law. Rather, the Committee can use its oversight role to encourage law enforcement to take seriously criminal violations of the copyright law, and it can encourage all stakeholders in the Internet ecosystem to proactively take commercially reasonable, technologically feasible measures to reduce the theft of intellectual property.¹

Principles For the Copyright Review Process

A robust, well-functioning and up-to-date Copyright Act is important to all stakeholders, especially the general public, which is the ultimate beneficiary of a well-functioning system. As a practicing copyright lawyer for close to twenty years, I share the Chairman's and the Register of Copyrights' interest in examining the system to ensure it meets today's

¹ Law enforcement has stepped up in recent years to address IP crime. The creation of the IPR Center, the success of Operation In Our Sites, and the Megaupload indictment are just three of the many law enforcement initiatives that have educated the public – and the criminals – that the US does not consider IP theft to be mere nuisance crimes. This Committee can play an important role as both authorizers and in its oversight of DOJ to ensure that these efforts continue in an appropriate fashion.

Likewise, private initiatives between rights holders and online intermediaries have started to have an impact in this arena, and this Committee should be actively encouraging such efforts. To cite but a few examples, there are the "UGC Principles" (covering video-sharing sites); agreements between rightsholders and payment processors, rightsholders and ISPs, and ad networks. Ideally future private efforts will involve the participation of all affected rights holders and address the needs of creators such as photographers, graphic artists, authors and songwriters, who thus far have not been participants in these privately led initiatives.

needs in specific areas of its application. If we proceed in a spirit of cooperation with addressing some clearly defined ways in which copyright law may be failing to live up to its goals, then the creators I represent, and the public at large will be well served. If, however, we proceed on the premise that copyright law is somehow obsolete simply because we now live in a different technological age, we risk a future that will no longer add to and build upon over two centuries of cultural works and the liberty and prosperity fostered by their diffusion.

Copyright law should remain rooted in technology-neutral principles. The fundamental premise of copyright law is that ensuring appropriate rights to authors will drive innovation and benefit the society as a whole. This should not change because of new technologies that come and go in the marketplace. No one knows for sure what innovation looks like in advance. To undermine copyright protections on the theory that this will spur additional innovation in certain subsectors of our economy is simply guessing and therefore gambling with this nation's overall economic health and cultural heritage.²

Copyright is a unique form of property grounded in an artist's own creativity, hard work, and talent. In many ways it epitomizes the American Dream. This is something I know first-hand. I am a first generation American. My parents were refugees to the United States. My father supported our family in a middle-class household through his work as a visual artist and author, and most copyright owners in the U.S. are individuals just like my father. They are neither famous nor wealthy. They are individual graphic artists, photographers, songwriters, filmmakers and authors who make or supplement a middle class living from their creative work. They are small businesses in nearly every community in the country.

Based on these demographics of rights holders and the nature of copyright, some Constitutional scholars have argued that creative works should be even more worthy of protection than physical property:

² Of course when considering copyright it is important to value the entire body of law, including, for instance exceptions and limitations such as fair use. Copyright owners are users of copyrighted works as well as authors, and thus rely on these provisions as much, if not more, than other users.

[T]he field of creative works is infinite, and one person's expression of an idea does not meaningfully deplete the opportunities available to others; indeed it *expands* the size of the "pie" by providing inspiration to others. Moreover, while tangible property such as land and chattel is often pre-existing and acquired through mere happenstance of birth, intellectual property flows directly from its creator and is essentially the "proportization of talent" that is, "a reward, an empowering instrument, for the talented upstarts in society."³

Creative upstarts are a source of innovative ideas, solutions and new economic potential, and they are also first-adopters of new technologies that transform the means of producing creative works.⁴ For instance, documentarian Trisha Ziff, uses social media tools to collaborate with and remotely direct three taxi drivers in Kerala who are filming parts of her current documentary project. Capturing footage in Ramallah, Morocco, Kerala and Mumbai, Ziff is documenting stories of how cinema is keeping small emigree communities connected to their home cultures. Creators like Ziff and many others drive innovation in technology by using tools in new ways, thus providing impetus to technology producers to create new products and services to meet their needs.

At the same time, creative upstarts are perhaps most harshly affected by gaps in the copyright law, and their experiences and challenges are often least heard by policymakers.⁵

³ PAUL CLEMENT, VIET DINH & JEFFREY HARRIS, CENTER FOR INDIVIDUAL FREEDOM, THE CONSTITUTIONAL AND HISTORICAL FOUNDATIONS OF COPYRIGHT PROTECTION, 2 (2012) (emphasis and quotations in original) (citing Justin Hughes, *The Philosophy of Intellectual Property*, 77 Geo. L.J. 287, 291 (1988)).

⁴ See, Johannes Trüby, Christian Rammer, & Kathrin Müller, *The Role of Creative Industries in Industrial Innovation*, at Non Technical Executive Summary (Econstor Working Paper, ZEW Discussion Papers 08-109) available at <http://hdl.handle.net/10419/27592> (last accessed July 19, 2013).

⁵ For instance, authors of all types require a well-funded Copyright Office that is up to the tasks required of it in the 21st century. We appreciate and support the efforts of the Office to discover current inefficiencies, and to outline modernization needs. These sorts of modernization efforts must also take place with the full participation of a variety of authors in order to ensure a workable system emerges. As an example, photographers have long complained that the current registration system does not adequately take into account their work flows and requirements as potential registrants of large volumes of works, each of which individually may have a limited (or unknown) value.

Eric Hart, a maker of theatrical props and author from Burlington, North Carolina, recently shared his challenges with us. Earlier this year, after several years of researching, writing and assembling all the necessary technical information, including setting up and shooting more than 500 illustrative photographs, Eric's first book *The Prop Building Guidebook: For Theatre, Film, and TV* was published by Focal Press. The book is a unique, comprehensive reference for prop makers that provides innovative approaches to solving problems. Special attention was paid to the details of its design and layout to ensure that it can easily be used in a workshop. Unfortunately, but not surprisingly, it was pirated almost immediately upon its release, and many of the sites on which it appears are supported by advertising by major brands. Eric wrote to us:

I wanted this information to spread regardless of whether people can afford it. I filmed a number of videos to complement the book, and those are available for free on the book's website. I also had a few chapters which couldn't fit in the book, so those can be downloaded for free from the book's website as well (in a DRM-free format). The book's website has a link where you can find the closest library to read my book, as well as a link for teachers to request a free copy to review for their classes. Finally, my blog continues to be a source of free information on a regular basis.

While it is not unexpected for me to find out the book is being pirated, it is odd. I've found a lot of the pirate sites with links to my book are really just auto-generated websites using the name of my book to draw traffic, but the actual link leads you to download some malware or adware. But then there are sites like Mobilism.org, where real people are requesting a pirated copy of my book. It's happening in full view of anyone surfing the web. It's like I'm standing right here, and someone is saying, "Yeah, you spent years creating something unique and valuable that will benefit the community. I appreciate that, and I'm going to take advantage of it, but I'm not going to pay like everyone else."⁶

Encouraging the creation and broad dissemination of works like Eric's will

⁶ See Eric Hart's full statement at Appendix A.

require maintaining a framework of laws that makes it worthwhile for creative individuals to invest the labor and talent to share their skills with others. Copyright protection must not become illusory. And for creative businesses to survive and grow, the value to principals and investors in such works needs to be clear.

As you delve into this copyright review I would urge you to think about copyright and innovation from an author's perspective in the following way.

First, copyright is about empowerment. A copyright belongs to the author from the time a work is created and recorded in some tangible form, regardless of whether the author has registered it or taken any formal action. A copyright may be the only asset the author has in a negotiation with a distributor, label, or other corporation. It opens the door for an economic negotiation. If you weaken copyright or make it harder for the author to obtain or maintain its protections, you weaken the author's negotiating position, as well as the value proposition for the distributor.

Second, copyright is about choice. Because copyright exists in a work and belongs to the author from the time the work is recorded, it enables the author to choose what he or she wishes to do with it. She can use a work in multiple ways simultaneously. She can license the use of the work commercially to support herself and continue investing in new projects, while also making the work available for free to other non-commercial users to support a cause she believes in. These choices allow for a broader variety of business models to develop, which increases healthy competition among innovators and benefits consumers.

The author can also choose not to license his or her work in certain circumstances. Sometimes the non-economic choices an author makes by enforcing a copyright are the most important ones. Matt Herron, a civil rights era photographer who we work with explained to me once that the reason copyright matters to him so much is that it enables him to keep his collection of photographs of the Selma to Montgomery march together, and it ensures that the history of that period will be passed down to future generations as a coherent whole -- without images missing because they are controlled by someone else, and without images having been devalued

because they were licensed for commercial purposes.

Finally, copyright is about freedom. It is core to protecting our First Amendment rights of freedom of expression. It also gives authors the freedom to create and to thrive, and the freedom to create free from outside influence. “As the founders of this country were wise enough to see, the most important elements of any civilization include its independent creators – its authors, composers, and artists – who create as a matter of personal initiative and spontaneous expression rather than as a result of patronage or subsidy.”⁷

These guideposts I have suggested for your deliberations are fully consistent with the Founders’ vision for copyright.

The Founders Recognized that Copyright Protection Would Spur Creativity and Innovation

Article I, Section 8 of the Constitution grants Congress the authority “[t]o Promote the Progress of Science and [the] useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.”⁸ As one of the few constitutionally enumerated powers of the Federal government, this grant of authority reflects the Founders’ belief that copyright protection is a significant governmental interest, and that ensuring appropriate rights to authors drives innovation and benefits society.

In Federalist Paper 43 Madison declared “The utility of this power will scarcely be questioned.”⁹ And he asserted that “[t]he public good fully coincides in both cases with the claims of individuals.”¹⁰ Early Supreme Court cases reinforce the belief that “[t]o promote the progress of the useful arts is the interest and policy of every enlightened government.”¹¹

Because, in Madison’s words, “[t]he public good fully coincides with the

⁷ *Copyright Law Revision: Hearings on S. 1006 Before the Subcomm. On Patents, Trademarks, and Copyrights of the Comm. on the Judiciary*, 89th Cong., 1st Sess. 65 (1965) (testimony of Register of Copyrights Abraham Kaminstein).

⁸ U.S. Const. art. I, § 8, cl. 8.

⁹ THE FEDERALIST NO. 43 (James Madison).

¹⁰ *Id.*

¹¹ *Grant v. Raymond*, 31 U.S. 218, 224 (1832).

claims of individuals,”¹² in ensuring authors’ rights would be protected, the focus of copyright law has properly been first on the author, but the ultimate effect is a benefit to society at large.

“The economic philosophy behind the clause empowering Congress to grant patents and copyrights is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors in ‘Science and the useful Arts.’ Sacrificial days devoted to such creative activities deserve rewards commensurate with the services rendered.”¹³

In *Twentieth Century Music Corp. v. Aiken*, the Supreme Court reiterated this goal: “The immediate effect of our copyright law is to secure a fair return for an ‘author’s’ creative labor. But the ultimate aim is, by this incentive, to stimulate artistic creativity for the general public good.”¹⁴ It is axiomatic that to benefit society, copyright law must have a dual purpose: to create a framework that encourages creation and dissemination/commercialization of works. As the Court explained in *Golan v. Holder*,

“[n]othing in the text of the Copyright Clause confines the ‘Progress of Science’ exclusively to ‘incentives for creation.’ Evidence from the founding, moreover, suggests that inducing *dissemination*—as opposed to creation—was viewed as an appropriate means to promote science. Until 1976, in fact, Congress made ‘federal copyright contingent on publication [,] [thereby] providing incentives not primarily for creation,’ but for dissemination. Our decisions correspondingly recognize that ‘copyright supplies the economic incentive to create *and disseminate* ideas.’”¹⁵

As Justice Sandra Day O’Connor eloquently wrote “In our haste to disseminate news, it should not be forgotten that the Framers intended copyright itself to be the engine of free expression. By establishing a marketable right to the use of one’s expression, copyright supplies the economic incentive to create and disseminate ideas.”¹⁶

¹² Madison, *supra* note 8.

¹³ Mazer v. Stein, 347 U.S. 201, 219 (1954).

¹⁴ Twentieth Century Music Corp. v. Aiken, 95 S. Ct. 2040, 2044.

¹⁵ Golan v. Holder, 132 S. Ct. 873, 888-89 (2012) (emphasis in the original) (citations omitted).

¹⁶ Harper & Row Publishers, Inc. v. Nation Enter., 471 U.S. 539, 558 (1985).

Since the dissemination of works properly requires the consent of the author, the history and development of copyright law reflects both economic and other societal goals. A creator's control over the use of his or her work – the “right to say no” – can often serve as a proxy to address non-economic interests. In fact, international law elevates this right to a human right.¹⁷

In reviewing the Copyright Act, Congress should therefore keep in mind both the economic contributions and motivations of creators, and the non-economic goals the Copyright Act serves and make any adjustments to the law in ways that will encourage both the creation and dissemination/commercialization of works. For many creators, works will not be broadly disseminated unless the creator feels “safe” doing so on non-economic grounds.

Last year's controversy over Instagram's change to its Terms of Service demonstrates that users of the popular photo sharing site have similar concerns to professional creators in this regard. Instagram lost nearly half of its daily active user base last year when the site changed its Terms of Service in ways which users perceived would allow the service to sell users' personal photographs for commercial advertising.¹⁸ Consumer concerns about misuse of their personal photographs are well-founded. In a case in the Northern District of Texas in 2009, a family sued Virgin Australia based

¹⁷ See, Universal Declaration of Human Rights, G.A. Res. 217 (III) A, U.N. Doc. A/RES/217(III), art. 27 (Dec. 10, 1948):

(1) Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits.

(2) Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.

Several jurisdictions confirm that copyrights are human rights. For example, the European Court of Human Rights recently upheld criminal charges against various operators of the infamous Pirate Bay site. The Court stated that copyright is protected as property under Article 1 of Protocol No. 1 of the European Convention on Human Rights. Governments do not merely have a duty of noninterference with the enjoyment of property rights but “may require positive measures of protection.” The Court denied the challenge that the criminal charges interfered with defendants' exercise of their free expression rights as “manifestly ill-founded,” holding that in this case, such interference was “necessary in a democratic society” to vindicate copyright owners' human rights. *NEIJ v. Sweden*, 2013-V Eur. Ct. H.R. available at [http://hudoc.echr.coe.int/sites/eng/pages/search.aspx?i=001-117513#{"itemid":"001-117513"}\].](http://hudoc.echr.coe.int/sites/eng/pages/search.aspx?i=001-117513#{)

¹⁸ http://www.nypost.com/p/news/business/bad_insta_karma_4ZENrwZVX2byVMQxK045rN

on its use of photos of their daughter taken at church camp, and posted to Flickr. Virgin Australia had used the photos in an embarrassing ad campaign urging viewers to dump their pen pals.¹⁹

The Creative Industries Drive Innovation and Provide Major Economic Inputs to Our Economy

Ensuring that authors continue to enjoy appropriate rights in their works, and that the Copyright Act continues to motivate the creation and dissemination of works by taking into account authors' economic and non-economic motivations is crucial to our innovation economy. This is so because

First, Creative Industries are a major source of innovative ideas and thus contribute to an economy's innovative potential and the generation of new products and services. Secondly, they offer services which may be inputs to innovative activities of other enterprises and organizations within and outside the creative industries. Thirdly, Creative Industries are intensive users of technology and often demand adaptations and new developments of technology, providing innovation impulses to technology producers.²⁰

The experiences of our members are consistent with these findings. As storytellers, our members use technology to enhance their storytelling. Directors Guild member James Cameron spent years developing the technologies required to bring his vision for Avatar to the screen. His work required a number of groundbreaking, state-of-the-art technologies such as new cameras; leaps forward in 3-D; and advances in performance-capture technology that are continuing to benefit professional filmmakers as well as other businesses. These advances also benefit amateur creators – many of

¹⁹ Chang v. Virgin Mobile USA, LLC, Civil Action No. 3:07-CV-1767-D, http://scholar.google.com/scholar_case?case=17329615568000796880. The case was dismissed for failure of personal jurisdiction, and it is possible that had the merits been reached defendants would nevertheless have prevailed, because the photos were taken by her camp counselor and posted subject to a Creative Commons Attribution 2.0 license that provides for broad use privileges, including commercial use without payment. The case is significant nonetheless to illustrate that the copyright owner's decision to license or not based on the exclusive rights granted to a copyright owner have important non-economic ramifications as well.

²⁰ Johannes Trüby, Christian Rammner, & Kathrin Müller, *The Role of Creative Industries in Industrial Innovation*, at Non Technical Executive Summary (Econstor Working Paper, ZEW Discussion Papers 08-109) available at <http://hdl.handle.net/10419/27592> (last accessed July 19, 2013).

the techniques and technologies now used by amateur filmmakers and musicians on sites like YouTube were originally motivated, created for and tested and perfected by professional filmmakers and musicians.

Likewise, the motion picture studios aggressively pursue new technology opportunities for distribution of their works in digital media, not only as customers of technology companies, but as developers of platforms themselves. Some of the most popular consumer electronics formats in history, including DVD and Blu-ray were developed through collaborative cross-industry efforts. Both in private practice, and in my former role as an officer of Time Warner, I served on or chaired working groups of Consumer Electronics, Information Technology and Entertainment companies to develop technical specifications and license agreements for some of the underlying technologies for these and other formats. Studios are patent holders in these technologies alongside IT and CE companies. Similarly Ultraviolet, a cross industry initiative to distribute films through a cloud-based system, was heavily driven by studio investments and participation.

Entertainment companies also develop distribution platforms for their services entirely on their own.

- “HBO GO,” the TV Everywhere platform for HBO subscribers, was developed entirely in-house.
- Studios--in particular Warner Bros. and Universal--drove Digital Cinema Distribution Coalition (“DCDC”) with a group of major theatrical distribution companies to develop and standardize an open, transparent, cost-effective system for high speed digital delivery of movies and live event programming to all exhibitors from all content owners. This innovative technical project is quickly replacing the expensive and time-consuming process of distributing physical film prints to thousands of theaters domestically and (eventually) internationally.
- Warner Bros. invented the Video Recombine Process to upgrade older television programming into high-definition format suitable for watching on today’s HD large screen televisions and displays. This new, efficient, cost-effective process permits the upconversion of both popular and niche television shows shot on video from the 1980s and 1990s.

- Syndistro, a joint venture of Warner Bros., CBS and Deluxe, created the MagnuBox platform for syndication operations that permits multiple TV stations simultaneously to receive recorded material and live content for faster download speeds while dramatically reducing the need for costly and inefficient transcoding.

These types of investments occur throughout the creative community and have been going on for years – largely unpublicized. For the creative industries this sort of innovation is simply part of their businesses.

- The publishing Industry invests \$100s of millions in R&D, infrastructure, skilled labor, and other resources to create, publish, distribute and maintain scholarly articles digitally and on the Internet. Scholarly publisher Reed Elsevier began development of its on line publishing platform, ScienceDirect in 1995, beta tested it in 1997-1998, and finally rolled it out in 1999. The company invested \$26 million in initial development costs and made an initial investment of \$46 million to create digital archives. Since then it has spent \$100s of millions shifting to digital production and publication of journals. This includes paying developers to code, scan, and beta test platforms, purchasing hardware and machinery, R&D and ongoing maintenance and enhancements. Currently, Reed Elsevier maintains over 90 terabytes of digital storage capacity from which an average of 10 million active users from 120 different countries download nearly 700 million articles per year. More than 1.5 million articles in science, technical and medical fields were published in 2009 alone.²¹
- Creative people within such innovative businesses are developing new tools for their readers as well. The New England Journal of Medicine employs a full time staff of medical illustrators to redraw and recompose all images submitted by authors. A recent feature pioneered by the journal is a 3D video animation of all of the medical images that allows the images to be rotated on multiple axes for different perspectives. The benefits to medical and biochemical

²¹ Adam Mossoff, *How Copyright Drives Innovation in Scholarly Publishing* (forthcoming 2013) (manuscript at 18-20) available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2243264.

researchers for their own innovative work are obvious.²²

Innovative approaches are also being developed to ensure artists are remunerated for their work:

- As was recently emphasized by the World Creators Summit in Washington, DC, held by CISAC (the International Confederation of Societies of Authors and Composers), collective licensing organizations – like BMI and ASCAP in the United States and their counterparts in over 100 foreign countries – play a critical role in the protection and promotion of creators’ rights in a global, digital economy. Performance rights organizations (PROs) ensure that copyright royalties flow to authors for the use of their works anywhere in the world. To promote the licensing of entire repertoires of musical works on a non-exclusive basis, to remunerate songwriters, composers and publishers, and to provide information to the public, the PROs have invested significant resources in developing or acquiring the necessary computer software and hardware technologies.

The assertion that the creative community is making major contributions to our innovation economy is not just based on anecdotal evidence and every day experience. Both the World Intellectual Property Organization and the US Patent and Trademark Office have issued reports establishing that the creative community drives innovation and makes major economic inputs to economies.

The USPTO found that the entire US economy relies on some form of IP; because virtually every industry either produces or uses it. Having identified and studied 13 copyright intensive industries, USPTO concluded they provided 5.1 million jobs in the US, and that for every two jobs in the copyright intensive industries, they supported an additional one job elsewhere in the economy. Education levels, wage levels and the ability to lead economic recovery outpaced non-IP intensive industries.²³

²² *Id.*

²³ ECON. AND STATISTICS ADMIN. AND U.S.P.T.O., INTELLECTUAL PROPERTY AND THE US ECONOMY: INDUSTRIES IN FOCUS (Mar. 2012) available at http://www.uspto.gov/news/publications/IP_Report_March_2012.pdf.

Analyzing 30 national studies of the economic contributions of the copyright industries to GDP, the World Intellectual Property Organization has found a strong and positive relationship between contributions of copyright industries to GDP and (1) economic freedom (2) global competitiveness (3) global innovation and (4) research and development.²⁴ Specifically, WIPO found:

- Countries that have experienced rapid economic growth typically have above average share of GDP attributed to copyright industries;
- Contribution of copyright industries to GDP exhibits a strong and positive relationship with the Index of Economic Freedom. (The Index of Economic Freedom ranks countries on a 1-100 scale evaluating economic openness, competitiveness and the rule of law, including business and trade freedom, fiscal freedom, property rights, and freedom from corruption. According to WIPO “[c]ountries that score well demonstrate a commitment to individual empowerment, non-discrimination, and the promotion of competition. Their economies tend to perform better, and their populations tend to enjoy more prosperity...”²⁵
- There is a strong and positive relationship between the contribution of copyright industries to GDP and the Global Competitiveness Index. Countries with high scores have advanced knowledge, ideas and innovation;²⁶ and
- There is a positive and highly significant relation between performance of the copyright industries and the Global Innovation Index. This relationship implies that innovation and creativity are inherently and positively connected.²⁷

USPTO’s and WIPO’s economic findings are consistent with consumer opinion as well. The American Consumer Institute Center for Citizen Research is releasing a report today on consumer opinions on IP and counterfeit/pirated goods. The study surveyed 1,000 adult US citizens age

²⁴ WORLD INTELLECTUAL PROPERTY ORGANIZATION (WIPO), WIPO STUDIES ON THE ECONOMIC CONTRIBUTION OF THE COPYRIGHT INDUSTRIES 8, 10-12 (2012) *available at* http://www.wipo.int/export/sites/www/ip-development/en/creative_industry/pdf/economic_contribution_analysis_2012.pdf.

²⁵ *Id.* at 8.

²⁶ *Id.* at 10.

²⁷ *Id.* at 10-11.

18 or older, using a third party national survey research group. The survey results show that an overwhelming majority of consumers surveyed believe

- Protecting IP is good way to encourage innovation and creativity (86%)
- The sale of counterfeit and pirated goods negatively affects US jobs and economy (89%) and
- 91% support strong enforcement of laws against sale/distribution of counterfeit/pirated goods.

Conclusion

A focus on and respect for creator's rights reflects the values our country was built on, rooted in our Constitution. The public benefits from the intellectual and cultural diversity that results, as well as from the promotion of a sustainable and innovative economy. As you examine the Copyright Act during this review process I urge you to

- Keep in mind how the changes proposed will affect the vast and varied communities of creators and innovators across the country.
- Strive for a well functioning copyright act that will unite the interests of all stakeholders to a common goal – don't proceed from the basis of any particular business model.
- Continue to afford yourself the opportunity to hear from a wide array of participants in order to understand how any changes proposed will work for creative upstarts as well as for more established members of the creator and innovator community.
- Remember the multiple goals the Founders had in mind for copyright.

And with every argument for revision, demand specifics. After more than 200 years we already know that the basic premises of copyright protection work. We should not risk its benefits on vague or overbroad theories predicated on supporting the business goals of any particular industry. The debates we hear today are no different than those that have occurred in the past. The times and the players may be different, but the premises are the same, and the basic principles underlying the Copyright Act have withstood the test of time. In this regard, the words of Barbara Ringer, the former Register of Copyrights are worth remembering. In an essay published nearly forty years ago, when the Act was last being reviewed she

wrote:

If the copyright law is to continue to function on the side of light against darkness, good against evil, truth against newspeak, it must broaden its base and its goals. Freedom of speech and freedom of the press are meaningless unless authors are able to create independently from control by anyone, and to find a way to put their works before the public. Economic advantage and the shibboleth of "convenience" distort the copyright law into a weapon against authors. Anyone who cares about freedom and authorship must insure that, in the process of improving the efficiency of our law, we do not throw it all the way back to its repressive origins in the Middle Ages.²⁸

We urge you to keep true to the principles, which have served this country and its innovators and creators so well since the founding of our nation.

²⁸ Register of Copyrights Barbara Ringer, The Demonology of Copyright, R.R. Rowker Memorial Lecture New Series, 19 (Oct. 24, 1974) *available at* http://www.copyright.gov/history/demonology_of_copyright.pdf.

Appendix A:
Statement of Eric Hart

Like many creative people who work in the arts for a living I don't spend a lot of time thinking about copyright law, but a recent experience brought to my attention how important its protections can be and how challenging it can be for an independent author and artist like myself to use it to protect my work.

I began working in the theater at my undergraduate school in the late 1990s. I have done lighting, set design, painting and even audio. But I soon discovered my true passion: making props — and I have been a working prop maker for the past ten years. At a certain point, I became frustrated with the lack of current books available on the craft of prop making and began working on my own. It was partly because I wanted to collect all the information I needed to reference into a single volume, but I thought others might be interested in such a book as well. Earlier this year, *The Prop Building Guidebook: For Theatre, Film, and TV* was published by Focal Press.

I've always been open to sharing what I know and what I learn. Part of the reason I wanted to write the book in the first place was because it seemed the best way to get that kind of knowledge out to the most people possible. I could post it to the Internet, but the Internet is so fragmented and ephemeral. Most of what goes up there is soon forgotten about. The extra time and effort of making a book gives much more weight to the information inside.

Even with running a blog for a while and writing a couple of magazine articles, nothing could prepare me for the amount of work it would take to craft a full book. I was given a year to complete the manuscript, and I worked nearly every day on it; even then, I still felt like I could have used more time. For much of the time, I had to carve out a few hours before and after work to write; for a brief period, I was unemployed and could spend entire days (and nights) writing. There was no such thing as "time off" for that year.

But it actually took me longer than that year to write because I put a lot of work into it beforehand. I first started planning the book in 2008 and researching what I

would need to do to get one published. I started my blog a month later in January 2009 to practice my writing and start building an audience. My blog has always been free and I've been writing original content for it three times a week with only a few breaks for the past four years. It takes a lot to maintain that sort of writing habit; I began waking up a few hours before work every day, and any free time I would get I would spend writing.

The text itself was a challenge. No one had ever written anything as comprehensive as I was attempting. I talked to various professionals in the field and poured through any book, magazine or website with reference material I needed. Besides trying to describe the "best practices" of my industry, I was checking and rechecking a lot of technical information to make sure everything I said was accurate.

The photographs were another story. No other prop making book in the past had color photographs; mine had over 500. I was able to draw on the photographs I had taken throughout my career, but there were still dozens of photos that I had to set up and shoot specifically for the book. In some cases, I had to buy materials to demonstrate their use for those photographs. I invested a lot of time, effort and money into both the text and the photographs for this book, so it was an incredible value for anyone who would buy or read the book. I was literally creating something which had never been created before, and which would serve as a foundation of information for future prop makers to build off of.

Of course, I wanted this information to spread regardless of whether people can afford it. I filmed a number of videos to complement the book, and those are available for free on the book's website. I also had a few chapters which couldn't fit in the book, so those can be downloaded for free from the book's website as well (in a DRM-free format). The book's website has a link where you can find the closest library to read my book, as well as a link for teachers to request a free copy to review for their classes. Finally, my blog continues to be a source of free information on a regular basis.

While it is not unexpected for me to find out the book is being pirated, it is odd. I've found a lot of the pirate sites with links to my book are really just auto-

generated websites using the name of my book to draw traffic, but the actual link leads you to download some malware or adware.

But then there are sites like Mobilism.org, where real people are requesting a pirated copy of my book. It's happening in full view of anyone surfing the web. It's like I'm standing right here, and someone is saying, "Yeah, you spent years creating something unique and valuable that will benefit the community. I appreciate that, and I'm going to take advantage of it, but I'm not going to pay like everyone else."

The book is actually very cheap for what it is. Textbooks and reference books of the same size and scope can sell for \$80-120, but my book is a mere \$40. That's probably less than the cost of the raw materials to make the book if you didn't mass-produce it. The book itself is made for prop making; its large size and binding let it sit flat on a work table, open to any page you want so you can refer to it while building a prop. In that way, the pirated copy would be far inferior to the physical book itself.

Forty dollars for access to my ten years of prop making experience? Forty dollars to see the results of years of research into materials, products, tools and companies, as well as interviews and discussions with numerous experts in the field? In full color, to boot? That's quite the bargain.

You can pay at least \$40 a month for your Internet, hundreds of dollars for your computer equipment, and maybe another couple hundred for an e-reader, but you can't bring yourself to spend another \$40 for something unique and valuable to actually read on all that equipment? Something is off here.

What really gets me are the ads on the site. Companies like Citibank and Chrysler are actually paying the site to provide a forum for people to ask for pirated copies of my book. Imagine if I funded a website that told people how to avoid paying their Citibank credit card bills; see how long that will last.

The website even gives out "rewards" for people who provide pirated copies of the book! One pirate writes,

I actually really need this, so can raise the award to 100 WRZ\$ for a retail quality.

You *really* need this? You're in luck! You can buy the book and have it shipped to you almost anywhere in the world! You can buy the e-book and read it instantly! You can go to the library and check it out for free! If the library doesn't have it, you can request an inter-library loan to get it. You and your friends can pool your money and buy one to share.

But no. You do not want to reward the person who has spent years carefully creating the book that you "really need." You would rather reward the person who took two seconds to Google "how to remove DRM from e books". You reward a website who sells advertising to major companies and only draws traffic from pirates looking for new things to pirate.

Most people who have emailed me with questions have found I answer them. I don't have my information and knowledge locked away. All I ask is that you value my work and labor as much as I do. And it's obvious you do ("I actually really need this"). You have plenty of free alternatives to seek out on your own on the Internet. But you probably, like me, we're not satisfied with them, and wanted someone to devote the time and energy to create a more complete and definitive prop building guide. That's exactly how I felt and what I did.

This book is not a commodity. It is not interchangeable with other books out there, nor did it appear magically one day. Its publication was not inevitable. I didn't have some old prop book in front of me that I could just transcribe and update. I had to work for every sentence in that book. Some tiny phrases and charts took hours just to put together, because the information was scattered all over the place. The prop making book which most people use was published almost thirty years ago. If I hadn't written this one, it might have been another thirty years before one appeared again.

I've spoken with dozens of prop makers who have said they wanted to write a book, or were writing a book, but because of the demands of the job, there is never enough time. It's a rare confluence of events for a prop maker to have the desire to write a book, have the ability to explain and teach the craft well, have the skills to write coherently, have the time and support to devote to the mammoth undertaking of writing a book, have the network of colleagues to assist in areas which are not his specialty, and then manage to find an editor that believes in the project and gives it more support than expected, and a publisher with high standards of quality to carry the whole project through.

The publisher took the risk of thousands of dollars hiring editors, designers, marketers, proofreaders and indexers, as well as printing up thousands of copies of a book. I took the risk of spending a year working on a project with no guarantee of any return (as a side note, authors in these niche technical markets like mine don't get advances). Many people have taken great risks to get this book made; a book which has proven to be valuable and needed. It is clear this book would not have existed without those risks and that hard work. The million monkeys of the internet would not have inevitably created it on their million typewriters. The only risk the reader makes is less than \$40--on something that already exists and has been reviewed and sampled.

While we do have laws intended to protect creators like me, we seem to live in a culture that pretends piracy has no real victims (or even, as some pundits like to say, that piracy helps build your market). It is important to remind everyone the amount of work that goes into the creative works which are so useful and valuable to us. I only wrote a single book, but there are those who devote every day of their lives to writing and creating, and they will not be able to do that if we ignore websites which decide to give away those works for free without the creator's permission (or even knowledge). When we devalue the creative work, we are devaluing both the act of creation and the act of working, both of which are society needs.

Mr. GOODLATTE. And, Mr. Mopsik, do I have your name correct?

**TESTIMONY OF EUGENE H. MOPSIK, EXECUTIVE DIRECTOR,
AMERICAN SOCIETY OF MEDIA PHOTOGRAPHERS**

Mr. MOPSIK. Thank you. ASMP wishes to thank Committee Chairman Goodlatte, Subcommittee Chairman Coble, and distinguished Members of the Committee, along with Ranking Member Mr. Watt, for this opportunity to testify on this important issue.

Founded in 1944, the American Society of Media Photographers' mission is to protect and promote the interests of professional photographers who make photographs primarily for publication. ASMP is the oldest and largest trade association of its kind in the world. ASMP members are primarily freelance imaging professionals, creating images, both still and moving, for publication in advertising, editorial, fine art, and other commercial markets.

Simply put, ASMP members and professional photographers like them create many and probably most of the images that the American public sees every day. They create this country's visual heritage. In fact, we have one of our members right here, John Harrington, taking photographs this morning.

These images communicate the horrors of war and genocide, the thrill of victory and the agony of defeat, the events of everyday life, and the joy of discovery and travel. They create emotion, document history, and expand our knowledge.

Much of the incentive to create, innovate, and the ability to control the sale and license of these works would be lost without copyright. Imagine National Geographic, the Sunday New York Times and its magazine, Rolling Stone, Travel and Leisure, Food and Wine, Saveur, Sports Illustrated, all without photographs. And not just any photographs, but photographs created by professionals to fulfill the needs of their clients, created under various conditions, on schedule, processed and prepared for reproduction—stunning images that consistently stretch the bounds of creativity and innovation.

Each assignment is a challenge to create something new never seen before—communicate light, emotion, the facets of a commercial product, the history and location of an event. Professional photography enriches and opens our eyes to new worlds, making us better informed and more sensitive to the issues and conflicts occurring around us.

Again, in order for professionals to be able to sustain a livelihood, they need to be able to control the sale and license of their works so that they may receive fair compensation for their use. Copyright is the cornerstone of this equation.

I can't emphasize the fair compensation issue enough. It is ultimately not about copyright; it is about fair compensation. And copyright is the means to that end.

For 32 years, prior to my becoming the executive director of ASMP, I worked as a professional photographer, creating images and solving problems for companies such as Mack Trucks, Hyster Company, Ingersoll Rand, and Citicorp. It was the ability to license my works that allowed me to buy a home, put my children through school, and create a better life for my family.

Creativity and innovation are essential to the success of an imaging professional. There is a saying in the trade that you are only as good as your last job. Competition is fierce, even amongst friends. Client loyalty only goes so far.

The ability to profit in an ongoing manner from my images was a key stimulus for my work. In addition to my corporate industrial photography, I created and licensed a number of sunset skyline views of Philadelphia and its significant architectural environments, including the Ben Franklin Parkway, Logan Circle, and the waterfront. These images were repeatedly licensed by companies for business development literature and by other companies needing to highlight Philadelphia attractions.

These images were created early morning and in the evenings, before and having worked on assignments for the day, in the cold and in the heat, on rooftops, on docks, with no promise of financial gain other than the knowledge that the images would be unique, of great quality, and that I would own the copyright and be able to make licenses. I was driven to create and innovate. I needed to provide for my family and my future, and copyright gave me the path.

The digital revolution was supposed to be better, faster, and cheaper. Well, not all of that promise has come true. It may be better in many ways than film, it may be faster to capture the image, you can have immediate confirmation of success or failure, but in regard to cheaper, it never happened. Professionals now need \$5,000 to \$7,000 cameras that will become obsolete in 18 months, lenses extra. In addition, there is a need for expensive computer and storage devices to process and manage the thousands of files.

Photographers tend to be equipment junkies, appreciating good design and function. The marketplace has responded over the years with numerous innovations. Photographers have bought in, become thought leaders for the pro-amateur and amateur markets, encouraging further innovation and consumption.

Copyright is key to a free and open expression of opinion and point of view. If the independent professionals were no longer able to sustain a living from their works, the dissemination of images would be more concentrated in the hands of a few corporate giants who may have their own business interests and agendas. Embarrassing and controversial images might never see the light of day.

In conclusion, the equation is simple: without copyright protection, the public record, our visual heritage, and the stimulus to innovate would be drastically reduced in both quantity and quality.

And just quickly, to echo what Mr. Watt said earlier about world solutions and solutions that work outside of the United States, I would urge the Committee in their review of the copyright law to seek solutions that do, in fact, work in a world market, because that is the world we live in.

Thank you.

Mr. GOODLATTE. Thank you.

[The prepared statement of Mr. Mopsik follows:]

COMMITTEE ON THE JUDICIARY
U.S. HOUSE OF REPRESENTATIVES

SUBCOMMITTEE ON COURTS, THE INTERNET,
AND INTELLECTUAL PROPERTY

HEARING ON INNOVATION IN AMERICA:
THE ROLE OF COPYRIGHTS

JULY 25, 2013

EXECUTIVE SUMMARY AND PREPARED STATEMENT
OF
EUGENE H. MOPSIK
EXECUTIVE DIRECTOR
AMERICAN SOCIETY OF MEDIA PHOTOGRAPHERS

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**PREPARED STATEMENT OF EUGENE H. MOPSIK
EXECUTIVE SUMMARY**

ASMP wishes to thank Committee Chairman Goodlatte and Subcommittee Chairman Coble for the opportunity of testifying on this important issue.

Founded in 1944, the American Society of Media Photographers' mission is to protect and promote the interests of professional photographers who make photographs primarily for publication. ASMP is the oldest and largest trade association of its kind in the world. ASMP's members are primarily freelance imaging professionals, creating images --- both still and moving --- for publication in advertising, editorial, fine art and other commercial markets.

Simply put, ASMP's members and professional photographers like them create many and probably most of the images that the American public sees every day: they create this country's visual heritage. These images communicate the horrors of war and genocide, "the thrill of victory and the agony of defeat", the events of every day life and the joy of discovery and travel. They create emotion, document history, and expand our knowledge. Much of the incentive to create, innovate and the ability to control the sale and license of these works would be lost without copyright.

Imagine National Geographic, The Sunday New York Times and its Magazine, Rolling Stone, Travel and Leisure, Food and Wine, Saveur, Sports Illustrated all without photographs! And not just any photographs, but photographs created by professionals to fulfill the needs of their clients, created under various conditions, on schedule, processed and prepared for reproduction. Stunning images that consistently stretch the bounds of creativity and innovation. Each assignment is a challenge to create something new, never seen before. Communicate light, emotion, the facets of a commercial product, the history and location of an event. Professional photography enriches and opens our eyes to new worlds making us better informed and more sensitive to the issues and conflicts occurring around us.

Again, in order for professionals to be able to sustain a livelihood, they need to be able to control the sale and license of their works so that they may receive fair compensation for their use. Copyright is the cornerstone of this equation.

For thirty two years, prior to my becoming the Executive Director of ASMP, I worked as a professional photographer creating images and solving problems for companies such as Mack Truck, Hyster Company, Ingersoll-Rand and Citicorp. It was the ability to license my works that allowed me to buy a home, put my children through school and create a better life for my family.

Creativity and innovation are essential to the success of an imaging professional. There is a saying in the trade that, "You are only as good as your last job." Competition is fierce even amongst friends. Client loyalty only goes so far. The ability to profit in an ongoing manner from my images was a key stimulus for my work. In addition to my corporate industrial photography, I created and licensed a number of sunset skyline views of Philadelphia and its significant architectural environments including the Ben Franklin Parkway, Logal Circle, and the waterfront. These images were repeatedly licensed by companies for business development literature and by other companies needing to highlight Philadelphia attractions. These images were created early morning and in the evenings before and after having worked on assignments for the day. In the cold and in the heat, on roof tops and docks, with no promise of financial gain other than the knowledge that the images would be unique, of great quality, and that I would own the copyright and be able make licenses. I was driven to create and innovate. I needed to provide for my family and my future and copyright gave me the path.

The digital revolution was supposed to be better, faster, and cheaper. Well, not all of that promise has come true. It may be better in many ways than film, it may be faster to capture the image – you can have immediate confirmation of success or failure. In regard to cheaper, it never happened! Professionals now need \$5000.00 to \$7000.00 cameras that will become obsolete in approximately 18 months. Lenses extra! In addition, there is a need for extensive computer and storage devices to process and manage the thousands of files. Photographers tend to be equipment junkies, appreciating good design and function. The marketplace has responded over the years with numerous innovations, the photographers have bought in and have become thought leaders for the pro-amateur and amateur markets encouraging further innovation and consumption.

Copyright is key to a free and open expression of opinion and point of view. If independent professionals were no longer able to sustain a living from their works, the dissemination of images would be more concentrated in the hands of a few corporate giants who may have their own business interests and agendas. Embarrassing or controversial images might never see the light day.

In conclusion, the equation is simple: without copyright protection, the public record, our visual heritage and the stimulus to innovate would be drastically reduced in both quantity and quality.

PREPARED STATEMENT OF EUGENE H. MOPSIK

Chairman Goodlatte and Coble, and distinguished members of the Committee, I thank you for this opportunity to testify regarding the important contributions to our society and future generations made by professional photographers and the crucial role played by copyright in the continuing ability of imaging professionals to support themselves and continue to create the visual images that enrich the lives of everyone. Freelance professional photographers are both users and drivers of technological innovations in both the public and private sectors.

Founded in 1944 by a handful of the leading photojournalists of that time, the American Society of Media Photographers' mission is to protect and promote the interests of professional photographers who make photographs primarily for publication. ASMP is the oldest and largest trade association of its kind in the world. ASMP's members are primarily freelance imaging professionals, creating both still and moving visual images for publication in advertising, editorial, fine art and other commercial markets.

1. The Value of This Country's Visual History and Heritage

The ultimate beneficiary of copyright was intended by the framers of the Constitution to be the American public. In possibly no other area has this intent been fulfilled than that of photographic imagery. Ever since its invention in the mid-1800's, the public's lives have been enriched and expanded by an ever-increasing exposure to photographs. The world has been opened up for virtual exploration by people who would never have seen, for example, the Egyptian Pyramids, but for photographs of them.

The public has been able to "experience" every war, beginning with the Civil War, through photographs created by independent, professional photographers like Matthew Brady. The course of human events has been greatly influenced by these haunting and disturbing images. Freelance photographers like Walker Evans, Dorothea Lange and Gordon Parks created an astonishing body of images that showed the realities of the Great Depression and that constituted an archive that continues to educate and inform new generations many decades later.

Imagine what the world would be like without visual images that have been captured and stored. How much would the quality of your life, enjoyment and education be diminished if you turned on your television or computer and were exposed to nothing but text and sound? What if magazines and books, including

their covers, had nothing but text? Think of Sports Illustrated, National Geographic, and CNN without their visual content.

What would the financial impact be on the economy if consumers saw advertisements that had text or text and sound, only; how many people would be incentivized to buy products that they could not see without going to a store? What would Times Square look like if all of the signs and billboards showed only words; how many tourists would want to go there?

Photographic images, both still and moving, are crucial to creating and maintaining a complete and accurate historical record for scholars and future generations of the public. During and even after World War II, many people who had not experienced or seen the horrors of the Holocaust denied its very existence — until the world got to see the photographic images documenting the death camps and their millions of victims. Without such powerful proof of the truth, the public's view and understanding of the Nazi era might be very different from what it is today.

The power of visual images cannot be underestimated. It is so strong that, in many cases, the images are so burned into our collective consciousness that they do not even need to be seen to be experienced, over and over again. For example, consider these few short descriptions and whether a specific photograph jumps into your mind:

- A zeppelin on fire and breaking apart while landing,
- A young Vietnamese girl running while napalm burns off her clothing,
- A young boy in a coat and shorts saluting as his father's coffin is carried past,
- A cowboy lighting a Marlboro cigarette,
- A British Prime Minister standing with one hand on his hip, glaring into the camera lens.

The list could go on indefinitely. The point is that, as the old adage goes, a picture is worth a thousand words, and photographs are a crucial and integral part of our lives — past, present and future.

2. The Value of the Professional Photographer

A. The Visual Heritage

While the value of this nation's photographic archive might not be disputable, there are those who have questioned the value and need for — and even the current existence of — professional photographers. The CEO of Yahoo!, Marissa Mayer, recently said, "... today, with cameras as pervasive as they are, there is no such thing really as professional photographers..." She quickly posted on Twitter and elsewhere to apologize, but the question clearly reflects

the mindset of many people: Do we really need professional photographers and what value do they add? With vast numbers of amateur photographers and even non-photographers carrying cell phones with amazing picture-taking capabilities, and with the advent of the "citizen journalist," does the world truly need and benefit from professional photographers?

It is a question that begs to be answered, and the answer is a resounding Yes. We get to that answer by considering the following. First, for many, perhaps even most members of the public, copyrights are associated with large media producers, media outlets and other corporations. The reality, however, is that no corporation ever created anything, let alone a copyrighted work. Think about that: no corporation ever created a copyrighted work. While movie studios, record labels, publishing houses, etc. may own the copyrights to works that are published or distributed bearing the corporate name as copyright owner, the fact is that the works and copyrightable creations comprising those works were all created by individuals.

Who are those individual creators? In the world of photography, they are working pros: freelance independent contractors who support themselves through the sale and license of their works. They are small businesspeople, generally sole proprietors or small mom & pop shops, who earn, for the most part, modest livings. They generally receive no employee benefits. Even though they typically pay unemployment taxes, they are not eligible to collect unemployment payments if their work dries up or if they go out of business. There is no such thing as a paid vacation for a freelance photographer. There is no paid overtime or hazardous duty pay. If there turns out to be a problem with a photographic assignment, even one outside the photographer's control, there is likely to be no pay --- and often no future business from that client.

At one time, some large corporations and other businesses maintained significant staffs of photographers on their payroll. These photographers were able to enjoy all of the normal benefits of being an employee. Sadly, recent years have seen drastic reductions in numbers of these positions and frequently the wholesale elimination of staff photographer departments. This past May, the Chicago Sun-Times eliminated its entire photography department and started training reporters to capture still and moving images on their iPhones. See <http://www.adweek.com/news/press/chicago-sun-times-eliminates-entire-photography-department-150009> for more details.

This takes us back to the question of what is wrong with that --- what is the value that the professional photographer adds to the public record that the amateur and even accidental photographer does not? The answer, simply, is quality; it is the photographic eye and vision. Anyone with sufficient money can buy professional quality cameras and other equipment. Even with inexpensive cameras and even cell phones, current technology has made it difficult to make a technically "bad"

picture. However, there is a world of difference between the images created by professional photographers and the vast majority of pictures taken by amateurs and cell-phone-toting people in the streets.

To illustrate this, think about all of the photographs that you and/or your friends have ever taken of the Grand Canyon and our western national parks. Then look at, or even just picture in your mind, the images of the same subject matter created by professionals like Ansel Adams. Think about snapshots of everyday people that you and/or your friends may have taken over the years, then look at the images created by people like Walker Evans or that appear in books like Robert Frank's *The Americans*. There is a universe of difference, the difference between being forgettable and memorable; between just being a photograph and being evocative; between being filed away and being published again and again over a long period of time.

Consider the photographs that most of us have taken of beautiful buildings and other architectural structures. Somehow, even at their best, they never quite capture the true look and feel of the actual structure. Then take a look at some of the photographs of master architectural photographers like Ezra Stoller or Charles Sheeler. Words cannot describe the differences, a fact that provides additional illustration of my point that a world without images, and especially professionally made images, would be a poor place, indeed.

Aside from quality, a huge difference between professional photographs and non-professional photographs is the subject matter. There are simply subjects that are difficult to look at or capture but that are vital for the public to see and to know about. Professional photographers make images of those subjects because that is their vocation and their avocation; most non-professionals do not. Many such subjects are inherently dangerous and require the photographer to knowingly put him- or herself in harm's way. Professional photographers are paid to do that, one way or another, and they do it. Very few non-professionals do.

B. Innovation

In terms of technological innovations, professional photographers have consistently been among the earliest adopters of change and among those driving improvements and suggesting and demanding upgrades, to the benefit of the economy and the marketplace. Men like Niépce, Daguerre and Talbot were driven by the need for truly accurate visual representations of what they saw, as opposed to the interpretive reproductions provided by illustrations. They invented various photographic processes and simultaneously became the world's first professional photographers. Their invention has enthralled the world's population to the point where, today, an overwhelming majority of the populace walks around with at least one camera in his or her pocket, whether it is a single-purpose device or built into a mobile telephone.

Throughout the history of photography, professional photographers have invented new devices and techniques that have benefited themselves, their colleagues, their peers and the general population. For example, Edward Muybridge invented the first device to create moving images, to the eventual delight of untold millions of moviegoers --- and to the delight of movie studios and producers, as well as the economy in general and, I daresay, even the Internal Revenue Service.

Professional photographers have, from the beginning, been the earliest adopters, beta testers and users of every hardware and software innovation, as well as a driving force in demanding constant upgrades, improvements and new inventions. They are compelled to do so by the pressures of the marketplace. They are in constant competition with each other and need to take advantage of every new creation in order to remain competitive. Each assignment is a challenge to be innovative, creative, and to render their subject in a new and compelling manner. Their clients expect and demand that they be in the forefront, on the penalty that, if they are not, these same clients will move on to another working pro. When digital cameras were invented, it was professional photographers who have consistently been the first adopters. The same has been true for each improvement and invention in the evolution of digital photographic imaging. Typically, it has been only after a significant number of working pros start using a particular camera or product that the mass market tends to follow suit, then generating significant revenues for every person and entity in the supply chain and the economy, as a whole.

Freelance professional photographers kept asking for some way to track infringing uses of their images on the internet. This demand drove the invention of image recognition based search technology, which is used by huge numbers of professional photographers and other individuals and entities through vendors such as PicScout and TinEye. Freelance photographers continually pressed the Copyright Office to develop an online registration system, leading to the creation of eCO, a system in which professional photographers continue to work with the Copyright Office to upgrade and improve, for the benefit of the public.

3. Copyright --- the Sine Qua Non for Professional Photographers

Without copyright, there would be no professional photographers. It is that simple. Copyright is the engine that drives the professional photography machine and makes it sustainable as a living. Photographs are information --- visual information. As with news reporting, it is the uniqueness and freshness of information that give it much of its value. Being the first source for information, and being able to control other sources for the same information, is the difference between getting paid for that information and not. Without copyright, once a photograph is published or distributed for the first time, the photographer or other copyright owner goes unpaid. And going unpaid spells the end of a class of

businesspeople who rely on the revenue stream from copyright licenses for their livelihoods. The demise of freelance professional photographer would inevitably lead to a deplorable degrading of the quality of our visual heritage and public record.

The need of copyright protection by the freelance photographic committee is, today, at an all-time high for another reason. The advent of the digital era has made it fast, easy and simple for images to be stolen or otherwise infringed. Without copyright protection, all possible recourse by the photographer would be eliminated, and we would be creating a culture in which digital theft is considered acceptable.

Further, copyright protection is needed in order to preserve the integrity of our visual history. In a digital environment, images can be altered with little or no evidence of the alteration. Without copyright protection, the visual record --- history, itself --- could be altered, and there would be nothing that the creator of the true record could do about it.

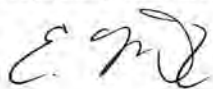
Further, copyright protection is necessary to allow the photographer to say No when he or she feels it to be appropriate. There are situations in which possible uses of images are contrary to what the photographer would and should allow. For example, in recent elections, there have been many instances in which photographs were illegally appropriated by candidates and used out of context to support candidates and issues that were diametrically opposed to the beliefs and intentions of the photographers involved. Without copyright, there would simply be no redress available.

Finally, if the loss of copyright did, as I believe it would, cause the end of the professional photographer, a handful of large business entities would become the primary source of visual information for the public. It appears likely that those business interests would not be concerned with a complete exercise of our First Amendment rights to freedom of speech. Rather, they would be interested in exercising those rights only when it was to their financial best interests to do so. Photographs that might cause embarrassment or problems for themselves or their allies would never see the light of day.

In conclusion, the equation is simple: without copyright protection, the public record and our visual heritage would be drastically reduced in both quantity and quality.

Thank you for your time and consideration.

Respectfully submitted,



Eugene H. Mopsik,
Executive Director



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Mr. GOODLATTE. Mr. Hansen, welcome.

**TESTIMONY OF TOR HANSEN, CO-PRESIDENT/CO-FOUNDER,
YepRoc RECORDS/REDEYE DISTRIBUTION**

Mr. HANSEN. Chairman Goodlatte, Ranking Member Watt, and Members of this Subcommittee, thank you for inviting me to testify today on behalf of my company, Yep Roc Records and Redeye Distribution, headquartered in Haw River, North Carolina, and also on behalf of the small and medium-sized independently owned businesses that make up the American Association of Independent Music, A2IM—businesses that, via the creation of musical intellectual property, are improving commerce here and abroad and, via exports, improving America's balance of trade, and thus creating jobs in America.

My name is Tor Hansen, and my partner and I own a music label, a music distributor, located in Haw River, North Carolina, which we started in the basement in 1996 and which now employs over 60 employees and distributes music internationally.

I am also a board member of the American Association of Independent Music, A2IM, board of directors, a not-for-profit trade organization that represents a broad coalition of over 300 independently owned U.S. music labels of all sizes located across the United States, from Hawaii to Florida, a sector which, per Billboard magazine, comprises 34.5 percent of recorded music sales in the first half of 2013.

For independent music labels and our artists, the Internet and related technology and business models have been a great equalizer for us and our ability to create, market, promote, monetize, and introduce new music and cultivate new fans for our label's artists. We honestly feel there is no other industry that has embraced new forms of economic and delivery models as completely as the music industry.

That said, small and medium-sized businesses that support the creation of musical intellectual property need to be compensated for the creation and promotion of the music to be able to continue to invest and create jobs.

We support the ability of non-on-demand music services like Pandora and Sirius/XM to be able to operate under statutory licenses with rates set by the Copyright Royalty Board. We also support on-demand music services that negotiate direct license on an arm's-length basis. But our music label community needs to be able to decide which non-statutory services should have our music and at what fair price, and be able to ensure that we have viable business models and when it is appropriate to give away our music to super-serve our fans.

One true strength of a strong regime supporting copyright ownership is to support the international commerce by U.S. businesses in all new mediums. In 2005, the U.S. share of the international music market was 34 percent. For 2012, the latest available data, the IFPI reported a U.S. share of worldwide wholesale recorded music revenues of only 27 percent. It is clear that now we must expand and need to look abroad to have viable business plans by generating export revenues.

We thank the U.S. Government, specifically U.S. Commerce Department ITA and the Small Business Administration, for their support of SME music creator international trade initiatives, for which my own business has been a beneficiary on a very successful Brazil trade mission.

We need to couple this with finally getting enacted an over-the-air radio performance royalty so that royalties of our artists which sit overseas do not remain captive, as, without legal reciprocity rights, those royalties are not available to U.S.-based independent creators.

The bottom line is that independent music label sectors and our artists have aligned ourselves with new consumer models based upon music consumption using many different new technologies. We embrace the responsiveness to new ideas but request government's continued support of copyright monetization protection to ensure that music creation process and the resulting commerce and job creation continue.

I thank you for your time.

Mr. GOODLATTE. Thank you, Mr. Hansen.

[The prepared statement of Mr. Hansen follows:]

COMMITTEE ON THE JUDICIARY
SUBCOMMITTEE ON COURTS, INTELLECTUAL PROPERTY AND THE INTERNET

Testimony of Tor Hansen

Co-President/Co-Founder YepRoc Records/Redeye Distribution
Haw River, North Carolina

Board of Directors member of the American Association of Independent Music (“A2IM”)

before the

United States of America House of Representatives

House Judiciary Committee
Subcommittee on Courts, Intellectual Property and the Internet
B-352 Rayburn House Office Building
Washington, D.C. 20515

Hearing on:

Innovation in America: The Role of Copyrights

July 24, 2013

Chairman Coble, Ranking Member Watt, and members of the sub-committee, thank you for inviting me to testify today on behalf of my company YepRoc/Redeye, headquartered in Haw River, North Carolina, and on behalf of the small and medium sized businesses that make up the American Association of Independent Music ("A2IM"), businesses that, via the creation of musical intellectual property, are improving commerce here and abroad and via exports improving America's balance of trade and thus creating jobs in America!

My name is Tor Hansen and I started working in the music business in the Boston area, working for Rounder Records Distribution (sales representative), Hear Music (Director of Merchandising) and Planet Music / Borders Group (Director of Merchandising). **Yep Roc** Records was founded in 1997 by my partner Glenn Dicker and myself and is exclusively distributed through our Redeye Distribution company. Yep Roc is home to hundreds of master recordings and includes Nick Lowe, Paul Weller, Josh Rouse, Josh Ritter, Fountains of Wayne, and many more. **Redeye Distribution** began in 1996 in my house and has grown into one of the largest Independently owned music distribution companies in the United States. Redeye has charted a course of steady, sustainable growth by developing a strong physical and digital distribution network both nationally and internationally, and providing a multitude of services to our partners. Distribution music label partners include Yep Roc, Warp, Daptone, Wichita, Kill Rock Stars, Ninja Tune, Thrill Jockey, Barsuk, Alive, and many more whose artists include U.S. Top 20 charting artists like Josh Ritter, Nick Lowe, Gillian Welch, Sharon Jones & the Dap-Kings, Paul Weller, and Grizzly Bear. Redeye's 10,000-plus title catalog is representative of a wide range of the best Independent music available. Regardless of genre, the unifying element of the catalog is an overall commitment to quality. Glenn and I started in a basement with no external funding 15+ years ago and we now currently employ more than 60 employees- a knowledgeable, passionate and dedicated staff of music lovers who make themselves accessible to everyone from the music accounts to the artists & records labels with whom we work.

I am also an elected member of the American Association of Independent Music ("A2IM") board of directors so I can speak to our overall community's views. A2IM is a 501(c)(6) not-for-profit trade organization representing a broad coalition of over 300 Independently owned U.S. music labels. Billboard Magazine, using Nielsen SoundScan data, identified the Independent music label sector as comprising 32.6% of the music industry's U.S. recorded music sales market in 2012 (and by our computation using the same methodology over 39 percent of digital album sales) and 34.5% for the first half of 2013. A2IM's music label community includes small and medium-sized music enterprises (SMEs) of all types across the United States, from Hawaii to Florida, representing musical genres as diverse as our membership. All of our label members have one thing in common; they are smaller business people with a love for music who are trying to make a living. A2IM members also share the core conviction that the Independent music community plays a vital role in the continued advancement of cultural diversity and innovation in music both at home and abroad. But we need your help to remain economically viable as musical Intellectual Property, one of the core pillars of U.S. economic competitiveness in the world market, while it creates an economic multiplier effect as it is used in film, games, ads, television, etc. and is a vital export, has become difficult to protect in the digital age.

Independent music labels are not luddites and the Internet has been the great equalizer for us and our ability to create, market, promote, monetize and introduce new music. The Internet has opened up countless opportunities for us and we would not do anything to jeopardize this improved access to music consumers. Additionally, our members have embraced new business models that allow for efficient distribution of music, such as the licensing of free-to-the user streaming services and webcasting, one-price-per-month subscription services, bundled mobile services, new devices, etc. We honestly feel there is no other industry that has embraced new forms of economic and delivery models as completely as the music industry. Many of our members also, on their own terms, give away free content to reward existing fans and cultivate new fans of their label's artists.

That said; our small and medium sized businesses that support the creation of musical Intellectual Property need to be compensated for the creation and promotion of the music to be able to continue to invest and create jobs. A2IM members support the statutory compulsory license mechanism as well as license to services that are not covered by compulsory licenses. But our music label community needs to be able to decide which non-statutory services should have our music and at what fair price, and when it is appropriate to give away our music to super-serve our fans and to ensure that we have viable business models.

One of the strengths of a good strong regime supporting copyright ownership support international commerce by U.S. businesses. In 2005 the U.S.'s share of the international music market was **34%**. For 2012, the latest available data, the IFPI reported a U.S. share of worldwide wholesale recorded music revenues of only **27%**. For our members, most sales traditionally have been in the U.S. market however it is now clear that we must expand our reach and we need to look abroad to survive which is what the National Export Initiative (NEI) is all about, supporting SME's that can grow faster, like our music loving Indie creators who invest in the music they love and make little in profits as they reinvest, and who can create exports that can improve our balance of trade as they export American know-how and improve the U.S. balance of trade and create jobs thus becoming a major growth engine for the U.S. economy. Exports include physical recorded music, digital, mobile, touring, synchronization licenses, etc. with, again, music being that great economic multiplier that fuel areas like musical instrument purchases. We thank the U.S. government, specifically U.S. Commerce Department ITA and the Small Business Administration, for their support of SME music creator international trade initiatives, for which my own business has been a beneficiary on a very successful Brazil trade mission.

As I noted earlier the Internet has transformed how consumers access music and as creators we have adapted to this change which has been a boon for Independents to reach an expanded and open

audience eager to hear our music. In the monetization area the changes in consumer consumption have presented financial challenges. The value of a copyright must be maintained for the music creation process to continue. We as Independents support the compulsory statutory licensing of music to services such as Pandora, iHeart radio, Sirius/XM and others and the Copyright Royalty Board (“CRB”) mechanism of rate setting. It ensures that all sound recording copyrights are created equally and should be paid equally. This issue cuts directly to the core of AZIM's mission: insuring a fair marketplace for Independents where the value of a song or performance must not be determined by which music label created or owns the song. If that is allowed to stand, Independent labels and artists will always be treated unfairly, as lesser, when there is ample proof that music fans want our music. CRB decisions and the resulting statutory rates ensure that the value of every creator's sound recording is equal, that our copyrights are worth as much as any other copyright!

The missing element in this discussion of internet streaming royalties is over-the-air radio performance royalties. For the over-the-air traditional AM/FM dial Independents have made inroads in airplay, and we thank terrestrial radio for the increased access and airplay. But we still don't have a performance right that would ensure music creators get paid when their sound recordings are broadcast on over-the-air radio, the only major country in the world without this right. That needs to change- AM/FM makes billions selling ads to folks who tune in for our music – while sound recording creators get nothing. That's just not right. In addition this impacts on our international business, our royalties sit overseas remain captive to the fact that, unlike other industrialized nations, we don't compensate performers for terrestrial airplay so without this legal reciprocity right those royalties are not available to U.S. based Independent creators. We don't make “content”, a product, we make music! If we allow radio or internet services to force below market rates on us to subsidize Internet business models, we will have allowed the gift wrapping to take on greater importance than the treasure that is in the box. Our artist's music that fuels AM/FM radio and every other platform that features music must be compensated.

Finally, I would like to touch on the issue of Copyright protection. Unfortunately due to the ever-shrinking overall music market revenue base, A2IM member music labels like mine as SME's simply do not have the financial means or resources to engage in widespread copyright monitoring on the Internet. The time and capital investment required for our community of like-minded, but proudly Independent small business people to monitor the web for usage and take subsequent legal action simply does not exist. A2IM member music labels do not have the financial means or resources to house a stable of systems people and lawyers to monitor the Internet and bombard users with DMCA takedown notices for seemingly endless illegal links to our musical copyrights. Our members have limited budgets and whatever revenues and profits they can eke out are directed toward their primary goals, music creation by their music label's artists and then the marketing and promotion of this music to the American public so they are able to continue this creation process. For our members whose livelihoods depend on the ability to license copyrights in a free market, it is essential to have government partners helping advance a worldwide enforceable regime for the protection of intellectual property copyrights online that enhances accountability at all levels of the online distribution chain and that deals effectively with unauthorized usages.

The bottom line is the Independent music label sector and our artists have aligned ourselves with new consumer models based upon music consumption using many different new technologies and devices. We embrace this responsiveness to new ideas and consumer adoption but request the governments continued support of copyright monetization and protection to ensure that the music creation process and the resulting commerce and job creation continue.

I thank you for your time today and I welcome any questions.

Mr. GOODLATTE. Mr. Lapham, welcome.

**TESTIMONY OF JOHN LAPHAM, SENIOR VICE PRESIDENT AND
GENERAL COUNSEL, GETTY IMAGES, INC.**

Mr. LAPHAM. Thank you for the opportunity to testify today. I am John Lapham, Senior Vice President and General Counsel for Getty Images, the leading provider of news, sports, entertainment, archival, and creative imagery in the United States and the technology company with a global distribution platform.

You see our imagery every day in the world's most influential newspapers, magazines, Web sites, books, television, and movies. Founded in 1995 by Mark Getty and Jonathan Klein, Getty Images has U.S. offices in Chicago, L.A., McLean, Madison, New York, Seattle, and Washington, D.C., supporting 2,000 employees and more than 150,000 photographers. Getty Images has offices in 18 countries, content from over 180, and business customers in more than 200.

We were the first company to license a picture on the Internet, and today nearly 100 percent of our business is conducted online. We license 200,000 images daily. And our collection consists of 70 million pictures online, 70 million in archive, and 40,000 new pictures uploaded daily, together with over 1.3 million creative and editorial video clips. We also represent original music tracks from over 10,000 independent musicians.

Getty Images' editorial team includes two Pulitzer finalists and a White House News Photographer of the Year. Our 24/7 coverage provides images and video of current events to thousands of news media organizations and media publishers, ensuring that the troubled events in parts of the world are brought to light. Our photographers have been placed in dozens of military embeds.

We have a significant impact on the digital and copyright economy. While copyright ownership varies across our library, copyright and its accompanying rights and permissions are the foundation for our business. Consequently, strong and effective copyright laws that protect the right to license and not just use creative works are critical for our growth and that of the many thousands of contributors that we represent.

Today, we serve more than a million customers, many small and medium-sized businesses that depend on powerful imagery to entice and engage their customers. We facilitate an essential copyright marketplace, where photographers of every genre and skill level know they can be compensated for contributing to our creative ecosystem.

We do have challenges with copyright infringement and expanded perceptions of fair use. To counter this, in part, we invest in leading technology to pursue and be paid for pirated content. This is not a total solution. Without laws protecting creative works from prolific free use online, this \$7.5 million to \$8 billion market for visual content and the hundreds of millions of dollars we pay in royalties to photographers would collapse.

We believe copyright laws can and should protect and encourage creative content as well as it protects the technology companies that assist in search and distribution.

Getty Images' distribution of creative content is made possible by our investment in a global technology platform that enables the rapid search and licensing of intellectual property for creators and media consumers, which allows them, in turn, to create and to innovate.

We are able to post new editorial images online within minutes or less of photographer transmission. In the last Presidential inauguration, our editor noted the sun coming up over the Capitol dome, an iconic shot on Inauguration Day. Our editor relayed the request, our photographer shot his images traveled through cable to the trailer, an editor selected the image, posted it online, and by the time the sun crested over the Capitol dome, the Washington Post was using that image online on the homepage of its Web site.

The demand for content will only continue to grow, and the vast market for licensed creative works can be enhanced with laws that protect creations, even in an overwhelmingly digital era. The continued growth in the use of the Internet as a forum to develop small and medium-sized businesses is projected to increase markedly in the years ahead, as today just over one-half of small businesses have Web sites.

With proper copyright protection and continued technological innovation, we can assist this growth and continue to invest and employ as we do so. The Committee's continued vigilance to advance, protect, and enforce copyright laws is critically important to Getty Images' ability to innovate, create jobs, and ensure that the United States maintains a strong competitive edge in the global digital marketplace.

I would like to thank the Committee for the opportunity to testify today. Our goal in reviewing licensure laws should be to protect creativity and still allow for an active and intelligent marketplace for searching and licensing creative works. When we do so, we all benefit from content that moves, inspires, provokes, educates, and encourages. Getty Images welcomes any future opportunities to assist in this dialogue.

Thank you.

Mr. GOODLATTE. Thank you very much, Mr. Lapham.

[The prepared statement of Mr. Lapham follows:]

**Prepared Statement of John Lapham, Senior Vice President,
General Counsel of Getty Images**

Thank you for the opportunity to testify today. I am John Lapham, the Senior Vice President and General Counsel of Getty Images, the leading provider of news, sports, entertainment, archival and creative imagery in the United States. You see Getty Images' award winning imagery every day in the world's most influential websites, magazines, advertising campaigns, newspapers, films, television programs, and books. Founded in 1995 by Chief Executive Officer Jonathan Klein and Chairman Mark Getty and headquartered in New York and Seattle, Getty Images has been publicly traded on both the NASDAQ and NYSE. With U.S. offices in Chicago, Los Angeles, Mclean, VA, Madison, WI, New York, Seattle, and Washington, D.C., Getty Images supports 2,000 employees and more than 150,000 photographers. Getty Images has offices in 18 countries, sources content from more than 180, and serves business customers in more than 200.

Getty Images pioneered the solution to aggregate and distribute visual content and was the first company to license a picture on the Internet. Today, nearly 100% of our business is conducted online. We license 200,000 images to customers every day, and our collection consists of more than 71 million images online; 70 million in archive; and 40,000 new pictures uploaded daily, as well as 1.3 million creative and editorial video clips. The images cover a diverse set of subjects designed to ad-

dress all types of customers' needs, and are licensed primarily through the industry's leading websites including gettyimages.com, istockphoto.com, and thinkstock.com.

Getty Images is the primary distribution channel for many content creators and has a significant impact on the digital and copyright economy. Getty Images' content comes from a number of sources including the more than 150,000 photographers and videographers, illustrators and musicians for whom we manage rights, all of whom are their own proprietors and entrepreneurs. The photographers range from global award winners to semi-professional or hobbyists. Content also comes from Getty Images' partners, as we are the distributor for more than 300 iconic brands including National Geographic, Disney and Discovery. While copyright ownership varies across our library of content, copyright, and its accompanying rights and permissions, are the foundation for our business and that of the creative professionals and image libraries that we represent. Consequently, strong and effective copyright laws that protect the right to license, and not just use creative works in today's digital economy, are absolutely critical for our growth and that of the many thousands of contributors and businesses we represent.

Getty Images' editorial team includes two Pulitzer finalists and a White House News Photographer of the Year. Our 24/7 coverage provides images and video of current events to thousands of news organizations and other media publishers, ensuring that the events in troubled parts of the world are brought to light. Our photographers have been placed in dozens of military embeds. We also enjoy relationships with most major sports entities globally including the NBA, MLB, and NHL, with coverage for more than 75,000 events annually. Getty Images also licenses more than 100,000 original music tracks from over 10,000 independent musicians.

Today, we serve more than 1,000,000 customers through our wide range of licensing models and price points. Many of these customers are small and medium-sized businesses that depend on powerful imagery to entice and engage customers. Through a team of more than 450 technology and 550 sales employees, we facilitate an essential marketplace where photographers of nearly every genre and skill level know they can be properly compensated for contributing to the creative ecosystem. We do have challenges with copyright infringement, and expanded perceptions of fair use. To counter this in part, we invested in leading technology to pursue and be paid for pirated content not just for Getty Images but our competitors as well. This effort is not a total solution, as legislation can provide important tools to protect creators by preventing the abuse of copyrighted works. Without laws protecting creative works from prolific free use online, the \$7.5–8.0 billion market for visual content and the hundreds of millions in royalties paid to creators of copyrighted works would collapse. We believe copyright laws can and should protect and encourage creative content as well as it protects the technology and technology companies that assist in search and distribution, as inspiration for creation suffers if people are not properly compensated.

Getty Images' distribution of creative content is made possible by our investment of more than \$450 million in a global technology platform. Our technology permits the rapid search and licensing of intellectual property for a multitude of creators and media consumers, permitting customers to, in turn, create and innovate. We are able to post new editorial images online within minutes (or less) of photographer transmission from news, sports and entertainment events. For instance, in the last presidential inauguration, an editor noticed the sun coming up over the Capitol dome, an iconic shot on inauguration days. Our editor relayed the request for the shot on the radio from our trailer on the south-west lawn of the Capitol to our photographer John Moore on the grandstand. He turned and shot, and his images travelled through cable to the trailer. An editor selected a photo, attached metadata and posted to our site for licensing. By the time the sun crested over the dome the Washington Post was using the image on the online home-page of its website.

The demand for content will only continue to grow, and the vast market for properly licensed creative works can be enhanced with laws protecting creations even in an overwhelmingly digital era. People today have more ways to communicate and more devices with which to consume information than ever before. The continued expansion of websites and devices with spectacular visual displays increase the opportunities for content creators, as a greater number of businesses require rich digital content for their marketing and educational uses. The continued growth in use of the Internet as a forum to develop small and medium sized businesses is projected to increase markedly in the years ahead, as today just over one-half of small businesses have websites. With proper copyright protection and continued technological innovation, we can assist this growth, and continue to invest and employ as we do so. The Committee's continued vigilance to advance, protect, and enforce copyright laws is critically important to Getty Images' ability to innovate, create jobs,

and ensure that the United States maintain its competitive edge in the global digital marketplace.

I would like to thank the Committee for the opportunity to testify. Our goal in reviewing licensure laws should be to protect creativity and still allow for an active and intelligent marketplace for searching and licensing creative works. When we do so we can all benefit from content that moves, inspires, provokes, educates and encourages. Getty Images welcomes any future opportunity to assist in this dialogue.

Mr. GOODLATTE. Mr. Sherak, welcome.

TESTIMONY OF WILLIAM SHERAK, PRESIDENT, STEREO D, LLC

Mr. SHERAK. Chairman Goodlatte, Ranking Member Watt, and Members of the Subcommittee, I want to thank the Committee for the opportunity to testify this morning. My name is William Sherak, and I am the President and Founder of Stereo D, the leader in high-quality 2D-to-3D conversions of theatrical content for major motion picture studios.

I started Stereo D in 2009 as a company of 15 in southern California. Following the explosion of popularity of 3D films after the release of Avatar, we have grown to nearly 100 times our original size in the last 3 years. As of today, we have converted over 20 full-length feature films, including "Captain America," "Titanic 3D," "The Avengers," "Jurassic Park 3D," "Iron Man 3," "Star Trek: Into Darkness," and, most recently, "Pacific Rim" and the upcoming "Wolverine."

Many think the conversion process is like the flip of a switch. As you will soon see, nothing could be further from the truth. It is a highly technical, labor-intensive process. To give you an idea, "Star Trek: Into the Darkness" required the conversion of roughly 200,000 individual and unique frames and took over 7 months and over 300,000 man-hours of work.

This process starts with isolating images through rotoscoping, the outlining of every image in every frame. From there, a depth map is created for each frame. This entails using various shades of gray to indicate the depth for each and every object in that frame.

Creating that depth creates missing information in the 2D image. This brings us to the last step, which requires artists to hand-paint the missing information created by the 3D image and to do so in a way that mimics what you see in real life.

If everyone would please put on their 3D glasses in front of you, we are going to take a look.

Mr. WATT. The Chairman was responsible for the popcorn.

Mr. SHERAK. So this is the 2D image. This is what we annotate to send to our rotoartists so they can see what objects they need to roto in how much detail.

Rotoscoping, as you can see, we have actually taken away about 50 percent of roto images just so you could look at it.

This is the depth map that creates the depth, white being the closest thing to you and black being the furthest thing away from you.

This is the depth pass. This is where our proprietary software comes into play. And as you see the missing imagery, that is what needs to be hand-painted, and that is the final stereo image.

To make all this happen, we recruit the best artists and stereographers in the industry from leading U.S. graphic design and computer technology trade schools. Thanks to 3D, these talented artists now have a new career option in our industry.

We are certainly not the sole beneficiary of this dynamic 3D industry. The growth of popularity of these films has led to the creation of a number of companies that either didn't exist at all or grew as a result of expanding their existing businesses into 3D. They are the manufacturers of screens required for 3D movies, 3D products like 3D glasses, and the 3D projectors, just to name a few.

And yet none of what I describe today would be possible without strong copyright protections. While many believe that copyright protections only benefit the holders, the impact is actually much broader and deeper. A copyright system that preserves and protects the rights of creators will foster an environment of certainty under which technologies like ours will continue to be developed, leading to the advancement of the entire film industry.

Using Stereo D as a case study, our very existence and growth from the start has been dependent on the ability of our customers to make an investment in our services. Simply put, if copyright holders are poised to succeed and thrive, so will we.

Moreover, it is the economic viability of copyright holders that drives innovation. As with any business, major film studios make investment decisions based on the expectation of profits. If an environment exists that does not provide adequate copyright protection, and blockbuster films become unaffordable and unprofitable due to the threat of piracy, this new and thriving 3D industry will be significantly hampered and severely impacted, the reason being that 3D conversions are normally undertaken on major blockbuster films, the very films that are often the greatest targets of piracy.

Finally, copyright protections can not only lead to the development of cutting-edge technologies, it will improve the entertainment experience for the general public. They will also foster the development of new and emerging companies that are part of the complex, labor-intensive process that goes into making a film and will ultimately enable the entire industry to be successful.

Thank you for giving me the opportunity to testify this morning. I look forward to all of your questions.

Mr. GOODLATTE. Thank you very much, Mr. Sherak, for a very interesting demonstration and for the opportunity you afforded many in the audience to photograph the entire Subcommittee wearing black-framed glasses, which I am sure we will see shortly on Facebook and Twitter and a few other places.

[The prepared statement of Mr. Sherak follows:]

**Prepared Statement of William Sherak, President, Stereo D,
(Deluxe Entertainment Services Group)**

Chairman Coble, Ranking Member Watt and members of the subcommittee, I want to thank the Committee for the opportunity to testify this morning. My name is William Sherak and I am the President and founder of Stereo D, the leader in high-quality conversions of 2D theatrical content into stereoscopic 3D imagery. We are part of a larger company, Deluxe Entertainment Services Group; with more than 4000 employees across the US, Deluxe is a leading provider of a broad range of services and technologies for the global digital media and entertainment industry.

I want to take a few minutes to share some background into how I started Stereo D and how the economic viability of copyright holders—in this case the film industry—created the opportunity for a company like Stereo D to exist and grow.

In 2009, I was introduced to a scientist who had developed a code to convert still images from 2D to stereoscopic 3D—where two-dimensional images are combined to give the perception of 3D depth. He literally took a picture of me, put it on his laptop, and converted it into a 3D image whose depth made it the most dynamic and lifelike I had seen on a screen. Given that movies are a series of still photos, at that moment, it became clear to me that this conversion technology would transform the movie experience, both for film makers during the production process and audiences whose movie-going experience would be significantly enhanced with a stereoscopic 3D film.

We began as 15 employees who worked with James Cameron to convert several frames during the post-production process on *Avatar*, the film that forever changed the idea of a 3D film. Overnight, the 3D experience was changed from one that was hokey and underrated to one that immersed the movie-goer in high-quality stereo images, bringing the film to life through more realistic depth perceptions. For the first time, viewers felt as though they were actually in the scene of the movie, instead of watching it on a flat screen. From there, the 3D industry took off and Stereo D was tested and ready to meet the coming demand of high quality 3D conversion.

Since that time—in just over three years—we have grown to over 1000 employees globally, 400 of which are in Burbank, CA—where we work side by side with major motion picture studios and the industry's best and most well-known directors, cinematographers, and visual effects supervisors to bring their vision of 3D storytelling for major blockbuster films to life. We have converted “*Thor*,” “*Captain America*,” “*Titanic 3D*,” “*The Avengers*,” “*Jurassic Park 3D*,” “*Star Trek: Into Darkness*,” and most recently “*Pacific Rim*,” and the upcoming “*The Wolverine*,” among others. In fact, I am proud to say that Stereo D was recently named one of the World's Most Innovative Companies by *Fast Company* magazine.

There is no question that an investment made to convert a film shot in 2D into 3D pays off. When you look at last year's box office report and compare the top grossing film as compared to number two, *The Avengers* grossed over \$623 million and *The Dark Knight Rises* finished with \$448 million, a difference of \$175 million. The major differentiator: *The Avengers* was released in 3D and *The Dark Knight Rises* was not.

Many think that the conversion process is like the flip of a switch; nothing could be further from the truth. It is a highly technical, highly laborious process that starts with isolating images through rotoscoping, the outlining of every image in every frame. From there, a “depth map” is created for each frame—this entails using various shades of gray to indicate the depth for every object in the frame. Now that you have created depth in places that did not exist before in 2D, the last step requires artists to literally reconstruct or add in new areas created by the 3D image and to do so in a way that it mimics what you see in real life.

To distinguish ourselves in the conversion marketplace, Stereo D employs the best artists and stereographers in the industry. We do much of our recruitment from leading US graphic design and computer technology trade schools, including the DAVE School in Orlando, Florida and Full Sail University in Winter Park, Florida. In fact, the curricula at these schools have been tailored for the conversion of stereoscopic 3D imagery to meet market demands. This has led to a new employment opportunity for this pool of tremendously talented individuals.

It is important to note that we are not the only beneficiary of the dynamic growth of the 3D industry. There are a number of companies that either didn't exist at all or grew as a result of expanding their existing businesses into 3D, such as manufacturers of screens required for 3D movies to be projected onto, the manufacturers and suppliers of 3D products like the 3D glasses, the manufacturers of the 3D projectors, the consumer electronics companies, companies that develop and provide the hardware and software needed in post-production/editing of digitally-produced 3D and even the makers of 3D blu-ray discs.

None of this would be possible without strong copyright protections. While many believe that copyright protections only benefit the holders, the impact is actually much broader and deeper. A copyright system that preserves and protects the rights of creators will foster an environment of certainty under which technologies like ours will continue to be developed, leading to the advancement of the entire film industry. Using Stereo D as a case study, our very existence and growth from the start has been dependent on the ability of our customers to make an investment in our services. Simply put, if copyright holders are poised to succeed and thrive, so will we.

Moreover, it is the economic viability of copyright holders that drives innovation. As with any business, major film studios make investment decisions based on the expectation of profits. If an environment exists that does not provide adequate copyright protection and blockbuster films become unaffordable and unprofitable due to the threat of piracy, this new and thriving 3D industry will be significantly hampered and severely impacted. The reason being that 3D conversions are normally undertaken on major blockbuster films—the very films that are often the greatest targets of piracy.

Finally, copyright protections can lead to the development of cutting edge technologies in the film industry that will improve the entertainment experience for the general public; foster the development of new and emerging companies that are part of the complex, labor-intensive process that goes into making a film; and will ultimately enable the entire film industry to be successful.

Mr. GOODLATTE. We are now joined by the Ranking Member of the full Committee. And before we turn to questioning, I want to turn to him so that he can give his opening statement.

I now recognize the gentleman from Michigan, Mr. Conyers.

Mr. CONYERS. Thank you, Mr. Chairman.

I am going to put my statement in the record.

I want to join in welcoming all of the witnesses, from Copyright Alliance, from the records and distribution company, Getty Images, Stereo.

Let me say that, in putting my statement in the record, in summary, I agree with the assertion that copyright law plays a critical role in job creation and also in promoting the national economy. And we should review how copyright law can be strengthened to protect both artists and creators alike, and that the copyright law must ensure that creators have a fair chance to be compensated for their creative efforts. And, finally, our Committee—and I think all of us are in agreement here—should continue to study ways to prevent piracy and to fight other violations of copyright law.

And I thank the Chairman for allowing me to insert my full statement into the record.

Mr. GOODLATTE. I thank the gentleman.

[The prepared statement of Mr. Conyers follows:]

Prepared Statement of the Honorable John Conyers, Jr., a Representative in Congress from the State of Michigan, Ranking Member, Committee on the Judiciary, and Member, Subcommittee on Courts, Intellectual Property, and the Internet

Copyright law plays a critical role in job creation and in promoting the health of our Nation's economy.

For example, IP-intensive industries generated nearly 35% of our gross domestic product and was responsible for 27.1 million jobs, according to the Commerce Department.

A key element to the success of copyright law, however, is that it must work for both the owners of content as well as the users.

Today we will focus on copyright and the creative community's contribution to innovation. And next week we will shift our focus to the contributions that technology makes next week.

Content is available in many more ways than it was in 1976 when a major portion of the current copyright statute was enacted.

As we consider these issues over the next two hearings, there are several principles that I recommend we keep in mind.

To begin with, we should review how copyright law can be strengthened to protect artists and creators.

Earlier this year, we heard from Maria Pallante, Register of Copyrights, about specific recommendations we should consider for legislative review.

For instance, Maria Pallante, identified the following matters that should be addressed:

- providing a public performance right for sound recordings;
- developing a system to facilitate the use of orphaned works; and
- strengthening enforcement of copyright protections by making the unauthorized streaming of copyrighted content a criminal felony.

Each of these suggestions would improve copyright law and help protect creators. Accordingly, I would like the witnesses to give their thoughts on these proposals.

In addition, copyright law must ensure that creators have a fair chance to be compensated for their creative efforts.

Adequately compensating artists and creators for their work promotes creativity. This creativity can also benefit many of the new technologies like the ones we see on the Internet.

In his testimony, Tor Hansen, Co-Owner and Co-Founder of YepRoc Records, describes the fact that we still do not have a performance right and the reason why that needs to change.

Performers whose songs are played on the radio provide their services without compensation, and this sets our Nation apart from every other country, except China, North Korea and Iran.

This exemption from paying a performance royalty to artists no longer makes any sense and unfairly deprives artists of the compensation they deserve for their work.

Finally, the Judiciary Committee should continue to study ways that we can prevent piracy and fight violations of copyright law.

An important aspect of this process will be continuing to educate the public about piracy and copyright law. Today the Consumer Institute Center for Citizen Research released a report about consumer opinions on IP and counterfeit/pirated goods. The report notes that 86 percent of U.S. citizens believe that protecting IP is a good way to encourage innovation and creativity. Another finding from the report is that 89 percent of U.S. citizens view the sale of counterfeit and pirated goods as negatively affecting American jobs. I look forward to reviewing this report and believe that it will be helpful in our evaluation of this issue.

We must continue to work to fight piracy. A study by the Institute for Policy and Innovation found that the U.S. economy lost \$12.5 billion dollars and more than 70,000 lost jobs annually by American workers due to piracy of sound recordings.

We must also monitor how other countries are enforcing intellectual property laws. Chinese piracy and counterfeiting of intellectual property cost American businesses approximately \$48 billion in 2009, according to a report by the United States International Trade Commission.

As we examine the copyright system to ensure that it meet the needs of creators and the public, I believe that copyright law should be guided by technology-neutral principles.

I will continue to work to ensure that creators receive adequate protections and look forward to hearing from our witnesses today.

Mr. GOODLATTE. And we will now turn to questions by the Members of the Committee.

Ms. Aistars, your testimony discussed the constitutional framework for copyright. How do you think the Framers would view the current copyright system and how American society values creators and their works?

Ms. AISTARS. Thank you for the question.

I think the Founders would be pleased to see that copyright, at its core, is working fairly well. I believe the sorts of debates that we are having today are debates that we have had historically over time: how to ensure innovation, ensure that creators feel empowered both to create and disseminate their works, and how best to balance the laws that we have to encourage that activity as technology changes over time.

So I think the Founders would be pleased that you are taking a look at the Copyright Act and how it is currently serving the pur-

pose of motivating creators and protecting creators' works and also encouraging the dissemination of those works.

Mr. GOODLATTE. Thank you very much.

Mr. Sherak, some might incorrectly view moviemaking as not being an advanced technology business. Yet you were named, your company was named one of the world's most innovative companies by Fast Company Magazine.

I would like you to talk more about innovation and your investments to create it.

Mr. SHERAK. I think that the film industry has historically driven the entertainment medium forward, if you look at colorization, you look at sound. 3D is the new way to enhance the moviegoing experience. And, you know, film, more than anything, is just an amazing social medium for people to go with a group of people and experience something, and we continue to drive that forward.

Stereoscopic film is the newest way to do that, and we will continue to drive that forward as you look to the future. We hope the next thing is 3D without glasses, making it an even more passive experience and not having to put glasses on. And we will continue to try and drive those technological advancements.

Mr. GOODLATTE. Thank you.

I was fortunate in the last Congress to get legislation passed by the Members of this Committee in a very bipartisan way and then sent on to the Senate and then ultimately signed into law by President Obama making it possible for people viewing movies to share that on Netflix and other companies, so they can do it on Facebook and Twitter and other media, the opportunity to enhance that socialization that you referenced.

Let me ask all the witnesses one more question, and then I will recognize the Ranking Member.

As the Committee undertakes the review of copyright laws, what are the overarching issues that we should keep in mind as they relate to the copyright world as a whole in addition to your specific part of it? And since there are five of you, hit the highest point or two, not—don't take too much time.

We will start with you, Ms. Aistars.

Ms. AISTARS. Thank you, Chairman.

As I referenced in my testimony, I think the main principles to keep in mind when looking at copyright law are the ones that the Founders put before us—that is, that copyright law should encourage both the creation and the dissemination of works, and that when you are looking at what that requires, you look at it from the perspective of all creators who are involved in that process. And you evaluate the reasons why creators put works out publicly and what empowers them to put works out publicly.

I think that you should keep in mind experiences like Eric Hart's, which I referenced in my testimony, as well as experiences like Matt Herron's, and be motivated by those types of creators as you look to the future, as well.

Mr. GOODLATTE. Mr. Mopsik?

Mr. MOPSIK. I believe, Mr. Chairman, in recent years, everyone has figured how to make money from photographs except for photographers. And I would encourage, going forward, I guess the big issues for us are ultimately fair compensation, and I am also con-

cerned about the expansion of fair use, at this point. But those would be the big issues for us.

Mr. GOODLATTE. Mr. Hansen?

Mr. HANSEN. Well, with music, you are dealing with a lot smaller file sizes than some of these larger, more complex movies and what have you. But I would say the ease of file-sharing and the way that search has allowed the trading of the non-legitimate sources for music, meaning the ones that are getting paid, is an issue that needs to be looked at and to figure out how that can be sorted to not allow those sort of things to be so easily done.

And then, clearly, the fair compensation for the copyrights.

Mr. GOODLATTE. Mr. Lapham?

Mr. LAPHAM. Thank you.

For us, it's fair use. We think there has to be a balance between having enriching content to find and then also having that content available in order to have something to search for. And as a creative and technology company, we see the value involved in striking that balance.

Mr. GOODLATTE. Thank you.

Mr. Sherak?

Mr. SHERAK. Thank you.

I think, for me, it is keeping in mind all of the other people that are affected by copyright law and how many jobs are created, not just by the creators of the holders of the copyright, but my company wouldn't exist if studios didn't make big films. And the amount of employees we have, that is a very important thing to consider.

Mr. GOODLATTE. Thank you.

The Chair recognizes the gentleman from North Carolina, Mr. Watt, for his questions.

Mr. WATT. Thank you, Mr. Chairman.

As has become my policy, I am going to defer and go last in the queue. So I will defer to Mr. Conyers.

Mr. CONYERS. Thank you.

I welcome all the witnesses.

Let me start with Director Aistars. Do you believe that we should take a measured approach when reviewing copyright law?

Ms. AISTARS. I do, Mr. Conyers. I believe the copyright laws, at its core, are working and are serving both creators and innovators well. I do believe there are areas which are ripe for improvements and that the Committee is doing the right thing by looking at the laws and how they could be updated to meet our current needs.

Mr. CONYERS. Thank you.

To any one of the other witnesses, who can name steps that we might as a Committee take that would be helpful in our analysis of copyright law?

Mr. LAPHAM. I can take a crack at that.

I think some of the steps would include what you are doing right now, and that is hearing from content creators, from people that benefit from having the protections of copyrighted works, also hearing from technology companies and having the importance of the ability to find the content. Because creative content that is made and you are not able to locate it is of little value.

And so I think that hearing from both constituents is great, and then also looking at the economic impacts on both sides.

Mr. CONYERS. Thanks for your suggestions.

Mr. Hansen, have you embraced yet the new business models to distribute your music?

Mr. HANSEN. Sure, yeah. We are looking for where we can find customers with—you know, seeing our content and paying for our content wherever they are. We recognize that these customers have a value to add to us as long as they can value what we bring to them.

Mr. CONYERS. Uh-huh.

Does anyone have any other recommendations about steps this Committee might want to take in terms of our analysis of copyright law?

Ms. AISTARS. If I could comment—

Mr. CONYERS. Please.

Ms. AISTARS [continuing]. Briefly, Mr. Conyers.

I think there are important steps that you can take that don't require revising Title 17, as well. And here I refer to your oversight authority and your ability to encourage stakeholders to take responsible steps together to try and solve the problems that we are facing in the marketplace.

Mr. CONYERS. Uh-huh. Thank you.

And, finally, what about, Mr. Hansen, over-the-air radio performance royalties? Do you have a view on that?

Mr. HANSEN. I had mentioned that in my testimony, and we see—and, I guess as I mentioned, over-the-air is something that the United States does not pay out as a royalty, and every other country in the world is holding royalties for our copyrights because we do not pay these things out.

And we see that as something—and appreciate Mr. Watt's comments earlier—that this is something that really needs to be looked at. And we are continuing to look and to talk about how we can make that happen.

Mr. CONYERS. Very good.

Any other recommendations you would like to make?

Yes, sir?

Mr. MOPSIK. Yes, Representative Conyers.

I think there are some simple changes that could be made to the actual statute that would make it easier for, in particular, for photographers, who I believe have more registrations than any other group of rights-holders, but that would make it easier for them to register. And, in particular, eliminating the differential between published and unpublished, which is a cause for concern and debate, I believe, by everyone from the Copyright Office to the rights-holders.

And I guess, also, I am not clear about the need for deposit copies; and, also, the institution of a small claims process for infringements.

Mr. CONYERS. Well, thank you very much.

And I would yield back any time left remaining.

Mr. MARINO. [Presiding.] Thank you.

The Chair recognizes Congressman Chaffetz from Utah.

Mr. CHAFFETZ. Thank you.

And thank you all for being here. This is an important topic, and I appreciate all the expertise that is here in this room and at this table.

And, Mr. Hansen, my question is first for you. And congratulations on your success. I mean, you are a great American success story, starting from your garage, 60 employees now. And that is what we like to see. And you are the type of business that we want to see growing and expanding.

And so let's talk about how you drive new fans, new audience. I mean, it is a very competitive atmosphere out there. How do you do that? How do you do that? Where do you go to find new fans?

Mr. HANSEN. Well, we have a staff of people that we employ, as well as artists that we also compensate, as well as they have their jobs of being career musicians. And it is—we try, at this point, to identify the methods and the customers and the partners out there that can best reach that audience. It is across the board.

Mr. CHAFFETZ. No doubt you have an array of people that help you do that. Where do you go to actually find them, to find the customers? Where are they?

Mr. HANSEN. They are listening to music everywhere and anywhere. It is online, it is on the radio, it is in the clubs, it is all over the place.

Mr. CHAFFETZ. So you have a group that is touring, and they have a hot song, and they are going from club to club, how do you promote that? Where do you go to promote that?

Mr. HANSEN. We are promoting it across the board. We are crossing—again, from the ground up and from the top down.

Mr. CHAFFETZ. Do you put an ad in the Yellow Pages?

Mr. HANSEN. No.

Mr. CHAFFETZ. Okay. Do you put it—

Mr. HANSEN. We go on—we go onto their—we recognize their fans through Facebook. We recognize their fans on YouTube. We recognize that we need to go to college radio, we need to go to commercial radio, we need to go across the board—

Mr. CHAFFETZ. There is a value—

Mr. HANSEN [continuing]. Where music lovers are listening.

Mr. CHAFFETZ. It would be fair to say there is a value for being on the radio.

Mr. HANSEN. Sure, just like there is a value to being on Facebook or YouTube or being in a club.

Mr. CHAFFETZ. And Internet radio is something I have been keenly involved with and engaged with. Certainly, you are finding fans on the Internet radio. Tell me how you use the Internet radio.

Mr. HANSEN. Well, the larger—we send our music to programmers, and they program our music on Internet radio. In some cases, they are performing on Internet radio, so live. You know, they will go into the studio and they will perhaps get interviewed and that sort of thing.

Mr. CHAFFETZ. I guess the point I am trying to make, Mr. Chairman, is there is great value, there is compensation in driving audiences and driving people to clubs and creating awareness. That is where the generation that is listening to music today. We have got to find the proper balance, I understand that, but I also think there ought to be more competition and more outlets for you on Internet

radio. I don't think it is working right now for most people. We have got a big dominant player who is having great success, but they still lose money every month and it doesn't work.

We want artists to be fairly compensated. And there is value to being on the radio. And, again, you are not going to go to the Yellow Pages; YouTube and Facebook are but two outlets, but where we are going to be 5 and 10 years from now is going to be a key to our future and it is something we need to continue to explore.

Going back to Mr. Mopsik, tell me a little bit more about your experience with the Copyright Office, and maybe anybody else who wants to join here, what are the positives, but what are the challenges, what works well and what doesn't work well at the Copyright Office?

Mr. MOPSIK. I mean, for photographers, the creation of the ECO system was a big step forward to be able to register online. Our challenge is that a photographer may go out routinely, create over 1,000 images in a day. I mean, you hear the number of clicks going on here with the photographers covering this event. It is easily in the hundreds of images. Then they have to go home and process those and decide what they are going to register or how that is going to happen.

And right now one of the things that we have been trying to promote to the Copyright Office and been in discussions with them about for a while, and they seem quite agreeable to it, it is just a matter of making it happen, is to create a link from within a photographer's workflow so that when they bring a job in, they can actually register images from their regular workflow and not have to go outside to go to the Copyright Office to make that registration. And we believe that would, I guess, fulfill one of the goals of the office, to encourage registrations.

I mean, some of the other, I guess, frustrations we have is that if, in fact, you haven't registered prior to infringement, you are locked out of statutory damages and court costs, at which point, very few photographers can afford to pursue an infringement matter in the absence of a small claims option. So they are effectively denied due process, because they have to go into Federal court to file a case, and no litigator is going to take that case without the promise of a statutory damage. So unless the photographer happens to be independently wealthy and willing to chase windmills, he is locked out. Those are, I think, some of the key issues.

Mr. CHAFFETZ. Thanks, Mr. Chairman. Yield back.

Mr. MARINO. Thank you. The Chair recognizes Congresswoman Chu from California.

Ms. CHU. Thank you, Mr. Chair. And first I would like to submit two items for the record. One is an op-ed in The Hills Congressional Blog by Eric Hart, who is Congress Member Coble's constituent, and I am submitting it because he couldn't be here today.

The other is a letter I received from East Bay Ray, who is guitarist of the Dead Kennedys, John McCrea, who is a songwriter and founding member of the band Cake, and 12 other musicians, songwriters and composers who wanted to remind us all that their careers exist because of copyright laws, and they wanted to make sure that individual creators are invited to testify in future hearings.

[The information referred to follows:]

Op/Ed, by Eric Hart

In the world of theatre, the people working backstage sometimes don't get the credit they deserve for making sure the show runs smoothly. The same could be said for the creative fields in general. For every talented professional in the spotlight, there are scores of talented professionals working behind the scenes, and it is paramount that we make sure their creativity and labor is afforded the protection it deserves.

Like many creative people who work in the arts for a living, I don't spend a lot of time thinking about copyright law. However a recent experience brought to my attention how important its protections can be for an independent author and artist like myself.

I began working in the theater during college and have done lighting, set design, painting and even audio. Through this I discovered my true passion: making props. I have been a working prop maker for the past ten years. At a certain point, I became frustrated with the lack of current books available on the craft of prop making and began working on my own.

While my book, titled *The Prop Building Guidebook: For Theatre, Film, and TV*, was published earlier this year, I first started planning and researching it in 2008. I began a blog a month later in January 2009, to practice my writing and build an audience. But nothing could have prepared me for the amount of work it would take to craft a full book. I worked nearly every day for a year to complete the manuscript but still felt like I could have used more time.

No one had ever written anything as comprehensive as I was attempting. I talked to professionals in the field and pored through every book, magazine or website with reference material I needed. Besides trying to describe the "best practices" of my industry, I was checking and rechecking technical information to make sure everything I said was accurate. I had to work for every sentence in that book. Some tiny phrases and charts took hours just to put together because the information was so scattered or mired in jargon.

No other prop making book in the past had color photographs; mine has over 500. I shot dozens of photos that I set-up specifically for the book; in some cases, I bought materials to demonstrate their use for those photographs. I invested time, effort and money so the book could serve as a foundation of information for future prop makers to build off of.

The book is not a commodity that's interchangeable with other books out there - nor did it appear magically one day. Its publication was not inevitable. I had to work to get it written. So is it unreasonable to ask that my work is protected and that protection is respected?

I'm not being unreasonable to my audience. While textbooks and reference books of the same size and scope can sell for \$80-120, my book is a mere \$40. Forty dollars for access to my ten years of prop making experience, as well as interviews and discussions with numerous experts in the field. In full color, to boot? That seems like quite the bargain.

And I'm not keeping my information and knowledge locked away. I wanted the information to spread regardless of whether people can afford it: I made a number of videos to complement the book, as well as a few chapters which couldn't fit in the book available for free on the book's website.

The book's website has a link for teachers to request a free copy to review for their classes, and my blog continues to be a source of free information.

So while it is not unexpected for me to find out the book is being pirated, it is odd. I've found sites harboring free copies of the book in full view of anyone surfing the web. It's like I'm standing right there, while someone says, "Yeah, you spent years creating something unique and valuable that will benefit the community. I appreciate that, and I'm going to take advantage of it, but I'm not going to pay like everyone else."

I can't hire a team of lawyers to go after these sites, and even if I could, there are too many to make a difference. I only ask that if you want to benefit from my work and labor, you respect me and access the book legally.

I hope Congress keeps this in mind as it reviews the Copyright Act. While we do have laws intended to protect creators like me, we seem to live in a culture that pretends piracy has no real victims. It's important to remind everyone the amount of work that goes into the creative works that are so useful and valuable to us. I only wrote a single book, but there are those who devote every day of their lives to writing and creating, and they will not be able to do that if their work is not protected from those who decide to give away those works for free without the creator's permission. When we devalue the creative work, we are devaluing the act of creation and the act of working, both of which are vital to a free and prosperous culture.



*Eric Hart is currently a prop maker, prop master, and writer in North Carolina. His book, *The Prop Building Guidebook: For Theatre, Film, and TV*, was published by Focal Press in 2013; it is available at Focal Press.*

July 22, 2013

The Honorable Judy Chu
House Committee on the Judiciary
Subcommittee on Courts, Intellectual Property and the Internet
1520 Longworth House Office Building
Washington, DC 20515

Dear Congresswoman Chu:

We, the undersigned, are all working professional musicians, songwriters and composers, and while our career paths are as varied as our musical styles, they have all been made possible by copyright laws, laws that require we are justly compensated for our time and labor when we express ourselves to the public. As Congress begins its review of copyright law, we hope you focus on making sure the law provides a framework that supports the work of musicians like us.

We appreciate the attention given to the need to have individual artists at the table during the copyright review process. In an op-ed appearing in Politico on May 13, 2013, one musician expressed dismay that individual artists have historically been excluded from discussions that impact their lives and livelihoods. ("Getting copyrights right", available at <http://www.politico.com/story/2013/05/building-a-real-copyright-consensus-91231.html>.)

This is a sentiment many of us share. We are glad that the Subcommittee has heard these concerns, and hope you will invite a member of our group to participate in future hearings when suitable.

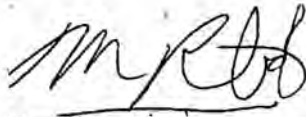
As you continue your review of the copyright laws we want you to know how important these laws are to working musicians like us. We want laws that will empower us to deal with other players in the free marketplace, protect us from constant exploitation by unethical businessmen, and provide a firm foundation for a robust, dynamic culture. We want you to remember that copyright promotes freedom of expression and reflects the autonomy and dignity of individuals and us as creators. It is vital that copyright continues to support creation as well as the commercialization and distribution of individuals' works with their consent. Such an approach has and will continue to benefit both society and creators.

We are ready to help in the Committees' review of copyright law, should you find that useful, and will be submitting testimony for the record in future hearings when appropriate.

Sincerely,

East Bay Ray

East Bay Ray
Guitarist, Co-Founder of Dead Kennedys



Marc Ribot

Recording artist, Cubanitos Postizos and many solo recordings. Side musician to: Tom Waits, Robert Plant and Alison Krauss, Diana Krall, Elvis Costello, Allen Toussaint and many others



Carla Bozulich

Professional musician of 25 years, current work Evangelista and solo



Matthew Montfort Bandleader
of Ancient Future



Jonah Matranga

Singer, songwriter, guitarist



Zoe Keating

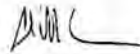
Cellist and composer



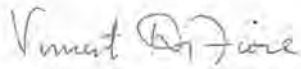
Grant-Lee Phillips
Singer/songwriter and front-man of Grant Lee Buffalo



Denise Siegel
Multimedia artist, writer and musician



John McCrea
Songwriter, founding member of CAKE



Vincent DiFiore
Professional musician and recording artist



Blake Morgan
Recording artist, Producer, Founder ECR Music Group

A stylized, handwritten signature in black ink, appearing to be 'Rupa Marya'.

Rupa Marya
Singer, Songwriter (Rupa & the April Fishes)

A handwritten signature in black ink, appearing to be 'Rebecca Gates'.

Rebecca Gates
Musician, Sound Artist

A handwritten signature in black ink, appearing to be 'Sean Hayes'.

Sean Hayes
Songwriter/Performer

cc: Amelia Wang
Linda Shim
Courtney Hruska

Mr. MARINO. That is it?

Ms. CHU. No.

Mr. MARINO. Oh, I am sorry. Without objection.

Ms. CHU. Well, I thought I would actually like to ask questions about copyright infringement and how we are dealing with it right now. And so first let me ask Sandra Aistars and Tor Hansen about the voluntary agreements that we have. We have seen two voluntary agreements to address this issue of online theft, and the first is the best practices guideline for ad networks. And this was started by Google along with leading ad networks such as Microsoft, Yahoo and AOL, that announced best practices that would block sites dedicated to online piracy from using their ad services.

And then there is also the copyright alert system that ISPs such as AT&T, Verizon, Comcast and Time Warner are working—are doing, along with content providers, to issue warning notices to users when they have used rogue sites that have infringed upon copyrights.

How would you evaluate some of these solutions that have emerged, and what can we do in Congress to monitor and assess the impacts of these efforts?

Ms. AISTARS. Thank you for the question, Congresswoman Chu. I am encouraged that other stakeholders in the marketplace are taking positive steps and recognizing their role in addressing infringements. I think they are doing so because they see this as something they need to do for their clients, for the brands which they place ads for, as well as for their own reasons.

The efforts, in my mind, work best when creators are fully consulted in coming up with these best practices and when the requirements, for instance, for alerting an ad network to an infringing site, placing ads on that infringing site are ones that are actually geared toward something that an artist could actually do themselves.

I was a little disappointed to see that this latest best practices document for ad networks required artists to be fully conversant in data tracing and figuring out exactly which ad network a particular ad had been generated by, and I think that is probably beyond the abilities of most artists who are on the road performing and working and trying to make a living.

With regard to the copyright alert system, I am encouraged that that is taking place. Again, I think it is great that it applies to movies, music and TV programs. I would love to see it expanded to address other types of creative works, such as photography and books and perhaps even lyric sites, because none of those are currently covered. So I am both encouraged, but I think there is still work to be done.

Ms. CHU. Mr. Hansen?

Mr. HANSEN. We are also encouraged by the—that these things are now moving into place and we are starting to get the messaging out there. I think it is going to take a two-prong effect or many prongs, really, that the messaging continues to go out there to the consumers that this is not the right way, the right behavior to be taking product, and as well as removing it and eliminating the access at some point somehow.

Ms. CHU. And Ms. Aistars, I asked what could we do in Congress to monitor the impact of these efforts.

Ms. AISTARS. Well, I think with your oversight role in this area, it would be fully appropriate for you to invite stakeholders who have begun to take these—these measures in to share with you how those are working, what—what seems to be the response—are they having the effect that was intended. I think also in particular when stakeholders announce they are taking measures themselves, it would be very interesting to understand how those play out over time.

For instance, Google announced last year that it was changing its algorithm to limit the types of infringing sites that might otherwise rise to the top of search results, and I would be interested in hearing how that is working and whether that is truly having the effect that they intended.

Ms. CHU. Thank you. I yield back.

Mr. MARINO. The Chair now recognizes Congressman Smith from Missouri.

Mr. SMITH. Wow. Thank you, Mr. Chairman. It is nice to be the newest Member on the Subcommittee and actually not go last. So getting here earlier pays off.

This Committee hearing has been quite informative and very helpful, being new and learning a lot of the issues facing copyright. And my question is for all of you, in fact, with the changes in technology, with everything, with the Internet and all the different areas, what do you all see or anticipate as being the biggest struggles facing copyright, I mean, the absolute biggest struggles, or the best opportunities that you have with changing technology?

Ms. AISTARS. I can start, if that is appropriate. I think, as I said in my testimony, we see ourselves as partners and collaborators with the technology community. And some of the issues that have come up through questioning already are some of the challenges that I think all of us need to struggle with. One, for instance, is ad-supported sites that are infringing sites. That is something that I think is in the best interests of all legitimate businesses to try and address.

Similarly, credit card and other payment systems. I know that numerous of the credit card processors are taking very positive steps themselves to prevent their payment processing systems from being used on infringing sites. I think these types of activities, which cut off the dollars flowing to what are most often foreign rogue sites are very important, and are things that we need to maintain and to expand to other areas as well.

Most people find the content, the movies, the music, the books that they are looking for online through a result of using a search engine, and so I would be very interested also in seeing efforts expand into that area as well.

Mr. MOPSIK. Representative Smith, I would like to add, from a photographer perspective, a few issues. One would be funding or additional funding or more funding for the Copyright Office to allow them to advance the work that they have engaged in.

Beyond that, I think a key issue for photographers is one of persistent attribution, which goes to, in effect, how rights holders are identified. It is a huge technology issue, but one that I think people

have been trying to solve for a while, but we don't have an absolute answer to that yet, but with—if there were—I mean, right now it is too easy for all of the identifying information to be stripped from a photograph as it moves through the digital space, and so the image can be used, reused in multiple sources without ever being able to find the actual rights holder. There are some ways to search that out, but not particularly great.

Mr. HANSEN. I think a lot of the ideas, the big ones, have been spoken about, but, just to reinforce that the search and the advertising and that the sort of—those things that raise to the top that are not the legitimate and real partners that are valuing our copyrights find a way to move down the list. And it is a challenge, but it is one that really needs to be looked at.

Mr. LAPHAM. For us, Mr. Smith, I think it is finding the balance between locating content and ensuring content creators are compensated. And then I also think it is finding a sensible alternative for dispute resolution. And we are big fans of the Copyright Office's efforts to put out a small claims process for copyright.

Mr. MARINO. Okay. The gentleman's time has expired, but Mr. Sherak, you want to quickly respond, please?

Mr. SHERAK. I will quickly. Yeah. Thank you. I think for us, it is protecting our customers' copyrights and then attacking piracy and making sure that we go after and take care of people that are pirating the films that we work on, because if they don't get made, we can't convert them to 3D.

Mr. SMITH. Thank you.

Mr. MARINO. The Chair recognizes Congressman Deutch from Florida. I think we have time to get through that.

Mr. DEUTCH. Thanks, Mr. Chairman. And I am glad we are having this hearing today on the role of copyrights in America. And I would start by noting that I think too often we only associate big celebrities and big companies with copyrights, and forget about the millions of lesser known creators whose work we might recognize, but whose work likely will never appear in the entertainment news or in the gossip magazines. And it is in that vein that I am honored to chair the songwriters caucus with Marsha Blackburn and pay tribute to those great American creators whose work provides such an important part of the soundtrack to our lives, but whose names we often don't know.

I want to thank you, Ms. Aistars, for highlighting your own family's story, along with those of other creators in your testimony, and I wanted to ask you as a follow-up something that you raised. I agree with you that our copyright law has to remain—has to remain rooted in tech neutral premises. I wanted your thoughts on how to ensure that the laws can grow with ever-changing technologies so that we are not picking favorites, we are not stifling potentially game-changing innovations, and at the same time, we are not opening creative works to new avenues for theft.

Ms. AISTARS. That is a big question. I think, first, what you are doing here today in examining the contributions both of the copyright community and of the technology community to our health and well-being as a Nation is the exact right place to start. I think through—going through this process in a measured way and understanding what types of innovation each of our communities is en-

gaged in will help you pinpoint the areas where some adjustments might be needed.

I think the challenge that I hear most frequently from my grassroots members is the challenge in quickly and efficiently responding to infringements online. That is just another iteration of the same sorts of challenges that people have been facing with their works for decades and decades. And I think we will keep seeing these same sorts of challenges moving forward, but we have been talking about certain—certain adjustments that might be necessary or appropriate to look at, and looking at the DMCA may be one of those places, in making sure it works for independent creators.

Mr. DEUTCH. And realizing how big a question that is, I look forward to continuing this conversation off-line, just so I can get in a couple more points.

I wanted just to go back to the fundamentals, which we often don't do that Article 1, Section 8 of the Constitution demands the Congress promote the progress of science and the useful arts, and it does that with meaningful copyright protections. It certainly helped that many of our Founding Fathers were creators themselves, they were inventors, but I think it reflects an even greater recognition that the long-term success of our country depends on the work of inventors as well as artists and creators in moving our country forward, in improving all of our lives with new medicines and technologies, but also in shaping our culture.

It is often pointed out in this Subcommittee, and I might add not said enough in other contexts, that our strongest export is our intellectual property. It is the only area where America enjoys a trade surplus and it provides a great source of goodwill for America overseas. The total estimated impact of copyright on the U.S. economy is over \$1.5 trillion. The film industry alone supports 2 million jobs and contributes over \$14 billion in exports. Sales in the music industry exceeded \$7 billion, and American authors and photographers and artists help promote our culture in every corner of the world. All of that progress and innovation is threatened when copyrights aren't protected.

The music industry was very publicly on the front lines of the problems when the digital age made theft ubiquitous, and they have worked painfully through these new challenges to embrace a whole host of new platforms that make digital sales and streams a source of incredible growth. And I think—I think that what we have seen there and the fact that—the potential to bring the music industry back to where it was even pre-Napster through all this new technology shows the point that you made, Ms. Aistars, that content and technology are not locked in some perpetual struggle looking for Congress to balance competing interests. To the contrary, having access to movies and music and books gives people a reason to adopt the latest technology and innovative platforms, help creators reach audiences that they would never otherwise touch.

So it seems like our goal as a Nation is to grow the pie for everyone fairly instead of fighting about how we slice up what we already see today.

In that vein, Mr. Hansen, your testimony explains that—in your testimony, you said that the compulsory license ensures that all

sound recordings are treated and compensated equally. That should be the goal. Now, some critics claim that under the compulsory license, not all music services are treated equally, and I am confused by that. I will ask this question, you can respond—you can respond in writing.

Under the license, you can't withhold music from any service or force them to pay different rates than the—than the CRB has set. Can you, and I would like you just to respond to those claims in writing since I don't think we have time now. And I thank the Chairman.

Mr. MARINO. Thank you.

Ladies and gentlemen, to our panel, I apologize. We are called to votes. We are going to be voting on the House floor for at least an hour. And after consulting with my Ranking Member, I have made the decision that we will not return; however, each Member does have the opportunity to submit questions in writing to you. And I apologize to you very deeply, but the votes came earlier than we anticipated.

So this concludes today's hearing. Thanks to all of our witnesses for attending and the people in the gallery. Without objection, all Members will have 5 legislative days to submit additional written questions for the witnesses or additional materials for the record. This hearing is adjourned.

[Whereupon, at 10:54 a.m., the Subcommittee was adjourned.]

SUBMISSIONS FOR THE RECORD

Prepared Statement of Stephen Schwartz, President, Dramatists Guild of America, the Dramatists Guild of America

Thank you to the House Judiciary Subcommittee for inviting me to participate in this critical discussion about the future of copyright in America. Although I was unable to testify before you, I am grateful for the opportunity to submit this statement to you for the congressional record.

I am Stephen Schwartz, a composer and lyricist who has written songs for the theatre since 1969. My Broadway shows include GODSPELL, PIPPIN, THE MAGIC SHOW, WORKING and WICKED, and my regional work has included CHILDREN OF EDEN, THE BAKER'S WIFE, and the opera SEANCE ON A WET AFTER-NOON. I've been honored with three Academy Awards and four Grammy Awards and have been inducted into the Theatre Hall of Fame and the Songwriters Hall of Fame.

I write to you now not only as a songwriter, but also as President of the Dramatists Guild of America, in order to speak on behalf of America's dramatic writers. The Dramatists Guild was established one hundred years ago and is the only professional association in America which advises and advances the interests of playwrights, composers, lyricists and librettists writing for the theatre. With almost 7000 members nationwide and around the world, ranging from students and beginning writers to the most prominent Broadway authors, the Guild aids dramatists in protecting both the artistic and economic integrity of their work. Our past presidents have included Richard Rodgers, Oscar Hammerstein, Moss Hart, Alan Jay Lerner, Robert Sherwood, Robert Anderson, Frank Gilroy, Stephen Sondheim, Peter Stone and John Weidman. Among past and current Guild members are the greatest writers of the American theatre, such as Edward Albee, Eugene O'Neill, Arthur Miller, Lillian Hellman and Tennessee Williams.

The Dramatists Guild believes that a vibrant, vital and provocative theatre is an essential element of the ongoing cultural debate which informs the citizens of a free society. If such a theatre is to survive, the unique, idiosyncratic voices of the men and women who write for it must be protected. And the one way we have managed to maintain that protection is through our copyrights.

The copyright laws have made it possible for generations of theatre writers to prohibit changes in our words and music and to have approval over the choice of the artistic personnel hired to interpret, stage, and design our shows. Copyright has then allowed us to license our works throughout the United States and the rest of the world, creating an ongoing revenue stream that can buy us the time to continue writing for the theatre.

But as you all well know, the basic principles of copyright are under siege in this new digital age. One can go on YouTube right at this moment and see parts of illegally recorded productions performed on Broadway and around the country, and there are even off-shore websites which have made a business trafficking in full recordings of these shows. We currently have no effective means to stop anyone dealing in this contraband. One can also go to Facebook and find sites that specifically deal in the sale and barter of illegally distributed sheet music, musical recordings, plays (published and unpublished) and monologues. Many younger theatre fans, having grown up in this digital environment, believe that "all information wants to be free" and that intellectual property is itself an illegitimate limitation on speech, even as they wax rhapsodic over their favorite songwriters and playwrights. The

websites that cater to them profit through ads, subscriptions and sales, none of which go to the creators and owners of the work. This is particularly true of digital mega-companies that download entire libraries of work, including plays and musicals, without the authors' permission, and then find ways to parse it out in digital bits and bytes, monetizing as they go. They claim they are making a "fair use" of authors' work, but in truth their use could not be less fair.

As copyright owners, we would encourage Congress, in any revision of the current Copyright Act, to strengthen the ability to stop such infringements and allow authors to defend the copyrights which they have struggled so long to maintain.

To do this, we would advocate that some way be found to shift the burden of policing infringement occurring on social media sites from individual authors (who have neither the means nor the expertise) to the sites themselves, which are profiting from these infringements and which have the means and expertise to keep such illegal material from being exploited on their sites in the first place, much as they do with pornography.

Furthermore, we would ask that some way be found to stretch the long arm of American justice around those off-shore websites flagrantly violating not just our laws, but international copyright law as well, and profiting from transactions on our soil, abetted by our own credit card companies.

We would also ask that you consider some kind of "small claims court" process for the efficient adjudication of smaller scale infringements, so that these cases can be pursued by authors rather than abandoned out of economic necessity.

But it's important to understand that we theatre writers are not just copyright owners; we are copyright users too. This is because most musicals, and a growing number of plays as well, are based on some pre-existing underlying material, be it a book, movie, magazine article, or catalogue of songs. It may be under copyright or in the public domain, and our use of the material may require a license or it may constitute a fair use. But this reliance on underlying work has made us sensitive to the cultural imperative for a rich and thriving "public domain" of materials for all of us to use, and for the limits on copyright posed by the Constitution.

The Constitution established copyright law through Article I, Section 8, but it did so not as an end in and of itself, but as a means to an end, that being the advancement of the public interest. Copyright is a mechanism to accomplish a larger goal. So it is essential to remember, as you go forward in your deliberations, that the framers did not establish a new perpetual property interest with this clause; they were, instead, carving out an exception from general First Amendment principles, to grant an exclusive monopoly over a particular piece of original expression to its author for a "limited period," and they did this in order to incentivize the creation of new works that would eventually enrich the public domain and be available to all. Given this perspective, we would advocate positions on a few issues that may come before you.

First, endlessly extending the duration of copyright renders meaningless the constitutional mandate that copyright be for a limited period; it frustrates the purpose of the act to enrich the public domain and instead impoverishes it. Granting additional value retroactively to pre-existing works does not create an incentive, since the work already exists. Instead, it just creates a windfall. We feel that "life + 70 years", consistent with international standards, is all the incentive an individual author needs to create work; after that, it becomes about indefinitely extending the profitability of corporate assets at the expense of the public interest.

Secondly, there is a cache of material that could be available for transformative uses by playwrights and musical theater writers, but no one knows who or where the copyright owners are. These "orphan works" sit fallow, unused by their owners or by other artists, and often ignored by the public too. We recommend that a system be devised that allows for the use of these materials by authors in order to create new work, yet preserves the rights of the original authors should they ever appear and make a claim.

Finally, "fair use" needs to be at the heart of any new copyright. "Fair Use" is the First Amendment safety valve that keeps the limited monopoly granted by a copyright from running afoul of the very purpose of copyright law, which is to enrich the public interest. If a celebrity can use his or her "publicity rights" to stifle an

unflattering play, or a wealthy media company can intimidate writers who attempt to create a parody or a historical work based on the public record, then new work is deterred. Furthermore, an expansion of the definition of copyrightable subject matter to include such work as stage direction (for example), thus granting an ownership interest in a director's idea of how a play should be interpreted and staged, would have disastrous results for all copyright owners and the public too. For instance, even the works of Shakespeare, should there be established a new layer of copyright ownership in their staging, would be forced out of the public domain.

We urge you to resist all attempts to limit fair use, or to expand categories of copyright that would serve to inhibit the public's use of our work.

On behalf of the Dramatists Guild, its membership, and theatre writers across the country, I thank you for considering our views on these significant matters and look forward to cooperating with you as you proceed on the course of a reconsideration of the Copyright Act.



**Prepared Statement of the
Computer & Communications Industry Association**



Before the

United States House of Representatives Committee on the Judiciary
Subcommittee on Courts, Intellectual Property, and the Internet

Regarding

"Innovation in America: The Role of Copyrights"

July 25, 2013

Statement of the
Computer & Communications Industry Association

The Computer & Communications Industry Association (CCIA) represents large, medium-sized, and small companies in the high technology products and services sectors, including computer hardware and software, electronic commerce, telecommunications and Internet products and services – companies that collectively generate more than \$250 billion in annual revenues.¹ CCIA requests that this statement be included in the record of this hearing.

I. Introduction

The announcement of these hearings indicated a focus on "the positive roles copyrights and technology play in innovation in the U.S.," and also quoted Chairman Goodlatte and Subcommittee Chairman Coble's stated intention to focus on "the important role that both the copyright and technology industries play in our nation." The role of copyright in innovation and the role of these industries in the economy are two very different issues, however. The latter is a relatively straightforward question amenable to objective analysis. Once the contours of the relevant industries are identified, government data concerning them can be gathered and studied. Although there may be some debate concerning what are the "copyright industries," an economist preparing a report on this topic would disclose the industries she considers to be copyright industries and the information she presents concerning that set of industries (e.g., employment, growth, contribution to GDP, etc.) would be objective and verifiable.

In contrast, the role of copyright in promoting innovation is extremely difficult to quantify. Although encouraging the creation of works is the Constitutional purpose of copyright,

¹ A complete list of CCIA members is available at <http://www.ccianet.org/members>.

economists have few tools to determine how much innovative activity is attributable to copyright as opposed to other factors, such as competition and the desire for reputational benefit. This inability to quantify the true impact of copyright on innovation makes it difficult for policymakers to make an informed decision on the optimal levels of copyright protection.

This statement offers observations on both questions: the role of the copyright industries in the U.S. economy and the role of copyright in innovation. It identifies difficulties in arriving at any causal conclusions about the specific role of copyright in innovation, and calls for more objective, peer-reviewed research on copyright-policy related issues.

II. The Role of the Copyright Industries in the U.S. Economy

Regardless of how they are defined, the copyright industries play a significant role in the U.S. economy. While the traditional “core” copyright industries – motion pictures, music, and publishing – are relatively small, the software industry is very large, and many other sectors of the information and computer technology industry may arguably be considered copyright industries. Indeed, for this reason, the structure of these hearings may inadvertently imply a false dichotomy between the copyright and tech industries, when in fact there is a degree of both overlap and symbiosis between the two.

However defined, the U.S. copyright industries are healthy. While some copyright industry representatives have claimed that the Internet poses an existential threat to the health of these industries, the evidence shows the opposite. According to the Department of Commerce study *Intellectual Property and the U.S. Economy: Industries in Focus*, employment in copyright-intensive industries increased by 46.3 percent between 1990 and 2011.² A study commissioned by CCIA from analysts at Floor64 found that “[b]y any measure, it appears that we are living in a true Renaissance era for content. More money is being spent overall. Households are spending more on entertainment. And a lot more works are being created.”³ During the first decade of this century, the entertainment industry’s global revenue increased 50 percent. The value of the global music industry rose from \$132 billion in 2005 to \$168 billion in 2010. The value of the global entertainment industry grew from \$449 billion in 1998 to \$745

² Economics and Statistics Administration & U.S. Patent and Trademark Office, U.S. Department of Commerce, *Intellectual Property and the U.S. Economy: Industries in Focus* (2012), at vii.

³ Michael Masnick & Michael Ho, *The Sky is Rising* (Floor64 2012), available at <http://www.ccianet.org/CCIA/files/ccLibraryFiles/Filename/000000000586/TheSkyIsRising7-130.pdf>.

billion in 2010.⁴ A study issued in June 2013 found that firms in copyright-intensive industries were significantly more profitable than firm in other industries. Additionally, in the ten-year period between 2003 and 2012, the copyright-intensive industries' profit margins on average grew by 3.98%, while the other industries' profit margins on average decreased by 0.75%.⁵

Similarly, the Congressional Research Service (CRS) issued a report on December 9, 2011, concerning the financial condition of the U.S. motion picture industry.⁶ The report found the motion picture industry to be in good health, undercutting claims that online infringement is causing economic devastation. It noted that the motion picture and sound recording industry's value-added share of GDP (0.4%) did not change between 1995 and 2009, suggesting that infringement has not substantially harmed these industries relative to the U.S. economy as a whole. The report also found that gross revenues for the motion picture and sound recording industries grew from \$52.8 billion in 1995 to \$104.4 billion in 2009, that box office revenues for the U.S. and Canada rose from \$5.3 billion in 1995 to \$10.6 billion in 2010, and box office receipts have been growing faster abroad, suggesting a limited impact of foreign infringement on ticket sales. It reported that, according to the Census Bureau, the industry's after-tax profit increased from \$496 million for the second quarter of 2010 to \$891 million for the second quarter of 2011. It also noted that CEO pay has increased significantly over the past 15 years: Walt Disney Company, \$10 million in 1994 to \$29.6 million in 2010; and Time Warner, \$5 million in 1994 to \$26.3 million in 2010. Other industry CEOs also received generous compensation in 2010: News Corp., \$33.3 million; Viacom, \$84.5 million; and NBC Universal, \$21.4 million. In sum, the CRS reported that the financial condition of the U.S. motion picture industry is very solid.⁷

⁴ Derek Slater & Patricia Wruuck, *We Are All Content Creators Now*, The Global Innovation Index 2012, available at http://www.wipo.int/export/sites/www/econ_stat/en/economics/gii/pdf/chapter11.pdf.

⁵ Jonathan Band & Jonathan Gerafi, *Profitability of Copyright Intensive Industries* (2013), available at <http://infojustice.org/archives/29916>.

⁶ Memorandum from Sue Kirchhoff, Congressional Research Service, to Senator Ron Wyden, Dec. 19, 2011, available at <http://www.icehdt.com/articles/20111212/02244817037/congressional-research-service-shows-hollywood-is-thriving.shtml>.

⁷ Motion picture ticket sales have continued to surge since the release of the CRS report. International motion picture tickets in 2011 increased three percent over 2010 and 35 percent over 2006. Richard Verrier, *International movie ticket sales reach new peak in 2011*, L.A. TIMES, March 25, 2012, available at <http://latimesblogs.latimes.com/entertainmentnewsbuzz/2012/03/international-movie-ticket-sales.html>. The Chinese box office grew 35% in 2011 and 36% in 2012. Motion Picture Association of America, *Theatrical Movie Statistics 2011*, available at <http://www.mpa.org/resources/Sbec4ac9-a95e-443b-987b-bff6fb5455a9.pdf>; *Theatrical Movie Statistics 2012* available at <http://www.mpa.org/resources/3037b7a4-58a2-4109-8012-58fca3abd11b.pdf>. In March 2012, *The Hunger Games* set multiple sales records, including the strongest opening weekend for a spring

Calls for more stringent copyright laws generally minimize these favorable trends. With respect to music, complaints may focus on declining CD sales, while failing to acknowledge successes in other parts of the music industry, such as the revenue from digital downloads⁸ and live performances.⁹ When these revenues are included, the music industry as a whole remains highly profitable, even if intra-industry shifts create winners and losers. Moreover, although CD sales have declined since 2000, the number of albums created has increased significantly. In 2000, 35,516 albums were released; by 2007, this number had risen to 79,695.¹⁰ According to Nielsen/Billboard, digital sales have driven total music purchases to record highs.¹¹ Perhaps the clearest indication of the record industry's health is Vivendi's rejection three months ago of an \$8.5 billion offer for Universal Music Group (UMG).¹² Softbank, the Japanese telecommunications company, made an all-cash bid to purchase UMG from the French media conglomerate. In 2012, UMG had \$6 billion in revenue and \$694 million in pre-tax profits.

Similarly, in regard to film, calls for greater regulation may point to the volume of illegal downloads and flat DVD sales, while overlooking rising ticket sales to theatrical performances,¹³ or the fact that the number of feature films released annually worldwide increased from 3,807 in 2003 to 4,989 in 2007. (In the same period, the number of feature film releases in the U.S. rose

release. Brooks Barnes, *Hunger Games' Ticket Sales Set Record*, N.Y. TIMES, March 25, 2012, available at <http://www.nytimes.com/2012/03/26/movies/hunger-games-breaks-box-office-records.html>. In May 2012, *The Avengers* broke the record for the biggest opening weekend in North America by \$30 million. Brooks Barnes, *'Avengers' Vanquish Box-Office Rivals*, N.Y. TIMES, May 6, 2012, available at <http://www.nytimes.com/2012/05/07/movies/marvels-the-avengers-top-box-office-record.html>. Notwithstanding the market's response to perceived poor quality in certain Hollywood summer offerings this year, the summer box office is nevertheless up 9.9%. Ronald Grover & Lisa Richwine, *'RIPD' Continues Hollywood's Summer of Big Budget Bombs*, REUTERS, July 22, 2013, available at <http://www.reuters.com/article/2013/07/22/hollywood-bombs-idUSL1N0FP1VB20130722>; Brooks Barnes, *Weekend Box Office Reflects a Season of Big-Budget Stumbles*, N.Y. TIMES, July 21, 2013, available at <http://www.nytimes.com/2013/07/22/movies/turbo-and-ripd-open-to-disappointing-results.html>.

⁸ *Album Sales Plunge, Digital Downloads Up*, ASSOCIATED PRESS, Jan. 1, 2009, available at <http://www.msnbc.msn.com/id/28463074/>.

⁹ Felix Oberholzer-Gee & Koelman Strumpf, *File-Sharing and Copyright* (Harvard Business School, Working Paper No. 09-132, 2009), at 20, available at <http://www.hbs.edu/research/pdf/09-132.pdf>.

¹⁰ *Id.* at 23.

¹¹ Nielsen Co./Billboard, *2012 Music Industry Report*, Jan. 4, 2013, available at <http://www.businesswire.com/news/home/20130104005149/en/Nielsen-Company-Billboard%E2%80%99s-2012-Music-Industry-Report>.

¹² Ben Sisario, *Vivendi Declined SoftBank's Lucrative Offer for Universal*, N.Y. TIMES, July 18, 2013, available at <http://www.nytimes.com/2013/07/19/business/media/vivendi-declined-softbanks-lucrative-offer-for-universal.html>.

¹³ See CRS Memorandum, *supra*. The MPAA trumpeted record box office receipts of \$29.9 billion in 2009, marking three straight years of solid growth and a 30% increase over 2005. Rob Pegoraro, *The MPAA Says the Movie Business Is Great. Unless It's Lousy*, WASH. POST, March 11, 2010, available at http://voices.washingtonpost.com/fasterforward/2010/03/mpaa_box_office_bragging.html.

from 459 to 590.)¹⁴ Film studio statistics also often ignore ancillary income, such as the sale of \$16 billion of entertainment merchandise.¹⁵ In this manner, policy makers are presented with a skewed, and often alarmist view of the health of certain content industries. In short, industry complaints about the economic harm caused by copyright infringement are frequently exaggerated.¹⁶

III. The Role of Copyright in Innovation

A. Incentives to Innovation

Proponents of increased copyright regulation often advance a qualitative argument about the essentiality of protection, instead of quantitative proof. Intuitively, it makes sense that the absence of IP protection would preclude many types of creative activity. In the absence of copyright restrictions, film studios would likely struggle to recover the cost of production, and would therefore produce far fewer of them.

¹⁴ Oberholzer-Gee & Strumpf, *supra* note 9, at 24.

¹⁵ *Id.* at 20.

¹⁶ In comments submitted to the Intellectual Property Enforcement Coordinator in 2010, the Copyright Alliance cited statistics that cast doubt on the need for an increased level of IP protection by demonstrating the vibrancy of the copyright industries: Expenditures on books, recorded audio, and video media grew in current dollars from \$108 billion in 1998 to \$169 billion in 2007, a 44% growth rate. Copyright Alliance Comments at 6. The online music industry grew by 27% in 2009. *Id.* at 8. Core copyright sales in foreign markets increased by 8% from 2006 to 2007. *Id.* at 10. Between 2000 and 2005, creative industries achieved an annual growth rate in international trade of 8.7%. *Id.* The number of U.S. independent artist-entrepreneurs increased from 509,000 in 2000 to 680,000 in 2007. *Id.* The number of professionals belonging to arts unions in the U.S. increased by 26.4% between 2004 and 2008. *Id.* at 12. There was a 33.6% increase in individual artists in the U.S. from 2000 to 2007. *Id.* Royalties for the performance of musical compositions increased 20% between 2003 and 2008. *Id.* This robust growth indicates that federal dollars are better spent elsewhere. Many studies have demonstrated this conclusion. See Francis Bea, *Study Suggests U.S. Box Office Not Affected by BitTorrent*, DIGITAL TRENDS, Feb. 11, 2012, available at <http://www.digitaltrends.com/international/study-suggests-u-s-box-office-not-affected-by-bittorrent/> (stating that a study by researchers from Wellesley College and the University of Missouri found that U.S. box office sales are not affected by BitTorrent pirating. The study also revealed that movie studios hold the power to curb infringement by decreasing international box office release windows); Timothy B. Lee, *Swiss Government: File Sharing No Big Deal, Some Downloading Still OK*, ARS TECHNICA, Dec. 5, 2011, available at <http://arstechnica.com/tech-policy/news/2011/12/swiss-government-file-sharing-no-big-deal-some-downloading-still-ok.ars>. This report written by the Swiss Federal Council, pursuant to a request by the Swiss legislature, concluded that file-sharing does not have a negative impact on Swiss culture. Because consumers spend a constant share of their disposable income of entertainment, money saved from buying CDs and DVDs are instead spent on concerts, movies, and merchandising, it concluded. More recent reports reaffirm that commercial availability is one of the most effective means for preventing infringement. See, e.g., Spotify, "Adventures in the Netherlands," July 17, 2013, available at <http://press.spotify.com/uk/2013/07/17/adventures-in-netherlands/> (noting marked decline in piracy in Sweden and Netherlands following introduction of Spotify), see also Joe Karaganis, ed., *MEDIA PIRACY IN EMERGING ECONOMIES* (Social Science Research Council 2011), available at <http://piracy.americanassembly.org/wp-content/uploads/2011/06/MPEE-PDF-1.0.4.pdf>).

But the fact that certain works or inventions may need some protection to ensure their creation does not inform policy makers about the *contours* of the protection, such as the breadth of the right or the length of the term. Nor does evidence of the need for some protection inform policy makers of the appropriate *form* of protection. The software industry flourished for decades with just copyright protection for computer programs; courts broadly permitted the issuance of software patents only after the industry was established. Evidence as to whether providing software with patent protection in addition to copyright protection has promoted innovation is not encouraging.¹⁷ Too much IP protection prevents competition from follow-on innovation.¹⁸ Balance between protection and competition is the salient feature of our IP system, and a major reason for our global leadership in the development of innovative technologies.¹⁹

Additionally, there are many industries where competition and consumer demand, rather than intellectual property, provide the incentive for innovation.²⁰ These include the furniture, clothing,²¹ and financial services industries. To be sure, companies in these industries rely heavily on their trademarks to differentiate themselves from their competitors and to establish

¹⁷ See JAMES BESSEN & MICHAEL J. MEURER, PATENT FAILURE 188-193 (2008). The EU Database Directive demonstrates that more protection does not necessarily lead to more innovation. In 1996, the European Union adopted *sui generis* protection for the investment in the assembly of facts in databases. The EU's objective was to increase its global market share of this important industry relative to the United States, which does not provide a similar form of protection. In 2005, the European Commission performed a study on the effectiveness of the Directive. The study found that since the adoption of the Directive, the European share of the global database market had actually decreased. The Commission concluded that the Directive did not have a positive impact on database creation. See DG Internal Market and Services Working Paper, "First evaluation of Directive 96/9/EC on the legal protection of databases," Dec. 12, 2005, available at http://www.europa.eu/comm/internal_market/copyright/docs/databases/evaluation_report_en.pdf.

¹⁸ See Simon Waterfall, *Investigation: Apple vs Nokia vs Google vs HTC vs RIM*, WIRED.CO.UK (May 12, 2010), available at <http://www.wired.co.uk/magazine/archive/2010/06/start/investigation-apple-vs-nokia-vs-google-vs-htc-vs-rim>, for a discussion of how the "patent thicket" on smartphones is causing litigation and impeding innovation in the smartphone industry.

¹⁹ See, e.g., Jonathan Band, *The SOPA-TPP Nexus*, 28 AM. U. INT'L.L. REV. 31, 53-58 (2012).

²⁰ A May 11, 2010 statement by the Federal Trade Commission, the Department of Justice, and the Patent and Trademark Office of a joint workshop said: "In recent years, federal agencies and the courts have recognized that patents and competition share the overall purpose of promoting innovation and enhancing consumer welfare. Timely, high-quality patents promote investment in innovation. The competitive drive of a dynamic marketplace fosters the introduction of new and improved products and processes. By contrast, delay, uncertainty, and poor patent quality can create barriers to innovation. Additionally, where standards for violating antitrust law are unclear, or where the threshold for antitrust violations is set too low or too high, innovation can be stifled. The workshop will address ways in which careful calibration and balancing of patent policy and competition policy can best promote incentives to innovate." DOJ, DTC, USPTO Workshop on Promoting Innovation, May 10, 2010, available at http://www.uspto.gov/news/pr/2010/10_16.jsp.

²¹ See CHRISTOPHER JON SPRIGMAN & KAL RAUSTIALA, *THE KNOCKOFF ECONOMY: HOW IMITATION SPARKS INNOVATION* (2012) (arguing that fashion, among other industries, operates within a low-IP equilibrium in which copying does not deter innovation and may actually promote it).

reputations for quality and reliability, and may also rely on trade secrecy. But product innovation has occurred notwithstanding the absence of copyright (or patent) protection.²²

The focus on the incentive to innovate provided by intellectual property also undervalues the innovation driven by academic research, which often is government-funded. A recent analysis of the 300 most influential innovations in science, commerce, and technology revealed that collaborative academic environments generated more world-changing ideas than the competitive sphere of the marketplace.²³

B. Excessive IP Protection Chills Innovation

Arguments that ever stronger regulation incentivizes innovation also overlook the ways in which excessive protection can inhibit innovation. As Alex Kozinski, Chief Judge of the Ninth Circuit, noted, “[n]othing today, likely nothing since we tamed fire, is genuinely new: Culture, like science and technology, grows by accretion, each creator building on the works of those who came before. Overprotection stifles the very creative force it’s supposed to nurture.”²⁴ For this reason, “[o]verprotecting intellectual property is as harmful as underprotecting it. Creativity is impossible without a rich public domain.”²⁵ Every year that a work is covered by a copyright is a year that subsequent users cannot build on that work. While incremental protection may provide additional reward to the author, society pays for this reward by being deprived of follow-on use, while the author and his or her heirs accumulate profits. For this reason, protection exceeding the amount necessary to incentivize innovation represents a dead weight loss to the economy.²⁶

²² Indeed, open source software demonstrates that even with copyrightable subject matter, the expectation of monetizing creative effort through copyright protection may not be necessary to provide an individual entity with an incentive to innovate. To the contrary, with open source software, copyright acts as the mechanism to *prevent* a single entity from appropriating the value of the innovation. Innovation nonetheless occurs through collaborative development enabled by the Internet. And developers of open source software derive significant revenue from selling their services, rather than their software.

²³ STEVEN JOHNSON, *WHERE GOOD IDEAS COME FROM: THE NATURAL HISTORY OF INNOVATION* (2010).

²⁴ *White v. Samsung Electronics of America, Inc.*, 989 F.2d 1512, 1513 (9th Cir.) (Kozinski, J., dissenting), cert. denied, 113 S. Ct. 2443 (1993). See also WILLIAM M. LANDES & RICHARD A. POSNER, *THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW* 326-27 (2003) (“There is also evidence that the patenting of computer software actually retards innovation because most software innovation both builds on and complements existing software. Without the retardation introduced by patenting and the resulting need to negotiate licenses, software manufacturers would innovate more rapidly and each would benefit from the others’ innovations, which, because of the sequential and complementary nature of the innovations in this industry, would enhance the value of the existing products.”)

²⁵ *Id.*

²⁶ See Mark A. Lemley, *Property, Intellectual Property, and Free Riding*, 83 TEX. L. REV. 1031 (2005).

An additional dead weight loss is imposed by defects in the IP litigation system. This committee is well aware of the problems caused by “patent assertion entities,” i.e., patent trolls. Trolls, with the resulting chilling effect on creativity, exist in the copyright system as well. In *Brownmark Films v. Comedy Partners*, the court noted that Brownmark’s broad discovery requests gave it “the appearance of a ‘copyright troll,’”²⁷ observing that “[t]he expense of discovery, which [defendants] stressed at oral argument, looms over this suit. [Defendants], and amicus, the Electronic Frontier Foundation, remind this court that infringement suits are often baseless shakedowns. Ruinous discovery heightens the incentive to settle rather than defend these frivolous suits.”²⁸ In May, a furious federal judge sanctioned attorneys for a prominent copyright “porn troll,” accusing them of having “outmaneuvered the legal system” with unsubstantiated infringement allegations, having

discovered the nexus of antiquated copyright laws, paralyzing social stigma, and unaffordable defense costs. And they exploit this anomaly by accusing individuals of illegally downloading a single pornographic video. Then they offer to settle—for a sum calculated to be just below the cost of a bare-bones defense. For these individuals, resistance is futile; most reluctantly pay rather than have their names associated with illegally downloading porn. So now, copyright laws originally designed to compensate starving artists, allow starving attorneys in this electronic-media era to plunder the citizenry.

Ingenuity 13 LLC v. Doe, Order Issuing Sanctions (C.D. Cal. May 6, 2013).²⁹

Even independent of trolls, litigation costs can prove fatal. The user-generated content site Veoh recently declared bankruptcy due to litigation costs, for example, although it ultimately prevailed over of infringement claims.³⁰

The feature of the copyright system that most incentivizes aggressive litigation postures, encourages trolls, and thereby chills innovation, is the availability of statutory damages in copyright infringement cases. Under 17 U.S.C. § 504, a plaintiff can obtain up to \$30,000 in damages for each work infringed, regardless of the actual injury it suffered. In cases involving

²⁷ *Brownmark Films v. Comedy Partners*, 682 F.3d 687, 691 (7th Cir. 2012).

²⁸ *Id.* Another example of a copyright troll is Righthaven. The Las Vegas Review Journal transferred the right to enforce the copyrights in its articles to Righthaven, which in turn sued bloggers for reposting as little as five sentences from these articles. Righthaven was half owned by the intellectual property attorney suing the bloggers. After numerous lawsuits, a federal district court in Nevada found that Righthaven did not have standing to sue because it was not the legal or beneficial owner of the copyrights. The Ninth Circuit affirmed this ruling. *Righthaven LLC v. Hoehn* (9th Cir. May 9, 2013).

²⁹ Available at <http://bit.ly/18qItWU>.

³⁰ *UMG Recordings, Inc. v. Shelter Capital Partners LLC*, 667 F.3d 1022 (9th Cir. 2011). Similarly, Perfect 10’s unsuccessful litigation against Google’s Image Search lasted five years and consumed vast attorney and staff resources.

willful infringement, the statutory damages can rise to \$150,000 per work infringed. Because cases involving digital technologies often implicate hundreds, if not thousands, of works, providers of information technology products and services face truly astronomic damages liability.³¹ The threat of enormous damages encourages rights-holders to assert aggressive theories in the hope of coercing quick settlements, and also causes technology companies to withhold new products and services from the market.³² Effort to quantify the amount of innovation caused by IP must also account for the amount of innovation inhibited by remedies of this nature.

C. Economic Contribution of Industries Relying on Balanced Copyright

Just as few grocery stores ever contemplated being sued for patent infringement,³³ the cost of overly expansive copyright could be visited upon unsuspecting sectors of the economy. A broad sector of the economy is regulated by the copyright laws, and a substantial number of diverse industry sectors depend upon the various limitations to copyright in their business. Research commissioned by CCIA in 2011 and recently cited by the National Research Council of the National Academies³⁴ concluded that industries depending upon fair use and related limitations to copyright generated revenue averaging \$4.6 trillion, contributed \$2.4 trillion in value-add to the US economy (roughly one-sixth of total US current dollar GDP) and employ approximately 1 in 8 US workers. Exports of goods and services related to fair use industries increased by 64 percent between 2002 and 2009, from \$179 billion to \$266 billion. Exports of trade-related services, including Internet or online services, were the fastest growing segment, increasing nearly ten-fold from \$578 million in 2002 to more than \$5 billion annually in 2008-2009.³⁵

³¹ See Pamela Samuelson, *Statutory Damages in Copyright Law: A Remedy in Need of Reform*, 51 WM. & MARY L. REV. 439 (2009).

³² The potential for large statutory damages can discourage authors from exploiting their own works. A 1965 book contract between an author and a publisher, for instance, may not address whether the author or the publisher has the rights for digital distribution. The possibility of large statutory damages prevents either the author or the publisher from taking the risk of distributing the book digitally.

³³ Release, *Food Marketing Institute Announces Support for SHIELD Act*, Mar. 15, 2013, available at <http://www.groceryheadquarters.com/2013/03/food-marketing-institute-announces-support-for-shield-act/>.

³⁴ Stephen A. Merrill & William J. Raduchel, *Copyright in the Digital Era: Building Evidence for Policy*, National Research Council (2013), at http://www.nap.edu/catalog.php?record_id=14686 (hereinafter "National Research Council Report").

³⁵ Thomas Rogers & Andrew Szamosszegi, *Fair Use in the U.S. Economy* at 26-27 (2011) available at <http://www.cciainet.org/fairusestudy>.

IV. The Need For Objective Data

The aforementioned report by the National Research Council of the National Academies observed that copyright policy debates have been “poorly informed by objective data and empirical research.”³⁶ For years, advocacy for stricter copyright has relied on rights-holder supplied data, some of which has been openly questioned by governments and inter-governmental organizations.

A. Industry Data Lacks Objectivity

Industry supplied data is often of the correlation-is-causation variety, such as a 2010 Chamber of Commerce study which concluded that because IP intensive industries outperform non-IP intensive industries, therefore “the creation of intellectual property is the key factor in sustaining economic growth.”³⁷

Media investigations into the source of such industry-driven statistics have found little or no basis for these numbers, dismissing them as “fiction.”³⁸ Objective analyses indicate that rights-holder-funded research has drastically overestimated counterfeiting and copyright infringement costs. A 2007 study by the Organization for Economic Co-operation and Development (OECD) demonstrated that industry estimates overstated reality by a factor of three.³⁹ A report by the Government Accountability Office (GAO) quoted a 2008 OECD study that found that “data have not been systematically collected or evaluated and, in many cases, assessments ‘rely excessively on fragmentary and anecdotal information; where data are lacking, unsubstantiated opinions are often treated as facts.’”⁴⁰ The GAO added that “industry

³⁶ *Supra* note 34, at ix.

³⁷ Nam Pham, *The Impact of Innovation and the Role of IP Rights on U.S. Productivity, Competitiveness, Jobs, Wages and Exports* 52 (2010), at 52, available at http://ndpgov.com/docs/NDP_IP_Jobs_Study_III_Res.pdf.

³⁸ See David Kravets, *Fiction or Fiction: 750,000 American Jobs Lost to IP Piracy*, WIREd, Oct. 3, 2008, available at <http://www.wired.com/threatlevel/2008/10/fiction-or-fict/>; see also Julian Sanchez, *750,000 lost jobs? The dodgy digits behind the war on piracy*, ARS TECHNICA, Oct. 7, 2008, available at <http://arstechnica.com/tech-policy/news/2008/10/dodgy-digits-behind-the-war-on-piracy.ars>; Nate Anderson, *Oops: MPAA Admits College Piracy Numbers Grossly Inflated*, ARS TECHNICA, Jan. 22, 2008, <http://arstechnica.com/tech-policy/news/2008/01/oops-mpaa-admits-college-piracy-numbers-grossly-inflated.ars>. An industry-commissioned “piracy” study, TERA Consultants, *Building a Digital Economy: The Importance of Saving Jobs in the EU's Creative Industries* (2010), was shown to rely on dubious assumptions and incomplete data. See Mike Masnick, *As Expected, Ridiculous, Wrong, Exaggerating And Misleading Report Claims That 'Piracy' Is Killing Jobs*, Techdirt, Mar. 18, 2010, available at <http://www.techdirt.com/articles/20100317/1617328605.shtml>.

³⁹ See Hugh Williamson, *Forgery Trade losses 'under \$200bn'*, FIN. TIMES, May 7, 2007, available at <http://www.ft.com/cms/s/0/acbd064c-fcb9-11db-9971-000b5df10621.html>.

⁴⁰ U.S. GOVERNMENT ACCOUNTABILITY OFFICE, INTELLECTUAL PROPERTY: OBSERVATION ON EFFORTS TO QUANTIFY THE ECONOMIC EFFECTS OF COUNTERFEIT AND PIRATED GOODS; THE IMPACT OF INNOVATION AND THE

associations do not always disclose their proprietary data sources and methods, making it difficult to verify their estimates.”⁴¹

At least as early as the mid-1990s, government officials reportedly acknowledged rights-holder-industries’ “varying degree of commitment to accuracy.”⁴² Notwithstanding the dodgy pedigree of such data, however, they are proffered to regulatory agencies as a basis for action.⁴³ For example, federal officials have been repeatedly presented with the results of an undisclosed study whose inflated findings were revised downward under criticism,⁴⁴ or with other studies that depended upon this discredited research.⁴⁵

The unsupportable numbers proved embarrassing in the context of the debate over the Stop Online Piracy Act (SOPA). House Judiciary Committee Chairman Lamar Smith declared in a January 20, 2012 opinion column on CNN.com that “[i]llegal counterfeiting and piracy costs the U.S. economy \$100 billion and thousands of jobs every year” — a statement which PolitiFact subsequently ruled to be “false.”⁴⁶ Julian Sanchez, a fellow at the Cato Institute, likewise challenged the statistics upon which SOPA’s sponsors justified the legislation.⁴⁷

ROLE OF IP RIGHTS ON U.S. PRODUCTIVITY, COMPETITIVENESS, JOBS, WAGES AND EXPORTS, GAO-10-423 16 (2010) [hereinafter “GAO Report”].

⁴¹ *Id.*

⁴² PETER DRAHOS & JOHN BRAITHWAITE, INFORMATION FEUDALISM 98 (2002).

⁴³ See WILLIAM PATRY, MORAL PANICS AND THE COPYRIGHT WARS 30-36 (Oxford 2009).

⁴⁴ See MPAA revises study on movie piracy, Jan. 23, 2008, L.A. TIMES, available at <http://articles.latimes.com/2008/jan/23/business/i-download23>; see also Carrie Russell, MPAA Admits Piracy Study Flawed, COPYRIGHT ADVISORY NETWORK available at <http://librarycopyright.net/wordpress/?p=75>. The contents of the offending study apparently have been withheld from the public notwithstanding a Congressional request for the methodology and data. Compare *The Analog Hole: Can Congress Protect Copyright and Promote Innovation?*, Before the Senate Comm. on the Judiciary, 109th Cong. 15-16 (2006) with Gigi Sohn, Congress Should Demand MPAA Data on the Cost of Piracy, Jan. 23, 2008, available at <http://www.publicknowledge.org/node/1363>.

⁴⁵ See I.F.C.G., I.I.C., *Economic Analysis of the Proposed CACP Anti-Counterfeiting and Piracy Initiative*, at 10 (2007) available at http://www.lexisnexis.com/documents/pdf/20080610072737_large.pdf [hereinafter LECG Study]; Stephen Siwek, *The True Cost of Motion Picture Piracy to the U.S. Economy*, at 2, 8, en.14, 18 (2006) available at [http://www.ipi.org/IPI/IPIPublications.nsf/PublicationLookupFullTextPDF/293C69E7D5055FA4862571F800168459/\\$File/CostOfPiracy.pdf?OpenElement](http://www.ipi.org/IPI/IPIPublications.nsf/PublicationLookupFullTextPDF/293C69E7D5055FA4862571F800168459/$File/CostOfPiracy.pdf?OpenElement) [hereinafter IPI Study] (citing MPAA study prepared by I.F.K.).

⁴⁶ See W. Gardner Selby, *Lamar Smith Says Online Piracy and Counterfeiting Costs the U.S. Economy \$100 Billion a Year*, POLITIFACT, Feb. 6, 2012, available at <http://www.politifact.com/texas/statements/2012/feb/06/lamar-smith/lamar-smith-says-online-piracy-and-counterfeiting-/>.

⁴⁷ Julian Sanchez, *How Copyright Industries Con Congress*, Cato Inst., Jan. 3, 2012, available at <http://www.cato-at-liberty.org/how-copyright-industries-con-congress/>; Julian Sanchez, *SOPA, Internet Regulation, and the Economics of Piracy*, ARS TECHNICA, Jan. 18, 2012, available at <http://arstechnica.com/tech-policy/news/2012/01/internet-regulation-and-the-economics-of-piracy.ars>.

B. GAO Criticism of the Methodologies of Industry Studies

The GAO observed that in the absence of real data on infringement, methods for calculating estimates of economic losses involve assumptions that have a significant impact on the resulting estimate. Two key assumptions are the rate at which a consumer is willing to switch from an infringing good to a genuine product (substitution rate), and value of the infringing good. The GAO suggested that assuming a one-to-one substitution rate at the manufacturer's suggested retail price could lead to a dramatic overstatement of economic loss. The GAO noted that some copyright industry studies made precisely this problematic assumption.⁴⁸ In other instances, the studies failed altogether to reveal their assumptions.⁴⁹ The GAO stated that "[u]nless the assumptions about substitution rates and valuations of counterfeit goods are transparently explained, experts observed that it is difficult, if not impossible, to assess the reasonableness of the resulting estimate."⁵⁰

The GAO also criticized rights-holder studies on the impact of infringement on the U.S. economy. The GAO noted that to develop an estimate of the effect of infringement on the overall U.S. economy, rights-holders have applied RIMS II economic multipliers⁵¹ to the estimates of economic loss for specific copyright industries. The GAO found that "using the RIMS II multipliers in this setting does not take into account the two fold effect: (1) in the case that the counterfeit good has similar quality to the original, consumers have extra disposable income from purchasing a less expensive good, and (2) the extra disposable income goes back to the U.S. economy, as consumers can spend it on other goods and services."⁵² Similarly, the GAO report referred to an expert's view that the "effects of piracy within the United States are mainly redistributions within the economy for other purposes and that they should not be considered as a loss to the overall economy. He stated that 'the money does not just vanish; it is used for other purposes.'"⁵³ The GAO concluded that "it is difficult, if not impossible, to

⁴⁸ GAO Report *supra* note 19, at 21 (referring to a Business Software Alliance survey).

⁴⁹ *Id.* (referring to a Motion Picture Association of America survey).

⁵⁰ *Id.* at 18.

⁵¹ The Department of Commerce's Bureau of Economic Analysis make multipliers available through its Regional Input-Output Modeling System (RIMS II). These multipliers allow the estimation of the impact of a specific change in one sector on the entire economy.

⁵² GAO Report *supra* note 19, at 23 (referring to an Institute of Policy Innovation study).

⁵³ *Id.* at 28. See Annelies Huygen *et al.*, *Ups and Downs: Economic and Cultural Effects of File Sharing on Music, Film and Games* (2009). See also Joe Karaganis, *Piracy and Jobs in Europe: Why the BASCAP/TERA Approach is Wrong* (2010), available at <http://piracy.americanassembly.org/wp-content/uploads/12010/12/Piracy-and-Jobs-in-Europe-a-note-on-the-BASCAP-TERA-study/pdf>. ("Within any given country, piracy is a reallocation

quantify the net effect of counterfeiting and piracy on the economy as a whole.”⁵⁴ The GAO further stated that the “net effect” of infringement on the economy “cannot be determined with any certainty.”⁵⁵

The GAO was not alone in reaching such conclusions; similar analysis appeared in the independent Hargreaves Review in the U.K., which surveyed U.K. and international data concerning online copyright infringement and “[found] that very little of it is supported by transparent research criteria. Meanwhile sales and profitability levels in most creative business sectors appear to be holding up reasonably well. We conclude that many creative businesses are experiencing turbulence from digital copyright infringement, but that at the level of the whole economy, measurable impacts are not as stark as is sometimes suggested.”⁵⁶

C. The Department of Commerce Study

When the Department of Commerce released its study on *Intellectual Property and the U.S. Economy: Industries in Focus* in 2012, the study’s findings were promptly misstated and misused by government officials. A Department blog proclaimed that the study “showed that intellectual property protections have a direct and significant impact on the U.S. economy.”⁵⁷ The Patent and Trademark Office claimed that the study proved that “when Americans know that their ideas will be protected, they have greater incentive to pursue advances and technologies that help keep us competitive, and our businesses have the confidence they need to hire more workers.”⁵⁸ The PTO further indicated that the study demonstrated that “this Administration’s efforts to protect intellectual property ... are so crucial to a 21st century economy that is built to last.”⁵⁹

In fact, the study did not in any way substantiate these claims. The study itself explicitly stated that it “does not contain policy recommendations and is not intended to advance particular

of income, not a loss. Money saved on CDs or DVDs will be spent on other things—housing, food, other entertainment, etc.”).

⁵⁴ GAO Report, at 16.

⁵⁵ *Id.* at 28.

⁵⁶ Ian Hargreaves, *Digital Opportunity: A Review of Intellectual Property and Growth* (2011), at 47, available at <http://www.ipso.gov.uk/ipreview-finalreport.pdf>. The UK Government’s Response to the Review agreed that “too many past decisions on IP have been supported by poor evidence, or indeed poorly supported by evidence. This is true at an international level as well as domestically.” The *Government Response to the Hargreaves Review of Intellectual Property and Growth 3* (2011), available at <http://ipo.gov.uk/ipresponse-full.pdf>.

⁵⁷ See <http://www.commerce.gov/blog/2012/04/11/intellectual-property-intensive-industries-contribute-5-trillion-40-million-jobs-us->.

⁵⁸ See <http://www.uspto.gov/news/pr/2012/12-25.jsp>.

⁵⁹ *Id.*

policy issues.”⁶⁰ Moreover, the study “notes the importance of achieving a balanced system of IP rights that protects innovators and creators from unlawful use of their work while encouraging innovation, competition, and the markets for technology in which IP is transacted. Importantly, using IP rights to support innovation and creativity means recognizing the public domain and limits such as fair use which balance the public’s right to use content legally with IP owners’ interests.”⁶¹

The study did present impressive numbers for the contribution of “IP-intensive industries” to the U.S. economy in terms of employment and value added. But it nowhere asserted a causal connection between IP and the strength of those industries, because such a connection cannot be shown. Moreover, the study includes “trademark-intensive industries” within the definition of “IP-intensive industries,” which include industries such as grocery stores, clothing stores, sporting goods and musical instrument stores, residential building construction, dairy product manufacturing, beverage manufacturing, footwear manufacturing, and gambling.⁶² Indeed, 83 percent of all reported IP-intensive jobs come from trademark intensive industries.⁶³ The study itself conceded that “employment in trademark intensive industries is almost six times as great as employment in patent-intensive industries.”⁶⁴

The study further conceded that “overall employment in IP-intensive industries has lagged behind other industries in the last two decades. While employment in non-IP-intensive industries was 21.7 percent higher in 2011 than in 1990, overall IP-intensive industry employment grew over 2.3 percent over this same period.”⁶⁵ IP-intensive industries’ share of total employment dropped from 21.7 percent in 1990 to 18.8 percent in 2010.⁶⁶ Employment in patent-intensive industries fared even worse than other IP-intensive sectors, shrinking by 30 percent during this period.⁶⁷

Thus, not only did the Department of Commerce study not show that “intellectual property protections have a direct and significant impact on the U.S. economy,” as the

⁶⁰ Economics and Statistics Administration & U.S. Patent and Trademark Office, U.S. Department of Commerce, *Intellectual Property and the U.S. Economy: Industries in Focus* (2012) at vi.

⁶¹ *Id.*

⁶² *Id.* at 36-38.

⁶³ Knowledge Ecology International, *The USPTO/DOC’s liberal and misleading definition of IP-intensive industries is designed to influence policy debates*, available at <http://www.keionline.org/node/1432>.

⁶⁴ *IP and the U.S. Economy*, *supra* note 60, at vi.

⁶⁵ *Id.* at vii.

⁶⁶ *Id.* at 40.

⁶⁷ *Id.*

Department's own blog claimed, it actually suggested that IP-intensive industries are having a *decreasing* impact on the U.S. economy. Furthermore, the study obscured the extent of the decrease by including trademark-intensive industries such as grocery stores.

More broadly, the fact that employment in "IP-intensive industries" has lagged behind other industries over the past twenty years certainly undermines the narrative of ever-increasing IP protection as a mechanism for job creation. While IP protection is undoubtedly important, the available data fails to support this conclusion.

D. An Objective Research Agenda

It is in this context that the National Research Council's report observes that "[t]his debate is poorly informed by independent empirical research." After observing the dearth of empirical evidence, and recognizing that "[n]ot all copyright policy questions are amenable to economic analysis,"⁶⁸ the Report stated that "a robust research enterprise, supported by public and private funders and using a variety of methods – case studies, international and sectoral comparisons, and experiments and surveys – can inform copyright policy by addressing a range of questions. The research we call for is especially critical in light of digital age developments that may, for example, change the *incentive* calculus for various actors in the copyright system, impact the *costs of voluntary copyright transactions*, pose new *enforcement* challenges, and change the optimal *balance* between copyright protection and exceptions."⁶⁹

CCIA supports such a robust research agenda. The Report provides a roadmap for this agenda, which involves an increased role for government agencies in creating and aggregating the necessary information. While CCIA has commissioned research in this area,⁷⁰ peer-reviewed research by disinterested scholars would be invaluable to the policymaking process. Such research should be considered an essential first step in this process of reviewing the Copyright Act.

⁶⁸ National Research Council Report at 1, 2.

⁶⁹ *Id.* (Emphasis in original).

⁷⁰ See, e.g., Thomas Rogers and Andrew Szamoszegi, *Fair Use in the U.S. Economy: The Economic Contribution of Industries Relying on Fair Use* (CCIA 2011).

**Prepared Statement of Brad Holland and Cynthia Turner, Co-Chairs,
American Society of Illustrators Partnership (ASIP)**

Written Statement

**Brad Holland and Cynthia Turner, Co-Chairs
American Society of Illustrators Partnership (ASIP)**

**Committee on the Judiciary
Subcommittee on Courts, Intellectual Property and the Internet
U.S. House of Representatives**

Subject: Innovation in America: The Role of Copyrights

July 25, 2013



August 2, 2013

To: Committee Chairman Goodlatte,
Subcommittee Chairman Coble,
Ranking Member Watt,
Members, Committee on the Judiciary
Subcommittee on Courts, Intellectual Property and the Internet
U.S. House of Representatives

We applaud the effort by the Judiciary Committee to undertake a review of US copyright law and we appreciate the Committee's stated acknowledgment that policy should develop *around the creator*. Since the Committee has asked to hear from creators regarding copyright's effectiveness in practice; and since American illustrators were not represented at the Committee's July 25th hearing, we're grateful for this opportunity to provide some answers to the Committee's questions and to introduce you to our organization.

An Overview of the American Society of Illustrators Partnership

The American Society of Illustrators Partnership (ASIP) is a grassroots coalition of twelve visual artists organizations, founded and funded entirely by working artists. ASIP was incorporated in 2007, although many of our member organizations have distinguished histories dating back more than 50 years.

Together we make up a broad spectrum of creative artists, ranging from the nation's editorial cartoonists to medical illustrators, architectural and science illustrators, aviation artists, magazine, book, record, film and advertising illustrators. Combined, we create much of the visual material in today's world and members of your Committee have seen our work in the countless publications that make up America's popular culture.

Our 13-person board includes a Pulitzer Prize winner, a muralist for the Smithsonian's Air and Space Museum and two members of the Illustrators Hall of Fame; as well as artists who have received the top awards for achievement in their respective fields. We are also fortunate to count the Honorable Bruce A. Lehman, former Assistant Secretary of Commerce and Commissioner of the U.S. Office of Patents and Trademarks among our closest advisors.



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We, and most of the thousands of artists we represent, are freelance creators or small business owners. All of us make our livings licensing the copyrighted work we create. We therefore have a compelling interest in the continued effectiveness of copyright law in the field of visual art. We believe we have unique insights and unparalleled experience regarding how art is created, licensed and managed by the people who actually create it. We also have insights regarding where policy may have gone astray, both from its constitutional foundations and international norms; and we have specific suggestions regarding how to reinforce constitutional objectives to insure that copyright remains effective in the 21st Century.

Support from the US Small Business Administration

In 2006 and 2008 our twelve organizations formed the nucleus of an even broader informal coalition of 84 organizations, representing artists, photographers, writers, songwriters, independent music labels and other small business owners in the multi-billion dollar craft, greeting card and licensing industries.

At the invitation of the Office of Advocacy of the US Small Business Administration, we came together on August 8, 2008 for a copyright roundtable hosted by the SBA. Although legislation then before Congress required us to address the specific subject of “orphan works,” we chose to place our comments in the larger context of copyright “reform.” We believe this makes them relevant to the issues currently before this Committee.

The roundtable: “How Will the Orphan Works Bill Economically Impact Small Entities?” was the first, and to our knowledge, only forum ever conducted by a US government agency to assess the impact of previous orphan works legislation on creators and other small businesses. The 167,000 letters our efforts generated to Congress from artists around the country testify to the widespread concern among creators that copyright protections not be emasculated. It is a concern we fear too often goes unacknowledged in Congress because as a cottage industry, artists cannot afford to compete with the ubiquitous lobbying efforts of publishers, large Internet interests and others.

The SBA roundtable was videotaped at New York’s famous Salmagundi Club and is available online at <http://vimeo.com/channels/artistsrights>. In addition, the panelists who attended the Small Business Administration roundtable – and scores of those and who could not attend – submitted papers to the SBA addressing the subject.¹

¹ We have collected and organized those papers. On February 3, 2013, the Illustrators’ Partnership submitted them to the Copyright Office as an appendix to our submission to its Notice of Inquiry regarding potential orphan works legislation (Notice of Inquiry, Copyright Office, Library of Congress Orphan Works and Mass Digitization (77 FR 64555)). http://www.copyright.gov/orphan/comments/omr_10222012/Illustrators-Partnership-America.pdf



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The Overview for Creators

There may never have been a prior time in history when visual art was created in such abundance or disseminated so widely. Yet even as popular art contributes to the nation's wealth, the economic return for artists has declined, and in a climate of exploitation and piracy, opportunists thrive while a growing number of creative artists leave the field.

Most of the problems artists face artists will have to solve. But from the standpoint of Congress we have four main areas of concern regarding copyright law:

- The effort by some to "reform" copyright by legislating broad new rights for "users" at the expense of creators;
- The success of third parties in creating streams of income for themselves by licensing our works without compensation;
- The failure of the US to join much of the rest of the world in adopting a resale royalty right for works of original art;
- The creation of a visual arts collecting society for American artists.

Artists, the smallest of small business, are vulnerable to exploitation by publishers and parasitic opportunists who make the most of their disparity of size. The failure of previous Congresses to ensure that individual creators are as well represented and protected in copyright law as these corporate interests has fostered policies that have dramatically eroded the exclusive rights of visual artists guaranteed by the Constitution.

We think Congress can and should act to rectify this situation.

Copyright "Reform" and the Default Principle of Copyright Law

For creators, the most important issue regarding copyright is the retention of its default position, as codified in the US Constitution, Article I, Section 8, Clause 8:

"To promote the Progress of Science and useful Arts, by securing for limited Times to *Authors and Inventors* the *exclusive Right* to their respective Writings and Discoveries." (Italics added.)

Note that the Constitution does not mention the "rights" of users. This is a key issue, because many of the current schemes to "reform" copyright law involve a widespread lobbying effort by large Internet companies (and the foundations and law professors allied with them) to reverse this time-tested default position.

We saw an example of this in the 2008 Book Search settlement reached by Google, the Authors Guild and the Association of American Publishers; an agreement opposed by the US Department of Justice and ultimately rejected by the court. On September 10, 2009, Marybeth Peters, then Register of the US Copyright Office, testified before Congress in



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opposition to the settlement:

"[T]he out-of-print default rules [agreed to by the litigious parties]," she stated, "would allow Google to operate under *reverse principles of copyright law* . . . (Italics added)."²

This echoed nearly exactly our condemnation one year earlier of Congress's 2008 Orphan Works Act:

"[The Orphan Works Act] creates the public's right to use private property as a *default* position, available to anyone whenever the property owner fails to make himself sufficiently available. *Its logic reverses copyright law*."³

The effort to reverse the principle of copyright law has become the slim reed on which the campaign to "reform" copyright now rests. Its objective is to overcome the "exclusive Right" guaranteed to authors in the Constitution by creating new "rights" for "users," an abstract class of "consumers" that serves as a cat's paw for the financial interests of third parties. To understand this is to go to the heart of the matter.

The Internet has made it possible for entrepreneurs, publishers and others to create financial empires by supplying the public with access to the intellectual property of creative artists. The problem they wish to overcome is how to legally profit from licensing that content to consumers without paying artists.

By promoting legislation on the back of postmodern theories about the origin of creativity deriving from "The Commons," they are trying to create a new "right" of the public to use the private property of creators whenever the "user" determines that the property owner has been sufficiently hard to find. But since *everybody* can be hard for *somebody* to find, this would allow countless copyright-managed works to fall through the cracks and into the public domain, subject to what one copyright "reformer" has approvingly called a "perpetual and irrevocable default license."⁴ If they're successful, this would allow them

² Congressional Testimony of Marybeth Peters, September 10, 2009. Cited in "Orphan Works and the Google Book Settlement/Part III: Compelling Arguments," The Illustrators' Partnership of America, October 1, 2009 <http://ipaorphanworks.blogspot.com/2009/10/orphan-works-and-google-settlement-part.html>.

³ *Ibid*.

⁴ Christopher Sprigman, "Reform(alizing) Copyright," Stanford Law Review Vol. 57: 485 November 2004, Comment to Copyright Office Orphan Works Study. "[T]his Article proposes a system of formalities that, although nominally voluntary, are de facto mandatory for any rightsholder whose work may have commercial value. Non-compliance with the newstyle [sic] formalities would subject works to a perpetual and irrevocable 'default license' with royalties set at a very low level, thus effectively moving works into the public domain. (emphasis added)."



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to profit by providing their customers with intellectual property they could never create themselves nor obtain from authors without payment.

This is why creators in such numbers opposed the Orphan Works Acts of 2006 and 2008: not because the bills would have allowed libraries and museums to digitize *true* orphaned works – in fact, we proposed amendments that would have limited the scope of the legislation to that function – but because the legislation was drafted so broadly it would have permitted the widespread commercial infringement of millions of copyright-protected works on the chance that *some might be* orphans.

We readily acknowledge that the Internet has transformed both the means of producing and distributing creative content. And we understand that anytime such a radical new technology is introduced, creators who wish to survive must adopt new business models. But those who portray artists as Luddites resistant to change are resorting to straw arguments.

As artists, we work in the marketplace. It is in our best interests to acknowledge change, experiment with new ways of doing business and adapt. Yet it's normal that there should be a lag time between the introduction of any new technology and the widespread implementation of successful new business models. Artists everywhere are already trying out new ways to market their work. But it takes time to innovate; and we urge Congress not to be persuaded by false arguments that there is some sort of crisis in the distribution of visual art that requires a drastic expansion of "users' rights." There is not.

As for the alternative, history has shown that it would be folly to allow lobbyists, civil servants and legal scholars to design, legislate and impose new ways of doing business in commercial marketplaces they know nothing about. Business models should be designed by people who know their own business and have a stake in the success or failure of what they create. The most efficient laboratories for change are in the free market. This too, is part of the incentive codified in Article I, Section 8, Clause 8 of the Constitution.

The Reprographic Royalty Right

Reprographic royalties are paid when printed material is photocopied or digitally republished. It has already been more than a decade since the courts recognized the damage to authorial secondary rights. Reprographic royalty income has, in fact, been lost to visual authors for more than 30 years. *Yet, it is a secondary royalty stream that continues to expand in both value and marketshare.*⁵

⁵ November 15, 2011, Danvers, MA, Copyright Clearance Center Press Release, Copyright Clearance Center Distributes More Than \$170 Million to Rightsholders in FY'11, Reaching \$1.3 Billion over Ten Years http://www.copyright.com/content/cc3/en/toolbar/aboutUs/newsRoom/pressReleases/press_2011/press-release-11-11-115.html



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American illustrators have suffered from the lack of a collective rights administration. Millions of dollars of royalties generated by the republication of our works, both in the US and abroad, have been averted from rightsholders. This has contributed to a substantial economic loss to American fine artists, illustrators, photographers and writers. The continued disarray has prevented published visual artists from the full enjoyment and exercise of their copyrights, and is fully inconsistent with the intent of authorial rights granted by US copyright law.

The increasing economic hardship on contemporary creators is not a new development. The loss of the revenue share earned by visual artists began with the uncompensated exploitation of our secondary rights through publishers' reprographic licensing. Revenue from photocopy licensing that began with the enactment of the 1976 Copyright Act – and was followed by mass digitization of print archives – has been withheld from independent authors whose contributions are contained in collective works.

This impasse remains unresolved, in part because of publishers' intransigence to acknowledge the copyrights of independent authors in their collective works, in part because of the inability of independent creators to bargain equally, and in part because of the toxic rise of "advocacy" associations that have willingly and aggressively intercepted "orphaned" copyright royalty streams belonging to creators.⁶ (Please see Appendix 1.)

Publishers began mass digitizing and licensing the printed works of authors nearly 20 years ago. The ongoing secondary revenue derived from the licensing of individual articles and/or images from published collective works can exceed the revenue earned through first publication. It is old news that publishers have raced to digitize their print archives to take advantage of this new secondary rights stream served by the Copyright Clearance Center, Lexis-Nexis, Pro-Quest, EBSCO and others.

Former Register of Copyrights Mary Beth Peters, in her Commentary on *NY Times v. Tasini*, noted the issue in *Tasini* was "whether authors are entitled to compensation for downstream uses of their works." She observed that although the 1976 Act

"focused more on safeguarding the rights of authors, **freelance authors have experienced significant economic loss since its enactment**. This is due not only to their unequal bargaining power, but also to the digital revolution that has given publishers opportunities to exploit authors' works in ways barely foreseen in 1976." (Emphasis added.)⁷

⁶ *Graphic Artists Guild, Inc. v. Brad Holland et al.*, Case/Index No. 109149/2008, New York State Supreme Court.

⁷ Mary Beth Peters, Register of Copyrights, U.S. Library of Congress, Letter to Congressman James P. McGovern re *New York Times Co. v. Tasini*, Congressional Record, February 14, 2001, at pages E182-3.



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In *Tasini*, Supreme Court Justice Ruth Bader Ginsburg dismissed as unavailing the publishers' warning that a ruling adverse to them would have "devastating" consequences for the historical record:

"The parties may enter into an agreement allowing continued electronic reproduction of the Authors' works; they, **and if necessary the courts and Congress, may draw on numerous models for distributing copyrighted works and remunerating authors for their distribution.** (Emphasis added.)"⁸

She further stated that there was "no basis for this Court to shrink authorial rights created by Congress."

There have been heroic efforts on the part of authors to enforce our copyrights and to be paid our licensing revenue earned through digital online databases and clearance centers.⁹ Some of these cases are still in active litigation after 17 years.¹⁰ Indeed, *in an unprecedented effort unique among independent authors*, illustrators have organized themselves into a rights society.¹¹

Nearly two decades into this seismic technological shift toward a new secondary licensing market, a market born from photocopying and now maturing into rapidly and ever-changing digital platforms that serve users with dazzling and granular specificity, the Copyright Clearance Center (CCC) boasts of distributing \$1 billion dollars to rightsholders in the past seven years.¹² Yet none of that money is paid to the US or foreign visual artists whose work appears in the publications for which CCC issues licenses. CCC is universally recognized as the largest reprographic collecting society in the world.

For years we have appealed to CCC to enter into legal agreements with visual artists to see that those who create the work are compensated for its use. But for a decade we have merely been stonewalled and ignored; and despite our best efforts, including a reaffirmation of the reprographic royalty right in the Supreme Court, visual artists remain uncompensated.

⁸ Ruth Bader Ginsburg, *New York Times Co. v. Tasini* (00-201) 533 U.S. 483 (2001) 206 F.3d 161, affirmed Pp. 19021, <http://www.law.cornell.edu/supct/html/00-201.ZS.html>

⁹ See: *NYT v. Tasini*, *Resnick et al v. CCC*

¹⁰ *NYT v. Tasini* continues as *Reed Elsevier v. Muchnick*, *In re Literary Works in Electronic Databases Copyright Litigation*

¹¹ American Society of Illustrators' Partnership (ASIP) <http://www.asip-repro.org/>

¹² http://www.copyright.gov/orphan/comments/00_10222012/Copyright-Clearance-Center.pdf



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The Resale Royalty Right

The legislative implementation of the federal resale royalty has been in abeyance since 1983 when the US joined the Berne Convention on the Protection of Literary and Artistic Works. Berne calls for the reciprocal implementation of the resale royalty right by national legislation. The New York art market ranks among the highest in the world and the lack of the resale royalty right *has resulted in a generation of resale royalties lost to artists and their heirs* in the US and around the world.

In 2001, the author and journalist Tom Wolfe gave an interview to the Illustrators' Partnership in which he remarked:

"I feel very comfortable predicting that art historians 50 years from now, assuming we're in a world kind enough to indulge art historians, will look back upon illustrators as the great American artists of the second half of the 20th century."

The time is right for the United States to implement the resale royalty right for its artists. The sale of American illustration, paintings and drawings is an emerging market attracting sophisticated collectors worldwide. American illustration is evocative of a unique type of American artistry. It is also a class of treasured Americana.

One auction house alone has reported more than \$40 Million in sales of American illustration in the last five years.¹³ Auction prices are on an upward trend as this market expands. Bringing the US into compliance with Article 14ter of the Berne Convention will finally bring equity to these artists *for the value their talents have brought to the US art market and abroad*. Article 14ter reciprocity would allow American illustrators to benefit from the market for American art in any of the 46 countries that have implemented the resale royalty, including the major art markets of the UK and the European Union. Likewise, overseas artists would finally begin to receive resale royalties when their works are resold in the US.

Illustrators are at a well-known disadvantage in initial leverage for the commission of illustration created for publication, and they are at a distinct disadvantage for pricing the sale of their originals. *In some cases, this is because the original art was never sold, but simply retained by publishers, advertisers and printing houses.*¹⁴

¹³ Heritage Auction Galleries Press Releases, 2007-2012.
<http://comics.ha.com/common/search/search.php?query=illustration&stpos=0&stype=AND&instance=press-comics>

¹⁴ A Connoisseur's Bounty of Pulp and Pin-Ups, The New York Times, May 14, 2009.
<http://www.nytimes.com/2009/05/15/arts/design/15anti.html>



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The resale royalty right restores a measure of equity by allowing the artist to share in the increased value of his or her works. It also recognizes the ongoing stake an artist has in the economic value of the work. Royalties received within an artist's lifetime help sustain a career and allows the artist to continue creating new works.

A lifetime spent creating a body of work also means the burden of creating and maintaining an archive. This burden is inevitably passed on to the artist's estate. A resale royalty stream can help support the considerable work that heirs contribute to the creation and maintenance of an art market, including preservation and cataloguing, promotion, and establishing provenance and authenticity.

Finally, but not least of all, a resale royalty income produced by the ongoing and increasing value of desired works is **the artist's rightful economic legacy**. In his article, *A Right Deferred: Resale Royalties for Visual Artists*, Charles Chen writes "[T]he resale royalty is consistent with American legal traditions because it also focuses on promoting creativity – 'the progress of Science and the useful Arts.' See U.S. CONST. art. I, §8, cl. 8."¹⁵ Shira Perlmutter noted in *Resale Royalties for Artists: An Analysis of the Register of Copyright's Report*:

"Copyright law is and always has been considerably more disadvantageous to visual artists. Artists therefore have a good claim to some form of remedy . . . artists feel that even small amounts paid occasionally are worthwhile both psychologically and financially."¹⁶

Henry T. Hopkins, distinguished museum director and educator who played a leading role in establishing Los Angeles' art scene, was more direct when he testified before the Senate Subcommittee on Patents, Copyrights and Trademarks in December 1987:

"Investors continue to profit directly from the creation of the artist. It is unfair that the artist be limited to proceeds from the original transaction while someone else reaps financial rewards from the product of an artist's hand on into infinity."¹⁷

In 2011, attorney Bruce Lehman drafted resale royalty legislation known as the *Equity for Visual Artists Act*. It was co-sponsored by Congressman Jerrold Nadler and Senator Herb

¹⁵ Chen, Charles, *A Right Deferred: Resale Royalties for Visual Artists*, *American Bar Association of International Law*, Summer 2012, Vol. IV, Issue No. 2.

¹⁶ Perlmutter, Shira, *Resale Royalties for Artists: An Analysis of the Register of Copyrights' Report*, *Columbia – VLA Journal of Law & The Arts* Vol. 16, 395, 1991-1992.

¹⁷ 35 Pat. Trademark & Copyright J. (BNA) No. 859, at 425 (Dec. 10, 1987) (Henry T. Hopkins of Los Angeles, before the Senate Subcommittee on Patents, Copyrights and Trademarks in December 1987).



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Kohl. It will be re-introduced in the 113th Congress. Our coalition of visual arts organizations supports it.

The Equity for Visual Artists Act includes a provision for qualifying a visual arts collecting society. The Act contains a legislative directive to the Register of Copyrights to develop qualifying criteria and issue regulations governing the designation and oversight of visual artists' collecting societies. This would also be a first step in resolving the current injustice in the field of reprographic royalties. We support this process, and urge that it proceed with the full input of rightsholders. An explanation of how a collecting society would allow artists to interact with the Copyright Clearance Center in licensing artists' collective fees was explained by one of the present authors (and illustrated via flow chart) in the 2006 Article "First Things About Secondary Rights," published in the *Columbia Journal of Law & the Arts*.¹⁸ (The flow chart is also attached to this paper as Appendix 2.)

We concur with the opinion of Charles Chen that "The United States has put off implementing a resale royalty for years, and federalizing the resale royalty would help the United States comply with the International Berne Convention and continue dominating the international art market." And we concur with Bruce Lehman that "In other cases Congress has acted to assure that American creators would be able to benefit from reciprocity with European nations when new benefits were granted by the EU to its own rights holders. . . . [it] is now time for the Congress to reconsider the unfinished business of the Visual Artists Rights Act of 1990."¹⁹

We urge the Committee to support the efforts by Bruce Lehman to pass this legislation on behalf of visual artists.

Please also see our Comment filed in response to the Notice of Inquiry, Copyright Office, Library of Congress, Resale Royalty Right (77 FR 58175).
http://www.copyright.gov/docs/resaleroyalty/comments/77fr58175/ASIP_Resale.pdf

Conclusion

Robust protection for the rights of the creator will incentivize parties to negotiate in good faith, enter into compensation agreements domestically and heighten the public's access to enjoyment and enrichment from creative works. Paying for the use of creative works does not halt innovation. On the contrary, it ensures that a continuing stream of fresh, original works will be available for distribution in the many innovative streams technology is

¹⁸ Brad Holland, "First Things About Secondary Rights," the *Columbia Journal of Law and the Arts*, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1969039. The flow chart is on page 322.

¹⁹ Bruce Lehman, Esq., Artists Equity Legislative Brief, Equity for Visual Artists Act of 2011 (EVA), S.2000 and H.R. 3688, December, 2011.



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creating. It is, after all, **the works of the independent authors** that are at the very root of the nation's copyright wealth.

We welcome the opportunity to discuss these matters further with the Committee, and we invite the Committee to call upon us if we can expand on our comments or answer questions.

Afterward: Thoughts on Orphan Works and Mass Digitization Legislation

On October 22, 2012, the Copyright Office published a Notice of Inquiry requesting comments from interested parties regarding "what has changed in the legal and business environments during the past four years that might be relevant to a resolution of the [orphan works] problem and what additional legislative, regulatory, or voluntary solutions deserve deliberation at this time."

As we've already noted, in the past, we opposed orphan works legislation as drafted, because it would have imposed a radically new business model on the licensing of our copyrighted work. It would have forced us either to digitize our entire life's work at great expense and entrust it to privately owned commercial databases or see it exposed to widespread infringement.

This was a Hobson's Choice that would have harmed artists and collateral small businesses. It would have let giant image banks access our commercial inventory and metadata and enter our commercial markets as clearing houses to compete with us for our own clients.

Databases don't create art. Individuals do. Yet whatever the intentions of the bill's authors, its provisions had been drafted so broadly it would have orphaned the work of working artists. Its consequences would have been far-reaching, long lasting, perhaps irreversible and would have struck at the heart of art itself.

In 2008, we were joined by 84 other creators' organizations in opposing that legislation; 167,000 letters were sent to members of Congress from our website. The artists behind those letters earn their living by licensing the work they create. Therefore, regarding the Copyright Office's question: how have things changed that would affect orphan works legislation, we think it's important to examine what things have *not changed*.

1. The High Cost of Compliance

The great expense (in both time and money) of digitizing and cataloging tens of thousands of copyrighted works in order to register them with commercial registries would make compliance impossible for all but the richest artists and would therefore make their ability to protect their rights a function of their ability to pay.



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While the exact figures would vary according to an artist's age, productivity and the genre in which he or she works – the precise figures supplied by White House photographer John Harrington at the 2008 Small Business Administration roundtable should suffice to make the point:

"[I]n 2006, I registered 58,731 images [with the Copyright Office], and in 2007, 71,919 images. If a [for-profit] registry charged \$0.50 per image to submit and process, I would have to pay **\$29,365.50** to protect my 2006 images, and **\$35,959.50** to protect my 2007 images, **for just those years.**"²⁰

For visual artists, such high registration costs would simply be a function of the volume of work visual artists create; it is a simple matter of math. These costs have not gone down in the last four years, nor will they in the foreseeable future. *We think it is impossible to overstress the importance of this factor. Indeed, we think the financial inability of artists to comply with this kind of legislation outweighs decisively any possible arguments for its passage.*

On this point there is overwhelming agreement among creators and those concerned about creators' rights. Consider the recent comments submitted by Bruce Lehman, former Commissioner of the US Office of Patents and Trademarks, an intellectual property expert whose role in crafting and passing past US copyright law is well known:

"To my knowledge this is the first time in American history that the ability to protect one's property rights has been subject to the limitation that only the rich have rights to legal redress...it is hard to understand the urgency with which the Copyright Office approached this matter in 2008 when there was no evidence whatever that the federal courts had been flooded with infringement lawsuits brought by long lost authors of works whose provenance was obscure...I strongly urge the Copyright Office to recommend that there is no need for legislative intervention on the issue of Orphan Works."²¹

²⁰ John Harrington, "Testimony Concerning How the Proposed Orphan Works Bill Will Economically Impact Photographers," US Small Business Administration Roundtable, August 8, 2008, Appendix A, Part 3, Document 36. Many more examples are collected in the statement of Constance Evans, National Executive Director, Advertising Photographers of America, SBA Roundtable, August 8, 2008. An addendum includes responses from working photographers: "ECONOMIC IMPACT OF THE ORPHAN WORKS BILL ON PHOTOGRAPHERS: THE COST OF COMPLIANCE," Comments of the Illustrators Partnership of America, Feb. 3, 2013, Appendix A, Part 3, Document 34. http://www.copyright.gov/orphan/comments/loi_10222012/Illustrators-Partnership-America.pdf

²¹ Comments of Bruce A. Lehman, Former Assistant Secretary of Commerce and Commissioner of Patents &



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2. No Credible Evidence of “Market Failure”

In its 2005 *Orphan Works Study*, the Copyright Office called for comments on the specific subject of orphaned work and received no more than 215 relevant letters. They did not inquire into the workings of commercial markets and there is no credible evidence of a market failure to justify the expansive scope of commercial infringement that would have been permitted by legislation drafted by the 109th and 110th Congresses.

3. Article 9(2) of the Berne Convention for the Protection of Literary and Artistic Work imposes specific constraints on the possible limitations and exceptions a Member Country may make to an author’s exclusive right of copyright:

“Member [countries] shall confine limitations and exceptions to exclusive rights to: a.) certain special cases; b.) provided that such reproduction does not conflict with a normal exploitation of the work; and c.) does not unreasonably prejudice the legitimate interests of the author.”²²

The orphan works bills previously drafted by Congress would have violated all three steps of this “three-step test.” By redefining an orphaned work as *any* work by *any* author that *anybody* finds sufficiently hard to find, the bills would *not* have limited exceptions to “certain special cases;” and permitting widespread commercial infringement of an author’s work would have conflicted with the author’s “normal exploitation of the work” and unreasonably prejudiced his or her “legitimate interests.”

4. Artists’ Negative Experience with existing Commercial Databases

The reluctance of artists to submit their work to unnamed for-profit databases “to be created in the private sector” is not grounded in abstract fears or reservations, but is based on common sense, actual business practices and negative experience with existing commercial databases such as Getty and Corbis.²³

Trademarks (1993-1999) http://www.copyright.gov/orphan/comments/loi_10222012/Edman-Brice.pdf

²² Berne Convention for the Protection of Literary and Artistic Works: Article 9 (2) “It shall be a matter for legislation in the countries of the Union to permit the reproduction of such works in certain special cases, provided that such reproduction does not conflict with a normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the author.” http://www.wipo.int/treaties/en/ip/berne/ttdocs_wot01.htm#P140_25350

²³ For more on artists’ experiences with the business practices of existing databases – including allegations by artists of copyright infringement and breach of contract – see Brad Holland, “First Things About Secondary Rights,” the *Columbia Journal of Law and the Arts*, Vol. 29, No. 3, 2006 http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1909039



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We can think of no other field in which small business owners can be pressured to supply corporate competitors with their content, business data and client contact information. As Brenda Pinnick, owner and president of Brenda Pinnick Designs, Inc., wrote in her comments for the 2008 SBA roundtable:

"If our government approached any other type of business and told them they could no longer own what makes their business valuable, that their intellectual property including sourcing information, trade secrets, collected knowledge of their industry and so on was now no longer theirs to own and use to prosper... imagine the outrage."²⁴

Orphan Works Developments in the European Union

On October 25, 2012 the European Parliament and the Council of the European Union passed Directive 2012/28/EU²⁵ on certain permitted uses of orphan works. This legislation is laudable and notable in many respects, one feature of which is its recognition that visual art presents unique problems for any orphan works regime, and has therefore exempted stand-alone visual art until such time as a just long-term solution can be formulated.

Conclusion

A government that would pass a law it knows its citizens can never comply with, but would strip them of their intellectual property for failing to comply, cannot plausibly be said to be promoting "the Progress of Science and useful Arts..." In 2008 the president of Public Knowledge reflected on the failure of that year's Orphan Works Acts to pass, but wrote that "visual artists...now understand that they must change their business models (emphasis added)."²⁶

With all due respect, it is not up to lobbyists or public servants – and certainly not to infringers – to decree that millions of artists "must change their business models." Nor are they qualified to decree how those business models should work. The people who know best how to adjust to the change in our markets are those of us who work in those markets.

²⁴ Comments of the Illustrators Partnership of America, Feb 3, 2013, Appendix A. http://www.copyright.gov/orphan/comments/nci_10222012/Illustrators-Partnership-America.pdf. The Small Business Administration Roundtable "How Will the Orphan Works Bill Economically Impact Small Entities?" was chaired by Tom Sullivan, Director of the Office of Advocacy of the SBA. It was initiated by the Illustrators' Partnership, The Artists Rights Society and the Advertising Photographers of America. It was conducted by the SBA August 8, 2008 at the Salmagundi Club in New York City. Seventeen panelists participated; scores of others submitted written papers. The video can be viewed at <http://vimeo.com/channels/artistsrights>

²⁵ http://eur-lex.europa.eu/LexUriServ/l.exUriServ.do?uri=OJ.L_2012.299.0005.0012.EN.PDF

²⁶ Gigi B. Sohn, "The Orphan Works Bill: Wait 'Till Next Year," October 6, 2008, Public Knowledge <http://www.publicknowledge.org/node/1783>



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We're the ones with the greatest incentive to adapt, and it's a rare artist who isn't already experimenting with ways to adjust.

The changes demanded of creative artists in the new digital environment are not news to those of us who work in this field; nor are we unaware of the misfortune such change generates. Most of us have already seen scores of talented colleagues drop by the wayside. Yet rather than rush to pass legislation that would allow opportunists to pounce like scavengers on the art "orphaned" by such casualties, our government should seek to work with those creators who have shown the will, resourcefulness and tenacity to confront that change.

This will be the test of whether copyright reform is to be in fact, true reform.

Respectfully submitted,

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APPENDIX I

Summary

Graphic Artists Guild, Inc. v. Brad Holland, Ken Dubrowski, Bruce Lehman, Terry Brown, Cynthia Turner and the Illustrators' Partnership of America, Inc.
Case/Index No. 109149/2008

On April 18, 2011 the New York State Supreme Court, New York County, dismissed all claims in a million dollar lawsuit brought by the Graphic Artists Guild (GAG) against the Illustrators' Partnership of America (IPA) and five named defendants. In the lawsuit, GAG asserted claims for defamation and alleged that efforts by the Illustrators Partnership to create a collecting society to return artists reprographic fees to artists "interfered" with GAG's "business" of appropriating those fees.

In her decision, Judge Debra James ruled that GAG's lawsuit had no merit. Citing evidence before the court, she ruled that public statements by the defendants regarding GAG's "surreptitious" collection and "gross mismanagement" of artists' royalties were "truthful and accurate" statements and therefore not defamatory, as GAG had alleged. Furthermore, she noted that all rightsholders have a "common interest" in "being compensated" and in knowing how their collective fees have been used or mis-used; and she concluded that IPA's exposure of GAG's conduct arose from a "duty" to make such information public:

"The duty need not be a legal one," she wrote, "but only a moral or social duty. The parties need only have such a relation to each other as would support a reasonable ground for supposing an innocent motive for imparting the information. Here the plaintiff Guild's factual allegations demonstrate that the defendants' statements were both true, and fall within the parameters of the common-interest privilege." – Page 11, Judge's Final Order (Emphasis added.)

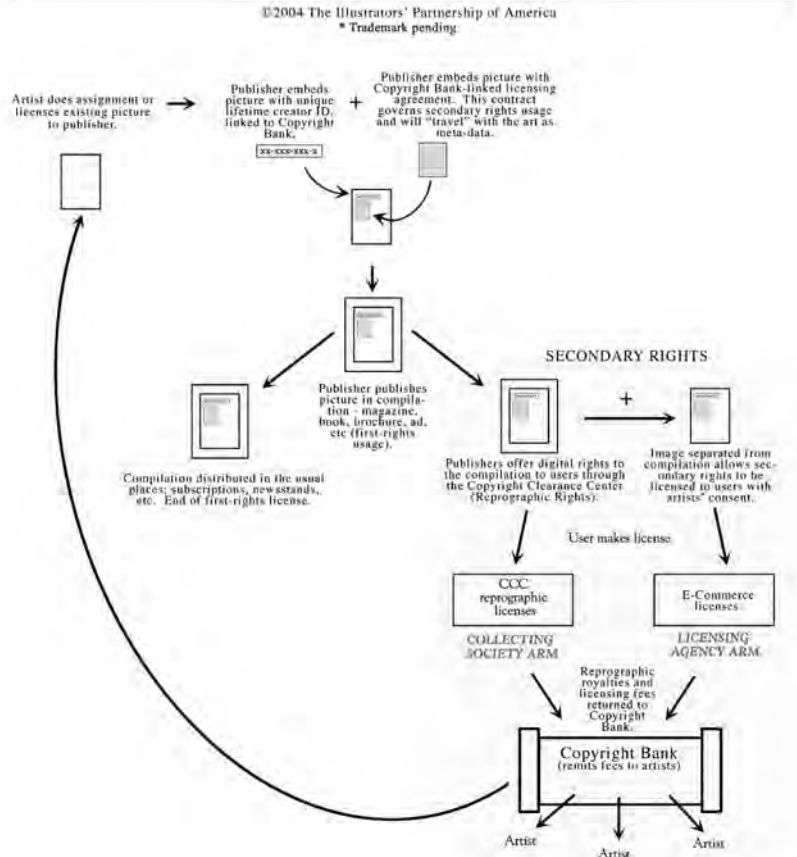
Furthermore, the judge stated (page 11): "The plaintiff Guild has conceded that it received foreign reproductive royalties and that it does not distribute any of the money to artists." GAG's steadfast refusal to disclose what its officers have done with over one and a half million dollars in royalties is documented in IPA exhibits B, C and D, on record with the New York State Supreme Court: Final Order of Judge Debra James/New York State Supreme Court in the matter of *Graphic Artists Guild, Inc. v. Brad Holland, et al.*, Case/Index No. 109149/2008.

<http://iapps.courts.state.ny.us/webcivil/FCASearch?param=P>

APPENDIX 2

COPYRIGHT BANK*

How Persistent Identity Tags and Contractual Meta-Data can be embedded in artwork, allowing a Copyright Bank to administer artists' individually-held rights on a use-per-image basis



Prepared Statement of the Library Copyright Alliance



**BEFORE THE HOUSE COMMITTEE ON THE JUDICIARY
SUBCOMMITTEE ON COURTS, INTELLECTUAL PROPERTY AND THE
INTERNET**

HEARING ON INNOVATION IN AMERICA: THE ROLE OF COPYRIGHTS

STATEMENT OF THE LIBRARY COPYRIGHT ALLIANCE

The Library Copyright Alliance (LCA) consists of three major library associations—the American Library Association, the Association of College and Research Libraries, and the Association of Research Libraries—that collectively represent over 100,000 libraries in the United States employing over 350,000 librarians and other personnel. LCA requests that this statement be included in the record of this hearing.

The subject of this hearing is the role of copyright law in promoting innovation in the United States. The starting point for understanding this relationship is the differentiation between the entertainment industry and other fields where copyrighted content is produced. Similarly, the creators of copyrighted content must be differentiated from the distributors of the content. Unfortunately, in copyright policy discussions, these distinctions often are overlooked. In this statement, LCA focuses on these distinctions. First, it discusses the diminishing role of copyright in incentivizing activity in one of the most important sources of innovation in the U.S. economy: scholarly communications. LCA then discusses the economic importance of collaborative activities such as open source software and Wikipedia, which do not rely on the incentive provided by copyright.

Finally, with respect to sectors that do appear to rely on copyright, LCA points out that many of the leading firms in those sectors are foreign owned. This suggests that the importance of copyright to maintaining U.S. leadership in the global economy may be overstated.

I. Open Access Models for Scholarly Communications

One of the primary sources of innovation in the U.S. economy is scholarly communications: articles, monographs, and databases written by professors, graduate students, and other researchers in all fields of human endeavor. The ideas expressed in these writings stimulate new research, advance the scientific and technology enterprise, and encourage commercial development of marketable products and services. This conversion is by no means a trivial exercise. Companies often must invest heavily in research and development to convert basic research into useful products and services. But without the basic research and its dissemination through scholarly communications, many technologically sophisticated products and services would not exist.

Significantly, academic authors do not engage in scholarly communications for the purpose of receiving copyright royalties on their writings. Indeed, they typically assign the copyright in their writings to a publisher without any sort of payment. Instead, the academic authors are compensated by promotion in their institution, enhancement of their reputations, and increased funding from grantors.¹

Judge Richard Posner of the Seventh Circuit, a prolific author on intellectual property matters, wrote a blog post arguing that scholarly works require little to no

¹ To be sure, in some fields a researcher might be motivated by the possibility of sharing patent license fees, but a patented invention that results from research is completely different from the copyrightable expression in an article describing the research.

copyright protection from a policy perspective. Judge Posner acknowledged that “modern action movies often costing hundreds of millions of dollars to make, yet copiable almost instantaneously and able to be both copied and distributed almost costlessly,” require strong copyright protection to ensure their creation. Judge Posner then observed that

[a]t the other extreme is academic books and articles (apart from textbooks), which are produced as a byproduct of academic research that the author must conduct in order to preserve his professional reputation and that would continue to be produced even if not copyrightable at all. It is doubtful that there is any social benefit to the copyrighting of academic work other than textbooks....²

We are not suggesting that scholarly works should receive no copyright protection. But we do agree with Judge Posner that academic authors do not need the economic incentive afforded by copyright to motivate them to write scholarly works.

While the “publish or perish” system of advancement in higher education provides academics with ample incentive to create scholarly works, the publishers of scholarly communications have relied more heavily on copyright. Historically, publishers of scholarly communications performed critical functions that bore a cost: coordination of the peer-review process, and the printing, marketing, and distribution of the copies of the journals or monographs.³ The publishers needed copyright protection to ensure that they would recover their investment in the production and distribution of the copies, even though they received the content itself at no cost from the academic authors.

² Richard Posner, *Do patent and copyright law restrict competition and creativity excessively?*, The Becker-Posner Blog (Sept. 30, 2012, 10:30 PM), <http://www.becker-posner-blog.com/2012/09/do-patent-and-copyright-law-restrict-competition-and-creativity-excessively-posner.html>.

³ Although publishers coordinate the peer-review process, they typically do not pay the peer reviewers. Members of the academic community donate their time to peer-review activities as part of their contribution to the scholarly enterprise.

The Internet has dramatically changed the economics of the scholarly communications market. Email and collaborative software tools have reduced the cost of coordinating the peer-review process; the Internet has cut printing and distribution costs. These reduced costs have enabled the emergence of open access business models, where readers can obtain online access to the writings for free. At the same time, the restrictive licensing terms and conditions and the skyrocketing cost of science, technology, and medical journals have encouraged researchers and scientists to promote new models of scholarly communication. Additionally, scientists are attracted to the functionality permitted by open access models, including the linking of databases and journal literature, and the mining and manipulation of these resources.

An academic author typically grants the open access publisher a non-exclusive copyright license to distribute the writing to the public at no charge. The open access publisher covers its costs by charging the author a fee for publishing the article or by receiving funding from another source, such as a granting agency or the institution that hosts the publication.⁴

Over the past fifteen years, the number of open access publishers has increased dramatically, as has the number of materials they have published. Since 2000, the members of the Open Access Scholarly Publications Association (OASPA) have published over 250,000 articles under open licenses, including over 80,000 in 2012 alone.⁵ Over 20% of all peer-reviewed articles are now published in the more than 4,700

⁴ Many granting agencies now include extra funds in grant awards to cover publisher fees for publication in an open access format.

⁵ Claire Redhead, *Growth in the use of the CC-BY license*, OASPA (Mar. 8, 2013), <http://oaspa.org/growth-in-use-of-the-cc-by-license-2/>.

open access journals.⁶ The Directory of Open Access Books, created in 2012, already lists 1,271 academic peer-reviewed books from 35 publishers.⁷ The demand for open access publishing among academic authors and readers is so strong that even highly profitable publishers such as Oxford and SAGE (plaintiffs in the electronic reserves case against Georgia State University)⁸ have open access publications and are members of OASPA.⁹

There are significant public benefits from open access publication:

- Open access to published research results enable faculty and researchers to build upon the findings of this research, both cutting-edge and historical, in their own research efforts. Building upon prior studies results in more efficient research efforts.
- Faculty, researchers, and students affiliated with research institutions collaborate on research and share their results in support of the scholarly and scientific enterprise. Providing greater access to these works through open access policies enhances this collaboration.
- Roadblocks negatively affect research productivity. In a survey conducted by the American Association for the Advancement of Science, a quarter of the respondents reported negative effects on their work because of difficulty in accessing the scientific literature. The consequences ranged from brief delay to abandonment of the research project.
- Open access accelerates the dissemination of basic research to entities that can make commercial applications.¹⁰ While large technology companies often

⁶ Mikael Laakso, et al., *The Development of Open Access Journal Publishing from 1993 to 2009*, 6 PLoS ONE, no. 6, 2011, <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3113847/>.

⁷ Directory of Open Access Books, <http://www.doabooks.org/> (last visited July 24, 2013).

⁸ *Cambridge University Press v. Becker*, 863 F. Supp. 2d 1190 (N.D. Ga. 2012), *appeal docketed*, Nos. 12-14676, 12-15147 (11th Cir. Sept. 12, 2012).

⁹ *Members*, OASPA, <http://oaspa.org/membership/members/> (last visited July 24, 2013).

¹⁰ According to the Battelle Technology Partnership Practice report, *Economic Impact of the Human Genome Project*, “the \$3.8 billion the U.S. government invested in the Human Genome Project (HGP) from 1988 to 2003 helped drive \$796 billion in economic impact and the generation of \$244 billion in total personal income. ... In 2010 alone, the human genome sequencing projects and associated genomics research and industry activity

subscribe to peer-reviewed journals directly relevant to their research and development, because of budget constraints, they usually do not subscribe to all journals of potential interest in related fields. Engineers and scientists in these companies are forced to conduct research with partial blinders on, seeing only what is directly before them and missing the potential interdisciplinary connections and the broader context that full access can provide.

- The Information Revolution has democratized research to an unprecedented degree. An individual with a laptop and a broadband connection has the capability of developing software solutions to extremely complex problems, provided that he has access to data and know-how developed by others. These software solutions can lead to the birth of new companies, or can hasten the rate of product-development by existing companies. Access to the results of academic research adds dramatically to the set of building blocks for these independent developers.

A specific example of the different incentives that exist in the scholarly communications sphere involves articles that result from federally funded research. In 2008, pursuant to direction from Congress, the National Institutes of Health (NIH) adopted a mandatory public access policy.¹¹ Under the policy, all investigators funded by the NIH are required to submit an electronic version of their final, electronic peer-reviewed manuscripts to the National Library of Medicine's PubMed Central, which then makes the manuscript publicly available within twelve months (or sooner, depending on

directly and indirectly generated \$67 billion in U.S. economic output and supported 310,000 jobs that produced \$20 billion in personal income. The genomics-enabled industry also provided \$3.7 billion in federal taxes during 2010." Press Release, Battelle, \$3.8B Investment in Human Genome Project Drove \$796B in Economic Impact Creating 310,000 Jobs and Launching the Genomic Revolution (May 10, 2011), *available at* [http://battelle.org/media/press-releases/\\$3.8b-investment-in-human-genome-project-drove-\\$796b-in-economic-impact-creating-310-000-jobs-and-launching-the-genomic-revolution](http://battelle.org/media/press-releases/$3.8b-investment-in-human-genome-project-drove-$796b-in-economic-impact-creating-310-000-jobs-and-launching-the-genomic-revolution). See Simon Tripp & Martin Grueber, Battelle Mem'l Inst., Economic Impact of the Human Genome Project: How a \$3.8 billion investment drove \$796 billion in economic impact, created 310,000 jobs and launched the genomic revolution (2011), *available at* http://www.battelle.org/docs/default-document-library/economic_impact_of_the_human_genome_project.pdf?sfvrsn=2.

¹¹ Department of Health and Human Services Appropriations Act of 2008, Pub. L. No. 110-161, Div. G, Tit. II, § 218, 121 Stat. 2187 (2007). See also *NIH Public Access Policy Details*, National Institutes of Health Public Access, <http://publicaccess.nih.gov/policy.htm> (last visited July 24, 2013).

the author's interest and the publisher's embargo period) of the official date of publication.

In February 2013, John P. Holdren, Director of the White House's Office of Science and Technology Policy, issued a memorandum directing federal research funding agencies with research and development budgets of \$100 million or more to develop a plan within six months to support increased public access to the results of research funded by the federal government.¹² In essence, this expands the NIH policy to other federal agencies. The LCA strongly supports the Administration's objectives of enhancing the public's access to scholarly publications resulting from research funded by federal agencies and maximizing the return on federal investments in research and development.

Because the federal government pays for the research described in these articles, as well as their dissemination through government repositories such as PubMedCentral, copyright is not necessary for these articles' creation. Nonetheless, public access policies do not harm traditional publishers. Due to the embargo period, academic libraries continue to subscribe to journals that rely on copyright protection. However, once the writing is made widely available through an open access repository, the public benefits increase. Scientists affiliated with companies and institutions that cannot afford expensive journal subscriptions can then access the scholarship. Additionally, the open access repositories allow researchers to conduct data mining and manipulation that

¹² Memorandum from John P. Holdren, Dir., Office of Sci. and Tech. Policy, Exec. Office of the President, on Increasing Access to the Results of Federally Funded Scientific Research (Feb. 22, 2013), http://www.whitehouse.gov/sites/default/files/microsites/ostp/ostp_public_access_memo_2013.pdf

cannot be performed on the traditional publishers' platforms.¹³

II. Open Innovation

Open access to scholarly communications is one example of the new models for creation and distribution enabled by the Internet. Open source software is another. It cannot credibly be argued that proprietary software is more innovative than open source software, or that traditional journals promote innovation more than open access journals. The embrace of open source software by successful companies such as IBM and Google demonstrates that in the Internet era, the use of copyright to restrict reproduction and distribution is more a matter of business strategy than a necessary mechanism to recoup investment. This can also be seen in the music industry, where more artists are promoting and distributing their sound recordings on platforms such as YouTube and receiving compensation through ad revenue and ticket sales for live performances.

This evolution of copyright enforcement from an economic necessity to a business strategy requires the Congress to reevaluate the emphasis the federal government places on copyright enforcement and to explore other, perhaps more efficient, means of promoting innovation. Steven Johnson, the author of the book *Where Good Ideas Come From: The Natural History of Innovation*, describes four quadrants of innovators: 1) the classic solo entrepreneur, protecting innovations in order to benefit financially; 2) the amateur individual, exploring and inventing for the love of it; 3)

¹³ Open Educational Resources is a related area where open distribution models can allow a greater return on public investment. Public school districts spend billions of dollars each year on the purchase of textbooks and other educational materials from commercial publishers. More recently, some jurisdictions have paid educators to develop content that then can be made available online for free. These materials are easy to update and customize for different educational settings. Similarly, colleges and universities are developing massive online open courses (MOOCs), which may revolutionize higher education by making it more widely available at lower cost.

private corporations collaborating on ideas while competing with one another; and 4) the space of collaborative, nonproprietary innovation. Johnson observes:

The conventional wisdom, of course, is that market forces drive innovation, with businesses propelled to new ideas by the promise of financial reward. And yet even in the heyday of industrial and consumer capitalism over the last two centuries, the fourth quadrant turns out to have generated more world-changing ideas than the competitive sphere of the marketplace. Batteries, bifocals, neonatal incubators, birth control pills – all originated either in amateur labs or in academic environments.¹⁴

Johnson stresses that the fourth quadrant “is not locked in a zero-sum conflict with markets.” Rather, “this fourth space creates new platforms, which then support commercial ventures.” He views the Internet as “the ultimate example of how fourth-quadrant innovation actually supports market developments: a platform built by a loosely affiliated group of public-sector and university visionaries that has become one of the most powerful engines of wealth creation in modern times.”

Much of the software that underlies the Internet is collaboratively developed open source software. Additionally, the world’s most used reference website, Wikipedia, is a collaborative project of more than 77,000 active volunteer contributors. They work on over 22,000,000 articles in 285 languages. Wikipedia attracts more than 470 million unique visitors a month. English Wikipedia has 4,288,907 articles with 30,719,418 pages.¹⁵ As Wikipedia has matured, its accuracy has surpassed that of commercial encyclopedias, and it is far more current and has a far broader reach. Wikipedia is maintained by a non-profit foundation that relies on donations to pay its costs, such as

¹⁴ Steven Johnson, *Innovation: It Isn't a Matter of Left or Right*, N.Y. Times, Oct. 30, 2010, at BU7, available at <http://www.nytimes.com/2010/10/31/business/31every.html>. The academic environments typically are dependent on government funding.

¹⁵ *About*, Wikipedia, <http://en.wikipedia.org/wiki/Wikipedia:About> (last visited July 24, 2013).

Internet access fees. It is the starting point for research for many businesses, professionals, government officials, students, and consumers. Its ease of use, free accessibility, and broad coverage has led to its saving society billions of dollars in research costs.¹⁶

Steven Johnson argues that “the fourth quadrant has been so innovative, despite the lack of traditional economic rewards” because of “the increased connectivity that comes from these open environments. Ideas flow from mind to mind, and to be refined and modified without complex business development deals or patent lawyers. The incentives for innovation are lower, but so are the barriers.”

III. Foreign Ownership of Firms in the Copyright Industries

The Internet has enabled the development of new approaches for the creation and distribution of content that do not rely on the economic incentive provided by copyright. Nonetheless, copyright remains important for the business models of certain sectors, particularly the entertainment industry. In their advocacy for stronger copyright protection, the associations representing the large media companies make two assertions: 1) Americans are global leaders in the production of creative and innovative services and products; and 2) many of these services and products are dependent on copyright protection.

There is a growing literature questioning the second assertion – the dependency of creative activity on strong copyright protection. The previous two sections of this statement addressed aspects of this issue. By contrast, the first

¹⁶ Of course, as librarians, we stress that like any encyclopedia, Wikipedia should be the starting point of a research project, and not its totality.

assertion – American global leadership in the production of creative and innovative services and products – often goes unchallenged.

Assessing the U.S. global standing in copyright industries is important because it helps to determine the optimal level of domestic copyright protection, as well as what copyright standards the U.S. should be urging upon its trading partners. For decades, U.S. domestic and foreign copyright policy has been predicated on the assumption that U.S. firms dominated both domestic and foreign markets for copyrighted products.¹⁷ Domination of foreign markets suggested that an increase in the level of copyright protection internationally would lead to increased exports, which would in turn lead to more jobs in the U.S. and more profits for U.S. firms. Likewise, domination of domestic markets meant that the higher prices to U.S. consumers resulting from the decreased competition caused by strong IP protection would be offset by U.S. job growth.

A recent study revealed that for many copyright industries, however, this assumption of U.S. dominance is no longer true.¹⁸ This suggests that, at times, copyright policies adopted by Congress and the Executive Branch may have benefitted foreign corporations at the expense of U.S. consumers. While the U.S. employees and contractors of a foreign firm may receive some income from the firm, it is safe to assume that much of the value generated by these employees and contractors will be captured by the firm and repatriated to its domicile.

The study found that:

¹⁷ See, e.g., Michael Ryan, *Knowledge Diplomacy: Global Competition and the Politics of Intellectual Property* (1998).

¹⁸ Jonathan Band & Jonathan Gerafi, *Foreign Ownership of Firms in IP-Intensive Industries*, InfoJustice (Mar. 5, 2013), <http://infojustice.org/archives/28840>.

- Four of the “Big Six” publishers, the largest English language trade publishers, are foreign-owned. More than 80 percent of the global revenue of the Big Six is generated by these foreign-owned companies. These foreign-owned companies published more than two thirds of the trade books in the U.S.¹⁹
- Four of the five largest STM (science, technical and medical)/Professional publishers are foreign-owned. More than 90 percent of the revenue of the five largest STM/Professional publishers was generated by foreign-owned firms.
- Only seven of the world’s 50 largest publishers of all categories are U.S.-owned.
- The book publishing industry in Europe has approximately twice as many employees as in the United States.
- Of the top ten best-selling fiction authors in any language whose work is still in copyright, five are foreign. A British author wrote three of the top five best-selling books in the U.S. in 2012.
- Two of the three major record labels are foreign-owned. These two labels have a market share of 59 percent.
- Thirteen of the twenty best-selling recording artists are foreign.
- Of the 50 most popular motion pictures in the United States in 2012, half were filmed partly or entirely outside of the United States.
- In 2013, the Oscar winners in thirteen of 24 categories were foreign. In 2012, the Oscar winners in eleven of 24 categories were foreign. In 2011, the Oscar winners in eight of 24 categories were foreign.
- Seventy percent of the most recent generation of game consoles were manufactured by Japanese companies. Japanese companies have manufactured 92 percent of all game consoles ever sold.

There is absolutely nothing sinister about foreign ownership of firms in the copyright industries, including foreign ownership of companies originally established in the United States. This is to be expected in a globalized economy with multinational corporations and complex cross-border supply chains. Moreover, many countries in Western Europe and East Asia are at the same level of technological and economic development as the United States. The critical point is

¹⁹ The parent corporations of two of the Big Six, Penguin and Random House, recently merged the operations of these subsidiaries. Random House’s parent, German-owned Bertelsmann, owns 53 percent of the joint venture, and Penguin’s parent, U.K.-based Pearson, owns 47 percent. The joint venture, named Penguin Random House, controls 25 percent of the U.S. trade market. Thus, the Big Six is now the Big Five.

that in such a globalized economy, U.S. policymakers should no longer assume without reflection that the beneficiaries of protectionist copyright policies are U.S. firms and, by extension, U.S. workers and shareholders.

IV. Conclusion

These hearings concerning the contributions of the copyright and technology industries reflect a statement by the Supreme Court in *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd.* that copyright law maintains a “balance between the respective values of supporting creative pursuits through copyright protection and promoting innovation in new communication technologies by limiting the incidence of liability for copyright infringement.”²⁰ The Court added that “the more artistic protection is favored, the more technological innovation may be discouraged; the administration of copyright law is an exercise in managing the trade-off.”²¹ The Supreme Court is correct that the copyright law balances the support of creative pursuits and the promotion of technological innovation. But copyright balances far more than art and technology. As the Court explained in *Sony Corp. of America v. Universal City Studios, Inc.*, copyright law “involves a difficult balance between the interests of authors ... in the control and exploitation of their writings ... on the one hand, and society’s competing interest in the free flow of ideas, information, and commerce on the other.”²² Copyright thus balances the interests of authors and society as a whole.

Society’s interest in the free flow of ideas, however, is not simply a matter of encouraging consumer access to information. Rather, as the Fifth Circuit recognized, in

²⁰ 545 U.S. 913, 928 (2005).

²¹ *Id.*

²² 464 U.S. 417, 429 (1984). *See also* *Golan v. Holder*, 132 S. Ct. 873, 900 (2012) (Breyer, J., dissenting).

the Copyright Act “Congress balanced the competing concerns of providing incentive to authors to create and of fostering competition in such creativity.”²³ In other words, copyright law also balances the interests of existing authors with the interests of future authors. This is accomplished by essential features such as copyright term, the idea/expression dichotomy, and fair use.

As Congress proceeds with this examination of copyright reform, it must bear in mind that it needs to balance not only the interests of the copyright industry and the technology industry, but also the interests of authors and the public as well as established authors and new authors.

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²³ *Kern River Gas Transmission Co. v. Coastal Corp.*, 899 F.2d 1458, 1463 (5th Cir. 1990). See also *Computer Assocs. Int’l, Inc., v. Altai, Inc.*, 982 F.2d 693, 696 (2d Cir. 1992) (“[T]he copyright law seeks to establish a delicate equilibrium. On the one hand, it affords protection to authors as an incentive to create, and, on the other, it must appropriately limit the extent of that protection so as to avoid the effects of monopolistic stagnation.”)

**Prepared Statement of the National Press Photographers Association
(NPPA)**



National Press Photographers Association

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Copyright Issues of Concern to Visual Journalists

Overview

- As both staff photographers and independent photojournalists, members of the National Press Photographers Association (NPPA) create original intellectual property for publication and broadcast in all media.
- Our images and video help Americans — and others — understand their world.
- As the news media have trimmed their staffs, more and more of our members find themselves working as independent contractors, licensing their images and footage.
- **Copyright infringement of this material has contributed to a devastating economic loss for our members, as newspapers and television stations (both local and network) reduce staffs.**
- **Copyright infringement takes a direct economic toll on these small business owners, who must shoulder the burden of policing infringements while at the same time seeking and fulfilling photographic assignments, working on self-initiated projects and maintaining all of the tasks of running a 24/7 business.**
- For many, losses due to infringement have been devastating.
- Photojournalists work on extremely tight deadlines covering events of great national and international importance, including political events, wars, breaking news and sporting events.
- These types of images are of interest to a large number of publishers and individuals.
- They are widely infringed as a matter of course.
- Today, a news photographer has the capability to transmit an image within moments of taking it.
- That image can be posted immediately to the Internet by the photographer or the photographer's client.
- Because of the enormous public interest in the subject matter documented by news photographers, the world takes immediate note of a newsworthy or interesting photo, and the theft begins.
- Within seconds of its creation that image may be downloaded and re-posted becoming "viral" in short order.

- **It is absurdly easy for a digital image to be stripped of its metadata, preventing law-abiding publishers from identifying the rights holder and being able to legally license the work.**
- **Under increased competition some publishers use a photo without permission under the premise of “act first, apologize later.”**
- As part of that cost/benefit analysis, publications weigh the probability of discovery and resulting litigation against the time and cost involved in obtaining prior permission and licensing.
- **That ever-increasing misappropriation of member-created content also threatens the country’s public health and safety by undermining a profession America relies upon to provide the public with compelling images and stories.**
- Most photojournalists view our profession as a calling.
- No one really expects to become wealthy in this line of work, but most do expect to earn a fair living, support themselves and their family, and contribute to society.
- Copyright infringement reduces that economic incentive dramatically.
- This in turn may abridge press freedoms by discouraging participation in this field.
- **It also devalues photography as both a news medium and art form, thereby eroding the quality of life and freedom of expression that are part of this great nation.**

Areas of Concern

- For photojournalists, copyright infringement is a pernicious problem.
- Not only has it reduced the profitability of our clients, resulting in layoffs and budget cuts for outside contractors, but has also created overly burdensome legal costs which act as an impediment to pursuing legal remedies in federal court.
- Too often, rights holders find it difficult to justify enforcement and difficult to find an attorney willing to take their cases.
- While there are other areas of concern to news photographers, being able to protect their intellectual property rights is of paramount importance if they are to remain in business.
- There has always been tension between the exclusive rights granted by copyright law to an author of a creative work and those who believe they have a concomitant right to use such work under the “fair use” doctrine.
- There is also much disagreement over whether fair use is a right, a limitation or exception to copyright law, or a defense that may be asserted by a defendant in a copyright infringement lawsuit.
- Compounding this historically vexing issue is a concern over the use of copyrighted works where the author cannot be determined or found, otherwise known as “orphan works.”

- Nowhere are these conundrums more profound than in the use and misappropriation of photographs.
- The exponential proliferation of visual images on the Internet has only exacerbated this confusing situation.
- **According to reports, 20 million photographs are viewed on the Internet every minute.**
- Compounding that mind boggling number is the very prevalent belief that the Web is the "public domain."
- As others know the public domain is not a place but rather a legal term pertaining to a work that is no longer under copyright protection.
- While works in the public domain may be used freely without the permission of the former copyright owner far too many users believe that if a photograph is posted on the Internet it is there for their use without permission, credit or compensation and any such use is "fair."
- As stated by the U.S. Copyright Office (the Office), "the distinction between what is fair use and what is infringement in a particular case will not always be clear or easily defined."
- There is no specific number of words, lines, or notes that may safely be taken without permission."
- **What makes photographs so unique are that rarely are they used except in their entirety.**

Orphan Works

- The Office has also articulated the concerns of some in the copyright community regarding "the uncertainty surrounding the ownership status of orphan works" by stating such ambiguity "does not serve the objectives of the copyright system."
- But there is a countervailing concern that in seeking to address the frustration of "good faith users" of Orphan Works in order to cure their potential liability and "gridlock in the digital marketplace," a far more serious problem comes into play for recently created visual works that, for whatever reason, appear to be orphaned when, in fact, they are not.
- That is because within seconds of its creation an image may be downloaded and re-posted becoming "viral" in short order.
- Many applications and websites strip identifying information, known as metadata from digital images when they are uploaded, preventing good-faith users (one who had made a "reasonably diligent effort to find the owner") from identifying the rights holder or being able to legally license the work.

- Such legislation, limiting existing recovery rights may create unintended harm to photographers that would far exceed any social benefit derived, particularly without any definitions or other requirements for satisfying a “reasonably diligent search.”
- This problem is illustrated best in the resulting furor by photographers over the recently passed Enterprise and Regulatory Reform Act 2013
- For authors, copyright is not just about receiving compensation for use.
- Copyright also protects them from having their work used in ways they do not approve and in ways that they never intended.
- This is particularly true for photographers.
- Subjects depicted in a photograph may have only consented to being photographed for certain purposes.
- Unauthorized use of photographs, therefore, effects more than just photographers.
- Another important consideration under copyright law and the First Amendment is the right to **not** publish or speak.
- There are many situations in which a visual work was created solely for private use and was never intended for public consumption.
- Due to the insidious nature of the Internet, many images so created have found their way there without any identifying information.

Fair Use

- In a number of postings many organizations including libraries and documentary film makers who advocated vociferously for the Sean Bentley Orphan Works Act of 2008 now take the position that Orphan Works legislation is no longer necessary.
- Instead, they assert “fair use” offers the protection they seek.
- They also state that any legislative remedies should be a minimal, “one sentence amendment to 17 U.S.C. § 504(c)(2) that grants courts the discretion to reduce or remit statutory damages if the user conducted a reasonably diligent search prior to the use.”
- They justify these proposals by explaining that “these uses would significantly benefit the public without harming the copyright owner”
- One online publication asserts that “transformativeness” should be used rather than rely on the four factors traditionally used by the courts in making a fair use determination (those factors being: the purpose and character of the use, including whether such use is of commercial nature or is for nonprofit educational purposes; the nature of the copyrighted work; the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and the effect of the use upon the potential market for, or value of, the copyrighted work.
- But no single factor is determinative.

- "All are to be explored, and the results weighed together, in light of the purpose of copyright."
- The American University School of Communications Center for Social Media defines that term in this way:
- Did the unlicensed use "transform" the material taken from the copyrighted work by using it for a different purpose than that of the original, or did it just repeat the work for the same intent and value as the original?
- Was the material taken appropriate in kind and amount, considering the nature of the copyrighted work and of the use?
- They also go on to state that one way to mitigate a copyright claim under fair use is by a good faith showing in providing "credit or attribution, where possible, to the owners of the material being used."
- Unfortunately such advice runs diametrically opposite of the statement by the Office that "acknowledging the source of the copyrighted material does not substitute for obtaining permission."

Caselaw

- Court rulings in some recent cases may support the transformative argument but once again it is crucial to remember that even slight changes in fact patterns may result in different outcomes. In *Associated Press v Meltwater*, the defendant asserted the affirmative defense of transformative fair use in their appropriation of copyright-protected material from the plaintiff for a new purpose.
- Despite the court's assumption for purposes of its opinion that Internet search engines are a transformative use of copyrighted work, it still held that Meltwater engaged in copyright infringement and that its copying was "not protected by the fair use doctrine."
- In rendering its opinion the court found that the purpose and character of the use was not transformative (no commentary or transformation of work in any meaningful way) and distinguished Meltwater News service from Google News as not so much a search engine, but an expensive subscription service marketed as a news clipping service.
- **The court also found that Meltwater copied too much of the AP articles both quantitatively and qualitatively.**
- **The court found that Meltwater's use of the works detrimentally affected the potential market and value of AP's articles.**
- In another recent case the U.S. District Court of Appeals for the 2nd Circuit reversed and vacated a lower court decision in part finding that the appropriation artist Richard Prince infringed on the copyright of Patrick Cariou's photographs when they were used in Prince's work.

- Once again the question of the “transformative nature” of the new work came into play in deciding the fair use question.
- The lower court had initially granted Cariou’s motion for summary judgment, finding that the artwork had infringed upon his copyrighted photographs.
- The lower court had also entered an injunction compelling “the defendants to deliver to Cariou all infringing works that had not yet been sold, for him to destroy, sell, or otherwise dispose of.”
- But the court of Appeals disagreed with the lower court analysis of the fair use factors and found that whereas “the district court imposed a requirement that, to qualify for a fair use defense, a secondary use must ‘comment on, relate to the historical context of, or critically refer back to the original works,’” they believed the proper determination is “if ‘the secondary use adds value to the original – if [the original work] is used as raw material, transformed in the creation of new information, new aesthetics, new insights and understandings” (Internal citation omitted).
- They also found that “for a use to be fair, it ‘must be productive and must employ the quoted matter in a different manner or for a different purpose from the original” (Internal citation omitted).
- With regard to the transformative nature of the work, the court thought it also critical to determine how the work in question may be reasonably perceived by the reasonable observer as compared with the original work.
- **To illustrate how difficult these types of decisions are, the case involved 30 pieces of artwork, but the appeals court was only able to make a determination on 25 of them, remanding the remaining 5 pieces back to the lower court for application of “the proper standard” so as to “determine in the first instance whether any of them infringes on Cariou’s copyrights or whether Prince is entitled to a fair use defense with regard to those artworks as well.”**
- In a 5 page dissent Judge John Clifford Wallace agreed that the lower court’s finding was flawed, but believed that all of the works in question should be remanded for further reconsideration and factual determination under the legal standard just articulated by majority.
- He also opined that “perhaps new evidence or expert opinions will be deemed necessary by the fact finder—after which a new decision can be made under the corrected legal analysis.”
- **Judge Wallace also took the majority to task for employing its own “artistic judgment” when comparing the transformative nature between the two works.**
- **He cautions against departing from aesthetic neutrality in that he would feel “extremely uncomfortable” for him do so in his “appellate capacity,” let alone his “limited art experience.”**

- Noting the court had appeared to move away from that foundational imperative in determining fair use he cited the admonition **by Justice Oliver Wendell Holmes that “it would be a dangerous undertaking for persons trained only to the law to constitute themselves final judges of the worth of pictorial illustrations, outside of the narrowest and most obvious limits.”**
- In another case involving fair use the courts have found that the scanning of books for the purposes of indexing meets the transformative requirement even when copying entire written works because it adds value and transforms the work from its original intent by providing full-text searching and access for print disabled individuals.
- Another court has also held that at universities the use of copies from unlicensed electronic course reserves in place of traditional printed course packs was permissible under fair use.
- The 350 page decision also weighed the four fair use factors, with the court finding that the unpaid use of small excerpts of the works in question to be acceptable given it would not discourage academic creativity in new works.
- These cases can all be distinguished from the daily misappropriation of photographs and visual images in their entirety for no other purpose than that they are readily accessible, help illustrate a story or fill a space and serve to monetize page views or sell publications.
- Such unauthorized and uncompensated misuse of the work of others should not be considered fair use. Rather they are exemplars of precisely the type of creative work that copyright laws were enacted to protect.

Conclusion

- As the legal system tries vainly to catch-up with technology and social policy as it relates to copyright protections for photographs and other visual images a few things are hopefully apparent.
- Those who assert “Fair Use” as a prior rationale for the misappropriation of photographs and visual images, do so at their peril.
- As the U.S. Supreme Court noted, fair use is an “affirmative defense” that must be successfully proved by the named defendants once a copyright infringement lawsuit has been commenced.
- “Defendants bear the burden of proving that each use was a fair use under the statute. The analysis of the fair use defense must be done on a case-by-case basis, and ‘all [four factors] are to be explored, and the results weighed together, in light of the purposes of copyright.’”
- There is a strong argument that an examination of the 4 fair use factors mitigates in favor of the photographer when the use is commercial or for-profit educational purposes.

- **The qualitative and quantitative nature of a photograph is normally self-evident.**
- Given that almost all copyright infringements of photographs involve their entire use rather than just a small portion of the picture, the third factor in considering fair use should favor the photographer in cases where the photographs are used without any transformative changes being made to them.
- **The effect of the use upon the potential market for, or value of, the photograph may also be summed by Justice Holmes, when he wrote, “that these pictures had their worth and their success is sufficiently shown by the desire to reproduce them without regard to the plaintiffs’ rights.”**
- **The fair use doctrine is meant to protect those wishing to stand on the shoulders of others when creating new works, not on the backs of others, such as photographers, whose works are infringed upon with impunity hundreds, if not thousands of, times a day both intentionally and inadvertently.**
- **To paraphrase U.S. District Judge Denise L. Cote’s ruling in *Meltwater* – A defendant misappropriates a photograph in its entirety in order to make money directly from the undiluted use of the copyrighted material; where this use is a central feature of its business model and not an incidental consequence of the use to which it puts the copyrighted material.**
- Photographing newsworthy events occurring around the globe is an expensive undertaking and enforcement of copyright laws permits the photographer to earn the revenue that underwrites that work.
- Permitting a defendant to take the fruit of the photographer’s labor for its own profit, without compensating the photographer, injures the photographer’s ability to perform this essential function of democracy.
- **Rather than advising users about a potential fair use safe harbor, many suggest following the golden rule of “do unto others” by first seeking permission, offering to credit and expecting to pay when using photographs and visual images on the web.**

About the NPPA:

Founded in 1946, the National Press Photographers Association (NPPA) is a 501(c)(6) non-profit professional organization dedicated to the advancement of visual journalism, its creation, editing and distribution in all news media. NPPA encourages visual journalists to reflect high standards of quality and ethics in their professional performance, in their business practices and in their comportment. NPPA vigorously promotes freedom of expression in all forms. Its more than 7,000 members include still and television photographers, editors, students, and representatives of businesses serving the visual journalism industry.

Prepared Statement of the National Writers Union, UAW Local 1981



NATIONAL WRITERS UNION, UAW LOCAL 1981

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DAN MCCORDRY, Recording Secretary

National Writers Union Priorities for Copyright Reform

Reform of U.S. copyright law is long overdue, not just because of technological change, but also to rectify longstanding inequities to writers and other creators.

The key issue for the National Writers Union and other writers and creators is this: Will copyright reform help our members and other creative workers take advantage of new technologies and business models that benefit us and the reading public? Or will keeping up with technology be a pretext for changes in the law which re-allocate rights and revenues in ways that unfairly favor publishers, distributors, and intermediaries over creators?

What We Want

1. Elimination of 17 U.S. Code § 411 and § 412, which require registration as a prerequisite for filing a copyright infringement lawsuit or obtaining statutory damages and attorneys' fees. These formalities are prohibited by the Berne Convention and deny creators the effective redress required by the WIPO Copyright Treaty. Repeal of these sections of the Copyright Act is essential for the U.S. to fulfill its global treaty obligations, and will encourage other countries to reciprocate by respecting U.S. copyrights. Repeal will make it easier for creators to defend their copyrights.

2. Creation of a Copyright Small Claims Court as an accessible, effective way to defend copyrights without having to bring costly, time-consuming lawsuits in federal court. Federal lawsuits are prohibitively expensive for most creators. As a result, we have no meaningful ability to enforce our rights. Since creators increasingly find their work has been pirated online by an unauthorized third party or their publishers' have issued unauthorized digital editions of their work, creators need a less costly way to assert their rights, terminate infringements, and win fair compensation.

3. Reform of 17 U.S. Code § 203 on the reversion of rights. Section 203 of the Copyright Act has too many limitations and procedural obstacles to be useful to most creators, and it cannot be invoked if an original publisher or other licensee has disappeared (an "orphan publisher"). Reversion of rights to a work's creator should be automatic after a number of years (no more than 20) without requiring notice, registration, or other formalities. Reversion of rights held by a corporation, partnership, or other entity other than a natural person should be automatic and immediate on the dissolution of the corporation, partnership, or entity, unless notice

of a successor is recorded with the Copyright Office beforehand.

What We Don't Want

1. No statutory license or exception to copyright for so-called orphan works. An orphan work is one whose rights holders have not been identified or located. All orphan works proposals to date would inevitably categorize as orphans many works that are being actively exploited by their creators and other rights holders because important ways that works are currently used and sold do not specify the rights holders. In effect, these orphan works' proposals would confiscate rights to these works and undermine their creators' livelihoods. They would also interfere with normal exploitation of the works and impose *de facto* formalities in violation of the Berne Convention.

2. No statutory, default, or extended collective licensing for digital distribution. Digital distribution, including through mass digitization, should continue to require permission from each copyright holder on an opt-in, not opt-out basis. Opt-out schemes are promoted as a means to build libraries' digital collections, but they also function as statutory usurpation of copyright. We support expansion of digital libraries through increasing their acquisition budgets, not through expropriation of creators' rights.

3. No increased formalities for rights holders. Mandatory registration already imposes an improper burden on the time and budgets of copyright holders, and it is a clear violation of the Berne Convention and other treaties. Under current procedures, it's nearly impossible to register many types of works in a timely, inexpensive way, especially works published online. Registration procedures necessarily embody technological and business-process assumptions that are slow to adapt to change and therefore serve as a barrier to new publishing and distribution models. Current registration requirements should be repealed and no additional formalities should be added.

4. No privatization of copyright registration functions. Only a public body such as the Copyright Office can assure all rights holders of fair treatment and due process. In all likelihood, copyright registries would be dominated by and vulnerable to capture and control by large companies—mainly publishers and distributors—that would favor publisher-centric business models and assumptions over new media and self-publishing models to the detriment of creators and the public alike.



**Letter from David P. Trust, Chief Executive Officer,
the Professional Photographers of America**



**Professional Photographers
of America**

July 23, 2013

The Honorable Howard Coble
United States House of Representatives
Chair, Subcommittee on the Courts, Intellectual
Property, & the Internet,
Committee on the Judiciary
B352 Rayburn House Office Building
Washington, DC 20515

The Honorable Melvin Watt
United States House of Representatives
Ranking Member, Subcommittee on the Courts,
Intellectual Property, & the Internet
Committee on the Judiciary
B352 Rayburn House Office Building
Washington, DC 20515

Dear Representatives Coble and Watt,

We are writing today behalf of Professional Photographers of America, the Student Photographic Society, and our affiliated organizations. Together we represent some 52,000 professional photographers whose livelihood is contingent upon strong copyright protections. The vast majority of our members consider themselves portrait and/or wedding photographers. They are quite literally the copyright holders next door, live in every congressional district across the U.S. -- in cities, suburbs, and rural areas.

We wish to thank you for your continued review of the copyright statute. We are pleased at your selection of Sandra Aistars, Executive Director of the Copyright Alliance and our colleague Eugene Mopsik, Executive Director of the American Society of Media Photographers (ASMP) as witnesses. We value and support Ms. Aistars' testimony as a representative of the creative community. We are also delighted to lend our support to Mr. Mopsik and ASMP, heartily endorsing their comments as representative of professional photography as a whole.

Photographers give us lasting images of the people dearest to us at the most important times of our lives. Their works are not just enduring memories of special occasions, but a tangible glimpse into who we are and where we come from - images of those who came and went before us, that we will one day share with our children and grandchildren to teach them their most personal heritage.

Photographers are typically the smallest of small businesses, earning an average of \$35,000 per year. With the cost of doing business increasing on an annual basis it is more important than ever that they be able to protect their creations. Without copyright protections to incent them to innovate on a daily basis, professional photographers might find themselves forced to close their doors. This would represent a loss not only to the creative community, but to the U.S. economy, and society as whole.

We are thankful for the Committee's efforts to examine the current statute and determine how best to accommodate the ever changing needs of the content and user communities. We wish to extend our continuing support for your review efforts are happy to supply any information or assistance the Committee may need in going forward.

Sincerely,

David P. Trust
Chief Executive Officer

INNOVATION IN AMERICA (PART II): THE ROLE OF TECHNOLOGY

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INNOVATION IN AMERICA (PART II): THE ROLE OF TECHNOLOGY

THURSDAY, AUGUST 1, 2013

HOUSE OF REPRESENTATIVES

SUBCOMMITTEE ON COURTS, INTELLECTUAL PROPERTY,
AND THE INTERNET

COMMITTEE ON THE JUDICIARY

Washington, DC.

The Subcommittee met, pursuant to call, at 9:40 a.m., in room 2141, Rayburn House Office Building, the Honorable Howard Coble (Chairman of the Subcommittee) presiding.

Present: Representatives Coble, Goodlatte, Marino, Smith of Texas, Chabot, Issa, Chaffetz, DeSantis, Smith of Missouri, Watt, Chu, Deutch, Bass, DelBene, Jeffries, Lofgren, and Jackson Lee.

Staff Present: (Majority) Joe Keeley, Chief Counsel; Olivia Lee, Clerk; and (Minority) Stephanie Moore, Minority Counsel.

Mr. COBLE. Good morning, ladies and gentlemen. Welcome to the hearing this morning. Today's hearing is another step down the long path of conducting a comprehensive review of our copyright system. We will be hearing from the stakeholders of the technology industry to better understand how they envision innovation and the role that it plays among other intellectual property intensive industries.

When we drafted the Digital Millennium Copyright Act, known as DMCA, it was impossible to comprehend how the law would adapt to ever changing technologies or predict whether those technologies would grow in popularity. Most Internet connections were dial-up. There were no smartphones, no supercomputers, and most users had limited capabilities to utilize this new digital platform.

Hindsight is 20/20, and in just over 10 years, I think it's safe to say that technology has forever changed the world in which we live. Today, technology is found everywhere. Virtually every industry has embraced some type, some form of technology to promote efficiency, improve quality, and ensure safety for workers and consumers.

While not all technological innovations are solely within the digital platform, they depend on the robust intellectual property system just as innovations do in other industries.

Government should not stand in the way of innovation. It should create an environment that will foster and incentivize it. Minus a handful of technical fixes on balance, I think the DMCA has gone

a long way to promote creativity and innovation within the digital platform. That being said, I am old-fashioned and I always have maintained that our laws, in particular our copyright laws, should be generously laced with common sense.

This hearing is unlike many other hearings we conduct because it is not focused on any specific issue, and for me, today's discussion is more about the future than it is about the past. In particular, I am interested in learning our witnesses' thoughts about what we can expect in the way of innovation over the next decade.

Our economy has undergone a technological revolution, but consumers still clamor for more technology and they want it faster. I am interested to know what you need from our government to meet your demand.

We welcome our witnesses and appreciate your efforts in participating in today's hearing.

With that said, I reserve the balance of my time and recognize the gentleman from North Carolina, the Ranking Member, for his opening statement, Mr. Mel Watt.

Mr. WATT. Thank you, Mr. Chairman, and I will be equally brief. Today's hearing focuses on the role of technology as it relates to copyright policy in the digital age. Last week we heard from segments of the content industry about the intersection between content and technology in this rapidly changing environment. At last week's hearing, as it was illustrated at last week's hearing, the reality that technology and content industries are completely separate and distinct with no overlapping goals and interest presents a false dichotomy. To the contrary, marriage between technology and content, unlike probably at any other time in our past, is unmistakable and largely due to the advent of the Internet irreversible. And whether that marriage is forced or one of convenience, we all have a stake in making it work.¹²¹ So I look forward to hearing from the witnesses about how copyright law and policy intersects with their particular technological innovations, and I yield back and I'll submit the rest of my statement at some later point, Mr. Chairman.*

Mr. COBLE. I thank the gentleman. I see the lady and gentlemen on the panel. We have a distinguished panel today, and I will begin by swearing in our witnesses prior to introducing them. If you would please all rise.

[Witnesses sworn.]

Mr. COBLE. Let the record reflect that all the witnesses responded in the affirmative.

Each of the witnesses' written statement will be made a part of the record, and we will ask you all—I stand corrected. I have just been told the Chairman of the full Committee has arrived, and I would be remiss not to recognize him. So I am pleased to recognize the distinguished gentleman from Virginia, Mr. Goodlatte, for his opening statement.

Mr. GOODLATTE. Thank you, Mr. Chairman.

This morning the Subcommittee will hear from several companies from the technology sector and their role in innovation in America. Their innovation touches numerous areas of our society,

*The information referred to was not available at the time this hearing record was printed.

from how the blind access the printed word, how businesses connect with customers, and even how American students learn about science and technology in school.

Last week, the Subcommittee heard from those involved in the copyright sector. The copyright and technology sectors are two very important components of our economy that have a unique symbiotic relationship. They are both also responsible for significant amounts of American innovation that is the envy of the world.

Thanks to the Internet, innovation can come from many places and be distributed with equal ease. Sometimes innovation comes from an artist holding a digital brush and sometimes it now comes from a collective effort of interested Internet users who choose to fund a new product, a new business or a new social cause. As the Committee conducts its review of U.S. copyright laws, it is important to hear from the technology sector about the varying methods of innovation in America.

I thank the witnesses for coming today and look forward to hearing their testimony.

Mr. COBLE. I thank the gentleman. All statements from other members of the panel will be made a part of the record.

Our first witness today is Ms. Danae Ringelmann, Founder and Chief Customer Officer of Indiegogo. In her role, Ms. Ringelmann leads the company's Customer Happiness Division and Employer/Employee Culture and Value Initiative. She was listed as Fast Company's "Top 50 Women Innovators in Technology" in 2011. Prior to cofounding Indiegogo in 2007, Ms. Ringelmann was a securities analyst at Cowen & Company. She received her MBA from the Haas School of Business at University of California in Berkeley and her BA in humanities from the University of North Carolina, Chapel Hill.

Ms. Ringelmann, Mr. Watt and I will award you high marks for having made that last choice, and that will set you apart from your fellow panelists.

Our second witness is Mr. Jim Fruchterman, President and CEO of Benetech, a nonprofit tech company based in Palo Alto, California. He is a former rocket scientist, having created technological social enterprises to target underserved communities. Mr. Fruchterman, also cofounder of Calera Recognition Systems and RAFT, RAF Technology. Mr. Fruchterman received his MS in applied physics and BS and engineering from the California Technical Institute.

Our third witness is Mr. Nathan Seidle, Founder and CEO of SparkFun Electronics. In his position, he oversees the day-to-day operations at SparkFun that brings new technologies to the market. Mr. Seidle founded the company in 2003 while studying electrical engineering as an undergraduate at the University of Colorado at Boulder. SparkFun received many awards, including the "2nd Fastest Growing Company in Boulder" in 2008 and "Colorado Companies to Watch" in 2010.

Our fourth witness today is Mr. Rakesh Agrawal—I think I butchered the pronunciation of some of these names. I apologize for that—Founder and CEO SnapStream Media. SnapStream creates software that enables organizations like the Daily Show with Jon Stewart to record and search inside of TV shows. Mr. Rakesh is

also an executive at a specialty manufacturing company, Piping Technology & Products. He received his mechanical engineering and computer science degrees from Rice University.

Our fifth and final witness is Mr. Van Lindberg, Vice President of Intellectual Property at Rackspace, the Open Cloud Company. In his position, Mr. Lindberg oversees all aspects of the company's intellectual property and brand management portfolio. Prior to Rackspace, Mr. Lindberg served as General Counsel at Python Software Foundation and as Counsel for Intellectual Property of Haynes and Boone, LLP. He received his law degree and bachelor's degree from Brigham Young University.

Welcome to you-all. And Ms. Ringelmann, we will begin with you. And folks, we are delighted to have you with us today. We try to comply ourselves as well as you-all within the 5-minute rule. If you can sum up in on or about 5 minutes, we would be appreciative to that, and there will be a panel on the board where the red light changes to amber. The ice on which you are skating is getting thin. You will have 1 minute to wrap up prior to the red light being shown.

Ms. Ringelmann, if you will start off. Good to have you with us.

**TESTIMONY OF DANAE RINGELMANN, FOUNDER AND
CHIEF CUSTOMER OFFICER, INDIEGOGO**

Ms. RINGELMANN. Thank you, Congressman, and thank you Congresswoman—

Mr. COBLE. I think your mic's off.

Ms. RINGELMANN. My mic's off. Hello, everybody.

Good morning. Thank you for having me. Hi, my name is Danae Ringelmann. I am one of the founders of Indiegogo. We have the largest global crowdfunding platform in the world. I am excited to be here today because I speak as an entrepreneur whose technology-based platform is both more of an innovative solve in the world of finance. We are fixing finance by using technology, but it is also a way to unleash further innovation. So I will be speaking today about how technology is not just a result, often a result of innovation but also a means to further innovation as well.

Indiegogo is an example of both, and let me start by explaining what Indiegogo is, the problem we are solving, how we using technology to solve it, and why are open approaches particularly innovative.

So Indiegogo, as I mentioned, is the largest global crowdfunding platform in the world. We have over 100,000 campaigns that have launched on our platform since 2008. We are in every country of the world and in every industry. At any given time, we have 7,000 campaigns that are running and we are distributing millions of dollars every single week to entrepreneurs, artists, activists, community champions all across the world trying to bring their ideas to life.

The problem that we are solving can be explained by how my co-founders and I came together. Back in 2006, we came together out of a deep mutual frustration for how unfair, difficult, and inefficient fundraising was. Myself, I had grown up a child of two small business owners who had struggled for 30 years to grow their business because not once could they ever get an outside loan. I then

went into finance to understand how finance worked and realized that I was failing for the exact same reason that my parents were.

I started working with independent artists on the side trying to help them raise money, and I failed because I didn't know the right people. In a parallel life, my cofounders had also been struggling to raise money. Eric Schell, my first cofounder for theater companies in Chicago, and Slava Rubin, my other cofounder, his father had died when he was a young boy and he never really dealt with it. So, in his 20's, he decided to deal with it, and to do that, he was going to raise money for cancer research.

So we came together out of this frustration, and the culminating moment for me was when I was producing an Arthur Miller play about racial profiling, which was right after September 11th, and I had a challenge to stage a one-night event where I would bring an entire audience, get actors to donate their time, and get investors there. So at the end of the one-night event, the investors would be able to witness the entire experience and write a check to turn the production into a full blown production. Everything went perfect except that very last bit where they said that that was an incredible performance, we are not investing, sorry, good luck. And it was in that moment that I realized that people who wanted to bring the idea to life, which were the actors and the audience, didn't actually have the power to make it happen.

At the same time, when I was meeting with my cofounders, we realized that as things like eBay and YouTube, what they were doing with the Internet in leveraging the Internet in terms of democratizing their industries, was incredible. What we saw with eBay was that it was providing a way for people to buy and sell anything from anybody to anybody. We saw with YouTube, there was an ability for people to share their videos and watch whatever videos they wanted.

So, if you could buy or watch or share whatever you wanted, why couldn't you fund whatever you wanted. And so that was the impetus that brought us together and that is why we created Indiegogo. Indiegogo is the first online funding platform that is empowering people to fund what matters to them, whatever that might be.

Great examples of how it is working better as a solve for finance is two stories. One, Emmy's Organics. It is a bakery that got its start, they make gluten-free macaroons, and it had a huge opportunity to grow their business into a local—expand their business by distributing their products in a local grocery store. In order to do that, they needed \$15,000 to redo their packaging. They had just taken out a new small business loan just a year prior to that, and so when they went back to the bank to take out another loan to do it, they got rejected.

So rather than wait and hold tight, they said, they took the matters into their own hands and they ran an Indiegogo campaign and within 3 weeks raised the \$15,000 by offering macaroons to their customers and they got their product into the grocery store chain, and within a year they were selling in 40 States across America.

Another example is a product designer who had invented a light called the Gravity Light where 30 seconds of lifting creates 30 minutes of energy. He wanted to create a new solution to kerosene in the developing world which kills people, and it is very dangerous

and expensive. So what he did is he shopped at venture capitalists, and not one venture capitalist would call him back. All of them were too worried about the risk. Inherent in that, there wasn't a market for it. So what he did, rather than give up, he went on Indiegogo and he raised \$400,000 by offering light in exchange for contributions from people across the world. And guess who kept calling by the time his campaign was over? Those venture capitalists that originally wouldn't call him back. Clearly their minds had been changed because their Indiegogo campaign had showed that there was a market.

So, clearly Indiegogo is using technology as a way to solve a problem, which is the inefficiency of finance, and it is also a way to unleash further innovation as the Gravity Light and Emmy's Organics are great examples of that.

But the secret ingredient about Indiegogo's technology-based approach to finance and crowdfunding is not just the fact that it is technology based. It is actually inherent in the fact that we are open. And what I mean by that is we don't judge and we don't vet and this is actually something that makes us very unique. But the importance of this is the reason we are doing that is if we did vet and we did judge, we would just become another gatekeeper, we would just become another third-party friction in the process of raising money, which means we would be basically watering the roots of the problem we are trying to solve.

An example of the power of this open approach is that a couple in Florida really wanted to have a baby, but they couldn't conceive naturally. And because they couldn't afford IVF, they weren't going to be able to have a baby. Instead of giving up, they turned to Indiegogo, after they had been rejected by another funding platform, and on Indiegogo, within weeks, they raised the money and just last year the baby was born happy and healthy.

So, our open approach is actually what is far more revolutionary than just the use of technology because it was because we were open that this baby now exists.

I will close in saying that—it is time to close?

Mr. COBLE. Time to close.

Ms. RINGELMANN. All right. I will just close in saying that it is worth noting that technology doesn't have to be open, but if you want to create an open approach that is truly democratizing industries, it has to be technology based. And if you want to be—the reason for that is when you are open, you are open to people who potentially are using your platform in a way that it wasn't intended, and so through technology, you can build infrastructure like the trust and safety algorithms on the back end that we use in order to protect our platform and ensure that people are using it for the way that it was intended.

Happy to answer any more questions. Thank you.

Mr. COBLE. Thank you.

[The prepared statement of Ms. Ringelmann follows:]

U.S. Congressional Hearing:
"Innovation in America: Role of Technology"

Committee on the Judiciary's Subcommittee on Courts,
Intellectual Property, and the Internet

Statement of:
Danae Ringelmann, CFA
Founder & Chief Customer Officer, Indiegogo
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Submitted on July 31, 2013

Dear Congresswomen and Congressmen,

My name is Danae Ringelmann, and I'm one of the founders of Indiegogo - the largest global crowdfunding platform in the world. Thank you for inviting Indiegogo to be a part of the hearing today. I'm excited to share Indiegogo's perspective on the role technology plays in innovation, which I would define as the discovery, identification, development and application of new and better solutions for old and new problems.

As an entrepreneur who has dedicated the last 7 years of her life to utilizing technology to solve a problem faced by millions of other entrepreneurs across the world – inefficient access to financial capital – I hope my perspective will surface new thoughts for you on how:

- 1) technology-based solutions are often the *result* of innovation, and
- 2) technology-based systems are often the *means* for innovation as well.

Since, Indiegogo is an example of a technology that is both an innovative solution itself as well as a catalyst for innovation, I will provide background on Indiegogo, the problem we're solving, how we're using technology to solve it, and finally how we enable more innovative solutions to come to life across America and the world. I will close with some thoughts on a particular flavor of technology that I believe is the most robust driver of innovation, and leave you with a compliment and wish.

What is Indiegogo?

As mentioned above, Indiegogo is the largest global crowdfunding platform empowering people to raise money and fund what matters to them. We have hosted over 100,000 campaigns and distribute millions of dollars every week, globally. About 7,000 campaigns are active on Indiegogo at any given time. We are an international platform with campaign owners and contributors in nearly 190 countries. We welcome a diversity of campaigns spanning creative, cause-related and entrepreneurial projects. This gives campaign owners and contributors the chance to fund what they care about most, without restrictions.

What problem is Indiegogo solving?

My co-founders and I came together back in 2006 out of mutual frustration for how difficult, inefficient and unfair the traditional fundraising process was for small businesses, artists, causes and every day people engaged in the world who were wanting to bring new ideas to life. I quit my job in the financial industry after failing to help independent artists raise money and returned to business school to start a company that would democratize funding. While in school, I met Eric Schell and Slava Rubin who immediately joined forces with me out of similarly discouraging experiences – Slava for cancer research and Eric for theater. We realized that we all failed, not for lack of heart, hustle and interest from a community of fans,

supporters and future customers, but rather for lack of efficient access to third party investors with capital.

We recognized that thousands - if not millions - of ideas were going unborn every year because the people who wanted ideas to come to life – the creators and their communities – didn't have the mechanism to fund them, efficiently. The fundraising process, instead, was reliant on the creators gaining access to specific third party investors whose interests and goals may or may not have aligned and then convincing said investors that the creators' community of supporters, fans and customers was large and engaged. Such inefficiency in connecting with interested capital not only made fundraising difficult, but also quite unfair.

Further we noticed innovative technology-based platforms like eBay, YouTube and Wordpress were democratizing ecommerce, video, and writing. So we asked ourselves: if anyone can sell or buy anything from anyone, and anyone can create or watch video made by anyone, or anyone can write or read a blog written by anyone, *why couldn't anyone fund a business, project or cause initiated by anyone?*

How we're using technology to solve the inefficiency of finance and spur further innovation?

Based on our frustrating experiences and observations, my co-founders and I set out to launch an online platform that would put the funding power back into the hands of the creators and their communities, making finance efficient and fair once and for all. We launched www.Indiegogo.com in January 2008 to empower people to fund what matters to them – whatever that might be. Rather than rely on third party investors – or gatekeepers – to determine which ideas are brought to life and which ones aren't, Indiegogo has created a way for the world - together - to decide which ideas are born.

As an online funding platform, discovering ideas to fund and connecting with new funders, has never been more efficient. Neither geographic, social nor economic boundaries are barriers causing friction in the funding process any longer. Further, as an "open" online funding platform where there is no application process, nor waiting period associated with launching a campaign, individuals can start raising funds immediately, without delays or third party approvals. As a result, the quest to connect and align with a gatekeeper is no longer a needed step in the funding process.

The only thing in between someone with an idea and that idea happening is the person, their work ethic and the responsiveness of that idea's community. There are no gatekeepers on Indiegogo, not even Indiegogo itself.

The Power of Technology in Driving Innovation

Because of Indiegogo's technology platform, many entrepreneurs, artists and causes have been able to raise money efficiently and fairly after being locked out of the traditional financial system; i.e. when other financial solutions have failed them.



Emmy's Organics was a young gluten-free macaroon business that needed \$15,000 to update their packaging in order to get distribution in a local grocery retailer. The bank rejected the company's loan application. Rather than give up and forego an amazing growth opportunity, Samantha - the owner of Emmy's Organics - turned to Indiegogo and raised over \$15,000 in just a few weeks. The campaign offered macaroons as perks, and customers who wanted this business to succeed not only funded the campaign but leveraged Indiegogo's sharing tools to turn their friends into funders (and thus customers) too. Within a few months, Samantha's macaroons were in stores across the region, and within the year, Emmy's Organics was selling its macaroons in 40 states across America.



Gravity Light was an innovative early-stage device that generated light by lifting it up against gravity. The creator - Patrick - envisioned this product as a safer and cheaper solution to kerosene in the developing world. When the product was at proto-type stage, he wanted to raise venture capital to bring his product to market. However, no VC would call him back as the size of the light's potential market was uncertain. Rather than give up, Patrick turned to Indiegogo and raised \$400,000. The campaign offered early samples of the lights as perks. Not surprisingly, because of the funding traction by the end of the campaign, venture capitalists wouldn't stop calling Patrick. Clearly the Indiegogo campaign proved there was a market for the product.

Both examples show how Indiegogo's technology-based solution to fundraising is a better solve than the options available to both entrepreneurs before they discovered Indiegogo (banking loans and venture capital). Further, both show how Indiegogo's technology is enabling further innovation. Without Indiegogo, Gravity Light would've never been able to bring its innovative lighting technology to life, nor would Emmy's Organics have been able to meet the growing demand of gluten-free macaroon eaters across the country.

The Power of Open Technology in Driving Revolutionary Innovation

On the surface, one might think technology alone - in our case the 1's and 0's of our codebase - are the only necessary ingredients that both result in and enable further

innovation. True: without a dynamic, automatic and systematized product that connects people across the world in seconds, securely stores and organizes information and data better than any human-system, and moves money with a few clicks of a button, funding is now more efficient and accessible than before.

However, it's because Indiegogo's technology platform is fully "open" that Indiegogo is not just innovating, but revolutionizing finance. If we had an application process layered on top of our technology platform or if Indiegogo employees decided which projects could use our platform and which couldn't, our technology-based solution would only be marginally better at democratizing funding than the gatekeeper-based solutions mentioned above. How we're revolutionizing finance is by applying an open model to funding; meaning we don't vet ideas upfront. We don't decide who has the right to raise money and who doesn't. We don't judge. If we did, we'd simply be watering the very roots of the problem we're trying to solve.



For example, a couple recently invented the world's first Tricorder called the Scanadu. It's a Star Trek-like device known as a "doctor in your pocket" that was not allowed on certain funding platforms. They used Indiegogo because we didn't judge. As a result they broke Indiegogo's funding record at the time, raising over \$1.5 million – enough to do a first-run production of their innovative device that reads and tracks your body's vitals. Had Indiegogo not existed, this couple would still be working to raise the funds to bring their tricorder to life.



Another example of the revolutionary power of Indiegogo's open approach to technology-based funding, is a story about a couple who wanted to have a baby, couldn't conceive naturally, but couldn't afford IVF. Rejected by a different funding platform because their project didn't adhere to the guidelines, this couple came to Indiegogo. Again, we didn't judge. They got their campaign launched right away. As a result the couple raised the \$8,000 they needed in just a few weeks to pay for IVF. As a result, a healthy and happy baby boy was born last year. Had Indiegogo not been open, this human being wouldn't exist today.

Why Disruptive Open Models Need Technology

These examples show that technology alone is not enough to innovate in a meaningful way. To truly disrupt and revolutionize finance, we needed to eliminate all remnants of the old solutions causing the inefficiencies & problems – gatekeepers and application processes. We needed to create an open funding system. However, the key ingredient of a robust open-system is in fact technology.

Said a different way, to create an open funding platform that operates efficiently and safely, that system has to be technology-based. Why? When a platform is open to everyone, it's open to people who want to use the platform in ways it is not intended, e.g. fraudsters or criminals. One solve is to build walls (like applications) to keep ill-intentioned people out. However, that approach is akin to gatekeeping, and thus runs the risk of excluding well-intentioned people accidentally (i.e. not very innovative). The approach assumes people are guilty or not worthy until they prove otherwise.

Another solve is to create a system where people are innocent until proven guilty. Technology, once again, enables this approach and thus enables platforms like Indiegogo to mitigate potential bad activity without excluding good activity. For example, we've built Trust and Safety algorithms and protocols that keep our platform clean when ill-intentioned folks come knocking. Our technology-based system catches suspicious behavior faster than any human-powered system could.

Further, regulation like DMCA has been instrumental in enabling open technology-based platforms like Indiegogo to remain open, as DMCA protocols also assume people are innocent until proven guilty.

Going Meta

So it's the combination of technology and "open" models that truly drive revolutionary innovation. If you think of other game-changing technology platforms – eBay, YouTube, Wordpress, Twitter, Mozilla, even Khan Academy – all are open, and all are democratizing an industry because of it. Said another way, imagine if YouTube required video-makers to apply to upload video. Would YouTube be the video engine for the world that it is today? Probably not.

Stepping one meta level up, the technology enabling Indiegogo.com and these other online platforms to even exist and work is actually the internet. Interestingly, one key feature about the internet is that it's also open. Indiegogo didn't need to "apply" to use the internet to start its company. We just used it. The internet's open approach have us the equal opportunity to build an equal opportunity funding platform.

To Close

When you think about the role technology in innovation, I hope you think about how it's both a product of innovation as well as a means for further innovation. I hope you also think specifically about "open models and applications of technology" like open-source, crowdsourcing and Indiegogo's open approach to funding are not just innovating, but democratizing and thus revolutionizing industries.

There's nothing better to sum up the power of open-based technologies than a history-making campaign live on Indiegogo now. The Ubuntu is an open-source software technology using Indiegogo's open funding model to create an open-source phone. The operating system was built "by the people," and the phone will be funded by the people. The campaign is currently raising \$32 million in 30 days. It's raised nearly \$8 million in 9 days. If it reaches its goal, the Ubuntu team will develop and manufacture the phone. If it doesn't reach its goal, funds will be returned to funders and no phone will be made. In sum, the world – together – owns the fate of this phone. Whatever happens, this Ubuntu campaign is a testament to the idea that finance can actually be efficient, fair and powered by the people. Because of Indiegogo, it finally is. The world can now decide what matters to it and what doesn't. Let's see what the world decides about Ubuntu...

indiegogo browse learn create

Ubuntu Edge
The Ubuntu Edge is the next generation of personal computing: smartphone and desktop PC in one state-of-the-art device.

Campaign Home | Updates / 5 | Comments / 8881 | Funders / 16708 | Gallery / 16

Ubuntu Edge: introducing the hardware

\$7,666,961
Raised of \$32,000,000 Goal
21 days left
Fixed Funding campaign
CONTRIBUTE NOW ►

This campaign will only receive funds if at least \$32,000,000 is raised by Wed 21 Aug 11:59PM PT.

<http://www.indiegogo.com/projects/ubuntu-edge--39>

Mr. COBLE. Mr. Fruchterman.

**TESTIMONY OF JIM FRUCHTERMAN, CEO/FOUNDER,
BENETECH**

Mr. FRUCHTERMAN. Okay. Chairmen Goodlatte, Coble, Ranking Member Watt, Members of the Subcommittee, thank you for the opportunity today to talk about a subject that I am very passionate about, which is technology serving humanity.

I am Jim Fruchterman, President and CEO of Benetech, Silicon Valley's leading nonprofit tech company. Our goal is to see that technology gets used to social needs where the standard off-the-shelf technologies don't fit and where a narrow solution targeting a social need isn't likely to make enough money to attract a for-profit company.

Let me tell you a couple of examples of how we use technology for social good. We have been one of the leading providers of software for human rights groups. We make the Martus open source software for collecting and analyzing information about human rights abuses. Martus has strong security built in so that governments that repress their people have a harder time spying on the activists that are documenting violations.

At the beginning of this year, Benetech wrote the report on Syria with the first accurate numbers of how many people are being killed in that civil conflict. We have also worked with truth commissions and genocide trials. We are actually not a human rights group. We are the geeks that help human rights groups do their job better, more effectively, and more safely. We write software for environmental organizations, helping them manage their projects more efficiently, and we have Benetech Labs where we are always looking at new ideas. And right now we are looking at helping America's dairy farmers run their businesses more sustainably or helping local government deliver clean water more effectively.

Bookshare is our largest single project. It is the world's largest online library for people with print disabilities like blindness, dyslexia, and physical impairments that interfere with reading print. We had two breakthrough ideas when creating Bookshare. First, we reinvented the traditional library for the blind by using ebooks delivered digitally rather than human narration delivered through the Postal Service. Second, we crowd-sourced the content. Actually, our members with disabilities scan the books as volunteers and then put them in Bookshare so they could be made available legally to the rest of the community. These scanned text files, which are much like Word processor files or web pages, can be delivered electronically for almost no cost and be automatically turned into a form the reader can actually use. That includes high quality voice synthesis where the computer, the device reads the book aloud to the disabled person or creating large format print files or Braille, which can be delivered digitally or through a Braille embosser.

We relied on two copyright exceptions to make this innovative new nonprofit enterprise possible. The first, Section 121, known as the Chafee Amendment, and also Section 107, Fair Use. Section 121 lets nonprofits like Bookshare provide the books to people with qualified disabilities without asking permission or getting to have to pay royalty, and fair use has been important since the creation

of Bookshare and continues to be crucial as we look to the future, especially as we try to make to make STEM materials for accessible to students with disabilities.

The result, we've revolutionized the field of providing accessible material to disabled people. Today we serve more than a quarter million American students with funding from the U.S. Department of Education, Office of Special Education Programs. We deliver an accessible book to one of our users for one-fifteenth the cost of the traditional method of making these books. We are able to solve most of the problem for getting the people the books they need at a funding level that was half of what the Federal Government traditionally provided.

We currently have more than 200,000 books. A major driver of this is 200 publishers who give us their digital files at the same time they give them to Amazon and Apple, and this really makes our library grow fast.

As you make policy, please keep in mind the impacts on the communities that I care about, that we all should care about. Two specific issues I would like you to keep in mind. First, the majority of the students that we serve under Chafee are not blind. They are either dyslexic or have physical disabilities like the brain injuries that many of our returning veterans have suffered. We don't want to enlarge Chafee beyond serving the 1 or 2 percent most disabled, but please keep these people who aren't blind in mind if you revisit that.

Second, one of the ironic reasons that Bookshare exists is because technical protection measures keep our users from using commercial ebooks, so we would like you guys to keep that in mind, but there are many legal and socially beneficial applications that these BRM materials get in the way of.

So, our dream at Bookshare is to gradually move away from being the primary source of accessible materials for our disabled users. We are actively working with publishers and the content industry with our Born Accessible campaign. We are hoping to see that all content that they create and deliver digitally is accessible to everybody, not just people who don't have disabilities.

In conclusion, intellectual property laws at their best can encourage technological advances, reward creativity, and bring benefits to society. To make this possible, we must keep the balance in copyright. We need to defend fair use as a laboratory for creativity, we need safety net provisions like copyright exceptions to ensure that people with disabilities don't suffer unduly because their accessibility needs get overlooked once again.

We have a great track record as a tech industry with new technology of figuring out how to make money for stakeholders while helping consumers and society, and we can continue this trend. With the leverage of technology and the foundation provided by well thought out intellectual property laws and a lot of common sense, we can inspire economic growth and social good.

Thank you.

Mr. COBLE. Thank you, Mr. Fruchterman.

[The prepared statement of Mr. Fruchterman follows:]

Prepared Statement of Jim Fruchterman, CEO/Founder, Benetech

INTRODUCTION

Committee Chairman Goodlatte, Subcommittee Chairman Coble and Ranking Member Watt, and members of the subcommittee, thank you for the opportunity to speak to you today.

I am Jim Fruchterman, CEO and Founder of Benetech, one of Silicon Valley's leading technology nonprofits. We operate just like a regular for-profit software company, with software developers, product managers and user support professionals, but our focus is on addressing important social problems where the market today is failing. As someone who was involved in the founding of seven for-profit high tech companies in Silicon Valley (and only five of them failed!), I understand well how much financial return there needs to be in order for a new enterprise to garner venture capital investment. In the social sector, there are so many opportunities to apply technology for good that the private sector traditionally hasn't, or won't, pursue—usually because they aren't quite profitable enough. But, we at Benetech believe that technology and innovation for good should still be pursued. So much of the nonprofit sector is about handling information, and information technology excels at improving the handling of information and reducing costs. Society desperately needs technology applied to these issues, even if they only break even financially.

Benetech is not a single-issue organization: our goal is to see that the best technology gets applied to social needs where the standard off-the-shelf technologies aren't good enough. We don't need a word processor designed for human rights groups, or a spreadsheet made for schools. However, there is usually a software need in every field of endeavor that's unique to that field. That's the market failure gap we explore.

We don't want to deliver the same solution in perpetuity. When we start a new project, we always devise at least three successful exits within five to ten years. If somebody else solves the problem well, there's no need for us to duplicate their work, even if we might be slightly better.

Let me give you some examples of how we use innovative technology for social good. Benetech has been one of the leading providers of software for the human rights movement. We make the Martus open source software for collecting and analyzing information about human rights abuses. Martus has strong security built in, making it difficult for repressive governments to spy on activists documenting violations. We've just received major funding from the Department of State to scale up the mobile version of Martus to offer the same kind of security on smartphones.

We also work with scientists to get the numbers right in large-scale human rights conflicts. At the beginning of this year, the first accurate numbers started coming out on how many people were dying in the Syrian civil conflict: that was a report written by Benetech. Benetech also worked with truth commissions on getting their numbers right, and helped develop key testimony in the genocide trial of General Rios Montt in Guatemala. We're not a human rights group, we're the geeks that help human rights groups do their work better and more securely.

We also developed the Miradi project management software for conservation projects. Imagine business project management 101 wrapped in terms that a field biologist is comfortable with, designed with the best practices of the field in mind.

We have a Benetech Labs, where we engage in conversations with potential partners to develop new tech solutions. This month, we're actively exploring writing software to help American dairy farmers manage their sustainability commitments to their customers, the big food companies. We're also in Latin America talking about helping the people who run community water systems about how to get clean water to more people more effectively. Many of these Labs ideas won't turn into full scale projects, but many of them will. We get asked to get involved in easily a hundred new projects a year. I strongly believe that the need is there for more Benetechs, in order to ensure that more of society benefits from the incredibly effective engine of technology creation we have in Silicon Valley and around the United States in countless communities.

The Benetech team comes out of the high tech industry. Many of our senior staff members have been entrepreneurs and founders of regular for-profit high tech companies. We build our work on strong foundations laid down by other people and companies, whether it's the open source ecosystem of the Internet, or proprietary software or content. We don't create solutions from scratch: our innovation is adapting existing raw technology to meet the needs of the users in the social sector. We call this building the last "social mile." We depend on an intellectual property system that works and is friendly to innovation. Concepts like fair use, open source

and open content make our work much easier, since they reduce the transaction costs for less lucrative uses of intellectual property. And, we frequently depend on the good will of companies and rights holders to provide us with free or inexpensive access to the assets that they control.

We need balanced intellectual property regimes that allow for socially beneficial applications, while allowing industry to make money. Silicon Valley has gotten very good at figuring out ways to make money while giving away the core product: these approaches have exciting analogs in the social sector.

BOOKSHARE

Our Bookshare initiative, which is the world's largest online library for people with disabilities like blindness and dyslexia that interfere with reading print, is a great example of this innovation ecosystem in action. About ten years ago, we had an idea for blowing up the traditional library for the blind, and recreating it using the then-emerging technology of ebooks and crowd-sourcing. We began with our members scanning books for each other, and many of our books still come from our volunteers. We also used digital text files (much like a web page) that we can deliver electronically and that can use high quality voice synthesis, large format print, or digital Braille, depending on the needs of the reader.

The legal underpinning of our work is of course the purview of this committee. We relied on two copyright exceptions to make this new nonprofit enterprise feasible: Section 121, also known as the Chafee Amendment in honor of then-Senator Chafee, who introduced this exception in 1996, and Section 107, fair use. Section 121 allows authorized nonprofit entities, such as Bookshare, whose primary mission is to serve people with disabilities, to create accessible versions of copyrighted books without the need to request permission from publishers and then distribute them exclusively to people with qualifying disabilities. Section 107, the fair use exception, has been important since the founding of Bookshare, and has continued relevance as we look to the future of our work.

Rather than springing this idea on the publishers and authors as a surprise when we launched Bookshare, we reached out to them first. A year in advance of our launch, I addressed the Copyright Committee of the Association of American Publishers. We made commitments to upholding the social bargain implicit in the Chafee Amendment: help people with disabilities, but don't interfere with the normal commercial process of selling books. We committed to not enlarging the franchise of who qualified for Bookshare, by using the same criteria used by Learning Ally (then Recording for the Blind & Dyslexic) to ensure that we provided accessible books only to people with bona fide disabilities that truly interfered with reading.

We next brought the Science Fiction and Fantasy Writers of America on board by committing to be against illegal copying of books and to authors' ability to review the quality of their works on Bookshare. By smoothing the way with publishers and authors, we had the space to launch a completely new approach to solving an important social issue: ensuring that people with disabilities have access to the books they need for education, employment and full inclusion in society.

The result? Bookshare revolutionized the field of accessible educational materials as we rapidly became the nation's (and the world's) largest online library dedicated to helping people with print disabilities. Today, we serve more than a quarter million American student members through funding from the U.S. Department of Education, Office of Special Education Programs. American students get this access to educational material for free, thanks to this funding. And, it's far, far cheaper to scan a given book once, proofread it, and then have it be accessible to all Americans with qualifying disabilities. This is in stark contrast to the status quo before Bookshare, where only a tiny fraction of the needed books were available in accessible form, and often the same book was painstakingly recreated over and over again by different educators at different schools, by parents and by students themselves.

Schools are legally required under Section 504 of the Rehabilitation Act and the Individuals with Disabilities Education Act (IDEA) to provide these students with accessible educational materials. These students are almost always receiving special education services of some kind. While tens of thousands of our members are blind or visually impaired, the majority of our members are dyslexic. We also serve people who are unable to interact effectively with printed books because of a physical disability, such as cerebral palsy, a spinal cord injury or traumatic brain injury. Returning veterans with disabilities that diminish their capacity to read print is a key population that we are actively working to support. We want to make sure they still have the opportunity to pursue higher educational opportunities.

We currently have more than 200,000 books in the ever-increasing Bookshare library. A major driver behind this accomplishment and our ability to deliver a book at $\frac{1}{15}$ of the cost of the traditional method of creating accessible books was the development of an eco-system of socially responsible publishers who have given us direct digital versions of their books. Over half of the books in our collection have been provided directly to Bookshare by publishers voluntarily in high quality digital formats. It's an outstanding act of corporate social responsibility. The Chafee Amendment terms provided a floor set of provisions that made these negotiations feasible: it is an indispensable safety net for accessibility.

Having the most in-demand books and textbooks solves only half the challenge. We also have an entire array of assistive technology tools for turning our ebooks into something our members can effectively perceive. We want students to have equal access to this content, in their preferred mode for reading. There are probably over fifty different products that serve our students, thanks to an open interface we provide to any maker of assistive software or hardware. Bookshare itself provides free software on PCs and Macs, as well as an open source reader for Android phones and tablets. One of our users who is logged into our website can start reading any book immediately through their web browser. There are a couple of best-selling applications for Apple's iPhones and iPads: one we created and one that an individual programmer developed that's terrific. For students whose families can't afford a PC or smartphone, it's possible to download our books as MP3 audio files, since just about every teenager has an inexpensive MP3 player. Plus, we support dozens of other products like Braille displays, low vision devices and dedicated players for people who are blind or dyslexic.

COPYRIGHT AND BOOKSHARE

The Section 121 exception has been crucial for us. It made Bookshare possible and continues to guide our work. It was written broadly enough that we could innovate and help solve the social problem we set out to solve. That flexibility allowed for creativity, which wouldn't have been there if the legislation had specified the four-track audio tape technology that was in use at the time of Chafee Amendment in 1996 (and is only now being phased out).

We also extensively leverage fair use, Section 107. It allowed for the creation of the scanned copies that were originally used to create Bookshare. We had a member who is blind who contributed 3,000 scanned books to us at the start. It wasn't legal for him to distribute those books to other people who are blind, but he was able to have his own library created by his personal efforts and those of his family, and that is a textbook case of fair use.

We are also creating new solutions to new problems. The great thing about ebooks is that the text at the core is increasingly accessible. However, more and more important content in these books are now delivered as images and graphics, not text. We've been operating an R&D center, called the DIAGRAM (Digital Image and Graphic Resources for Accessible Materials) Center, which brings the accessibility, special education and textbook publishing industry together around the challenge of making images accessible. We want to lower the cost of making an image accessible by at least a factor of ten. This is especially critical for science and math books, for STEM textbooks. In a current digital math book, all of the equations are delivered as images of formulas, not as text. We have to turn these inaccessible images into machine-readable information to ensure that students have equal access to the careers of the future. And, it's almost certain that these efforts to make image accessibility far less costly will be based on the provisions of fair use.

CHALLENGES AND OPPORTUNITIES

I am extremely optimistic about the opportunity to solve problems like accessibility through innovative applications of technology. However, I don't want to understate the challenges we face. We have a major textbook publisher that has regularly threatened us, our peer libraries and the assistive technology industry to keep students with dyslexia from being served under the Chafee Amendment. These threats have a chilling effect on accessibility, as some states make restrictive policies in reaction, denying many thousands of severely dyslexic students access to the books they need.

We have the ironic effects of digital rights management locking out the most likely customers who most need ebooks, people with disabilities. We're more than a decade into ebooks, and technological protection measures (TPMs) still stop people who are blind from using ebooks they purchase. The TPMs are too rigid to know the difference between a person wanting to make an illegal copy of an ebook, or a person wanting to access that book via text-to-speech or Braille. When the Kindle was re-

leased with a rudimentary ability to read books aloud, questions of rights led to many titles being soundproofed, where the speech was silenced. The transition of ebooks is also a giant challenge to libraries, with some publishers declining to provide electronic versions of their books to libraries. The traditional role of libraries as a resource for the person too poor to purchase books, or who wishes to look briefly at ten books necessary for research purposes is increasingly under threat.

And, the accessibility of new content and technology is an afterthought at best. While the past few years have seen the explosion of online courseware and new educational technologies, the opportunities for the inclusion of people with disabilities inherent in these innovations has been ignored. Even with laws mandating the accessibility of content and technology in the field of education and more broadly, we continually experience those “oops” moments. Oh, we forgot about students with disabilities in our product aimed at K–12 schools or students. Oops, we just released the Kindle Fire and forgot about accessibility again. These new digital books and products are going to be far more valuable than print books, with their ability to allow for interactivity with the content and with other users—people with disabilities must not be left behind once again.

This casual attitude towards accessibility is a real problem, because the true solution to the problem of accessibility is universal design. Most of the features in digital books that are absolute requirements for people with disabilities are amazingly valuable to everybody else. We believe that as content is born digital, it should simultaneously be born accessible. Because we’ve done such a good job under the exception of making books available to our users as a specialized library, the big fight now is for people with disabilities to be able to buy accessible books online. They should be the same books that everybody else buys electronically. Bookshare’s long term goal is to go from being the primary source of ebooks for our users with disabilities, to being like a regular library, so that our users enjoy the same privileges as their non-disabled peers. Most users would rather simply buy the same books through the same channels as everybody else and have them work for everybody. As part of our Born Accessible campaign, we’ve begun the process of creating new tools and processes to allow publishers and others in the authoring stream to include accessibility from the inception point of their content. We’re getting great responses from publishers, especially when they realize we truly want them to succeed in selling more books to disadvantaged communities.

However, we need safety net provisions like fair use and the Chafee Amendment to ensure that people with disabilities don’t suffer unduly because their needs get overlooked yet again.

THE MARRAKESH TREATY

The United States often leads the way in so many technology and policy areas. One great example was the Marrakesh Treaty to Facilitate Access to Published Works for Persons who are Blind, Visually Impaired, or otherwise Print Disabled that just concluded in June. It makes domestic copyright exceptions modeled after the Chafee Amendment a global norm for signatory countries. Plus, it eases import and export of accessible copies by organizations such as Bookshare. The Treaty should help Americans with disabilities access far more diverse content in English and other languages, reduce the amount of duplicative work being done in separate countries, and, most dramatically, greatly improve access for people with disabilities in developing countries that have not had a legal structure to deliver accessible materials until now.

I want to acknowledge the favorable role played by the United States delegation, thanks to reflecting the balance between rights holders and consumers. We were glad to be able to work with our partners in industry in striking a balanced treaty that upholds that same social bargain we honored in setting up Bookshare: helping people with disabilities without making a significant impact on the commercial markets for books.

SPECIFIC LEGISLATIVE PROPOSALS

The Chafee Amendment

We think that Chafee works very well. Its main defects are its reliance on the 1931 Act for a definition of disability, and its approach to people with severe dyslexia, which is incredibly out of date. Even though Learning Ally (formerly Recording for the Blind and Dyslexic) was at the table when Chafee was negotiated, the antiquated “organic dysfunction” language around reading disabilities is a concept that appears nowhere else and needs to be updated. The Treaty uses a more modern approach to disability, which is the functional approach pioneered in the Americans with Disability Act. Because balance is important, we don’t think the copyright ex-

ception should be enlarged in terms of serving more people. We think it just needs to be clarified to reflect the status quo of Chafee as it is operated by the two largest libraries serving the educational needs of students with disabilities. The 2011 Report of the Advisory Commission on Accessible Instructional Materials in Postsecondary Education for Students with Disabilities recommended that Chafee should remain narrow, effectively serving 1–2% of all students (note: I served on this Commission).

The Digital Millennium Copyright Act

I touched on the irony of digital rights management locking out the most likely customers for ebooks. As an authorized entity, Benetech has closely followed the Section 1201 proceedings under the Digital Millennium Copyright Act. The most recent determination by the Librarian of Congress allows an authorized entity to “unlock” ebooks for the benefit of people with disabilities. While we’re likely to conduct a pilot on a limited number of books, but this is not the way to solve this problem. We need to get rid of dumb TPMs that lock out customers with disabilities.

But, it highlights how much activity that has traditionally been legal is hard to do in a world of Digital Rights Management, Technological Protection Measures and licenses that forbid you from doing things that would otherwise be allowed in a printed book world. Of course, the recent cellphone unlocking controversy is just another one of these issues. We hope that Congress would make circumvention of DRM for legitimate purposes, not related to the making of illegal copies, more clearly legal.

CONCLUSIONS

Intellectual property laws, at their best, can encourage technological advances, reward creativity and bring benefits to society. Practical and creative innovators, like Benetech, need space to operate to ensure those benefits reach those people who are often most in need of new solutions, but are often least able to afford them. And new technology and new operational models are needed to do far more good with the same or fewer resources.

To make this possible, we must keep the balance in copyright. We need to defend fair use as a laboratory for creativity. And we can’t use moral panics and wild claims of economic damages to constrain innovation in advance. We have a good track record of figuring out how to make money for stakeholders while helping consumers and society, and we can continue this trend. With the leverage of technology, and the foundation provided by well thought out intellectual property laws—and a lot of common sense—we can inspire economic growth AND social good.

Mr. COBLE. Mr. Seidle.

**TESTIMONY OF NATHAN SEIDLE, PRESIDENT AND
CHIEF EXECUTIVE OFFICER, SPARKFUN ELECTRONICS**

Mr. SEIDLE. Chairman Goodlatte, Chairman Coble and Ranking Member Watt, and the Members of the Subcommittee, thank you for inviting me to speak on the role of innovation and technology today. I am the Founder and CEO of SparkFun Electronics, an e-commerce company that sells educational kits and building blocks to the people that invent and prototype new electronic products. I started SparkFun 10 years ago in college, and today SparkFun employs 145 people with revenues of \$28 million. We build 70,000 electronic components a month at our facility in Boulder, Colorado. Our customers range from the R&D labs of Fortune 500 companies to the hundreds of thousands of do-it-yourselfers, makers, and crafters. They are responsible for many innovative new businesses and products. I’m also on the board of the Open Source Hardware Association, whose purpose is to educate the general public about Open Source hardware.

I am here to demonstrate that innovation is not dependent on intellectual property. We manufacture over 450 products all freely available to copy, remix, and sell. Rather than spend millions of

dollars to secure and enforce a patent, we decided to invest that money back into new products. We have released over 700 unique products over the past decade without patents or intellectual property. We have found that we have about 12 weeks before our competitors copy and sell our products on the Internet.

Today, we survive by constantly innovating. We are too busy to wait for the U.S. Patent and Trade Office to approve patent applications. The pace of the patent system makes obtaining a patent irrelevant in our technological company where the product is measured in weeks, not years.

I don't need a patent to make a profit, and in fact, the creation of a patent and the enforcement of a patent are merely distractions to innovation. Thanks to this focus, we have posted record profits for the past 10 years. Attempting to stop pirates is a waste of time. Show me an anti-piracy law or technology and I will show you a dozen 15-year-old girls and boys who can crack it. Provide better support and better quality at the best price, that is how you sell a product. That is not a new business model. This is how business has been done for thousands of years. There is no need for us to waste time, energy, and money suing infringers or pirates. Our time is better spent innovating.

Through the power of the Internet, half of SparkFun's revenues come from international sources. Now, imagine what it is like to enforce intellectual property protection in 100-plus countries. It is laughable for a company my size. Instead of enforcement, we concentrate on competing. I brought today an example. We have released a product called the Fio. This is a small little electronic device that we sell all over the world. We released the design file so that anyone could take our design, learn from it, and produce their own version.

A few months after we released this product, we discovered a company in China producing a very similar copy. In fact, they improved our design, making it easier to use and cheaper to produce. Rather than crying foul, we leveraged all of their improvements and released our own new version that incorporated all their improvements. Today the company in China no longer produces the Fio. Their price was competitive, but customers came to SparkFun because of our shorter shipping times, better features, and technical support. In the Internet age, innovation moves faster than the shield of intellectual property.

The open source hardware model also has huge benefits on the classroom and STEM initiatives. It allows more students to have access to low cost, widely available educational products. With these tools we can teach engineering students in every corner of this country. As manufacturing continues to move to other countries, we need the educational backbone to produce engineers here in America.

The most direct route to fixing the gap is to collaborate through open sharing. It will be the absence of IP that will make these initiatives successful.

As a business owner, the worst thing Congress can do is to allow monopolies and protectionism to interfere with market forces. Intellectual property and copyright are important features to the economy, to the fabric of the economy, but they are not the only option.

In the future, more companies and innovators will be considering open source hardware and how it benefits their business. To enhance innovation, I encourage Congress to consider providing the following options.

First, protect small companies like mine from being bullied through litigation. There are too many truly innovative companies that are shying away from doing amazing work because they fear doing so would put their personal assets at risk. And second, alter the number of years that protection—alter the number of years of protection that patents grant to a timeline that better reflects the pace at which technology is produced today. Rather than the protection of a monopoly of 20 years, shorten it to 5 years so that further innovation can be done once the technology is reaching the end of its lifespan. These two changes will greatly increase the incentive to innovate within the U.S. borders.

Thank you for your time.

Mr. COBLE. Thank you, Mr. Seidle. You beat the red light.

Mr. SEIDLE. Thank you very much.

Mr. COBLE. A little bit after you concluded. Thank you, sir.

[The prepared statement of Mr. Seidle follows:]



Testimony of Nathan Seidle

Founder and Chief Executive Officer, SparkFun Electronics

Committee on the Judiciary

Subcommittee on Courts, Intellectual Property and the Internet

U.S. House of Representatives

"Innovation in America: The Role of Technology"

August 1, 2013

Testimony by Nathan Seidle, SparkFun Electronics
Innovation in America: The Role of Technology
Subcommittee on Courts, Intellectual Property, and the Internet
August 1, 2013

Chairman Coble, Ranking Member Watt, and members of the Subcommittee, thank you for inviting me to speak on the role of technology and innovation.

I am the founder and CEO of SparkFun Electronics. SparkFun is an e-commerce company that sells educational kits and building blocks that enable people to invent and prototype new electronic products. I started SparkFun ten years ago in college. Today SparkFun employs 145 people (has 41 dogs) and manufactures over 70,000 electronic components a month at our facility in Colorado. We are a privately held company that has not taken on venture capital. Last year we had revenues of \$28 million. We write tutorials and provide example designs so that our customers can learn how to build complex devices themselves, often without any training in engineering. In 2013 alone SparkFun has taught over 500 science, technology, engineering and math (STEM) educators on modern design tools and curriculum. SparkFun devices can be found in the R&D labs of large corporations including brand names such as Intel, Google, Microsoft and Apple. Our products are in high demand because we evolve with technology as it's released. Our customers are responsible for many innovative new businesses and products that are often based on our designs. To serve the community further, I am a board member on the Open Source Hardware Association (OSHWa) whose purpose is to educate individuals and the general public about Open Source Hardware as well as organize the movement. I also sit on the engineering advisory council of the University of Colorado.

I am here to demonstrate that innovation is not dependant on intellectual property (IP). We manufacture over 450 open source hardware products, all freely available to copy, remix, and sell as long as the product remains open source. Products released with these

rights are called Open Source Hardware¹. Rather than spend thousands of dollars to secure a patent, or the hundreds of thousands of dollars to enforce a patent, we decided to invest that money back into new products. We have released over 700 unique products over the past decade without patents or IP. We have about 12 weeks before other companies (domestic and international) copy our product and post it for sale on Ebay, Amazon, and Taobao (the Chinese market that is bigger than Ebay and Amazon combined). Many companies would find this threatening and seek legal recourse. We do the opposite and use this pressure to focus our efforts on innovation. Because we know our products will be copied we focus on creating the next new feature, the next major release, the next big thing. We encourage people to copy or “pirate” our products because it leads to shockingly fast innovation.

We are too busy innovating to wait for the USPTO to approve patent applications. The pace of the patent system makes obtaining a patent irrelevant in our technology company where the life of a product is measured in weeks, not years. The cost of filing a patent easily exceeds what a small business can afford. This system no longer helps my small business, it just gets in the way. I don't need a patent to make a profit and, in fact, the creation and enforcement of a patent actually detract us from focusing on innovating. Thankfully, the basics of capitalism are still in play; as long as we can deliver a better product, faster, with better support for the best price, we win. We have posted record profits for the past 10 years.

Attempting to stop pirates is a waste of time. Show me an anti-piracy law or technology and I'll show you a dozen 15 year-old girls and boys who can crack it. The resources spent stopping pirates comes at the expense of innovation and improving the business practices that actually serve the customers and industry. The most efficient way to get reimbursed for creative work is to make it easy to purchase and consume that content. How do you get the market to buy your product or service? Provide better support, better quality, better price,

¹ Open Source Hardware Definition: <http://www.oshwa.org/definition/>

and better availability. If you show the consumer that you are a better company with which to do business, they will shop with you. This is not a new business model. This is how business has been done for thousands of years. There is no need to waste time, energy, money and resources suing infringers or pirates; our time is better spent innovating.

Through the power of the Internet, SparkFun has 220 distributors in over 100 countries. Half our revenue comes from international sales - this is what a small, modern global company looks like. However, trying to enforce IP protection in 100+ countries is laughable for a company my size. Here's an example of what we experience daily. We released a product called the *Fio*. This small board enables users to wirelessly connect sensors to the Internet. We released the design files so that anyone could take our design, learn from it, and produce their own version. After a few months we discovered a company in China producing a very similar copy of our design. In fact, they improved part of the circuit making the product easier to use and cheaper to produce. They uploaded their design files to the Internet in line with the viral nature of open source hardware. Rather than crying foul, we leveraged all the improvements they had made and released a new version of our own that incorporated their features and some additional features that made the product easier to use. Today the company in China no longer produces the *Fio*. Their price was competitive but customers came to SparkFun because of our shorter shipping times, better features, and technical support in US time zones. In the Internet age, businesses must become agile. Innovation moves faster than the shield of IP protection.

We love sharing and teaching. STEM is a major pillar at SparkFun. SparkFun started our department of education in 2010 in order to increase the role of electronics and technology in the classroom. We see our role in the STEM world not as leaders but as foundation builders. SparkFun creates as many examples, tutorials, videos, and curricula as possible. We release all of that content with a Creative Commons license² that allows anyone to remix, share and even sell our materials. This openness and freedom is crucial; by offering

² Attribution-ShareAlike 3.0 United States <http://creativecommons.org/licenses/by-sa/3.0/us/>

open source hardware and documentation, educators can take our curricula and materials and remix them to fit their particular needs.

Education will always be challenged to find sufficient economic support. Open source hardware provides affordability and accessibility to the classroom. Bringing open hardware/software into the school system allows more students to have access to these tools. Scratch and the PicoBoard are good examples of tools that are quickly leveling the playing field. Scratch is a free, open source, educational programming language that visually teaches students using colorful blocks to control characters on the screen. Originally developed by the MIT Media Labs, Scratch has become a very popular tool used by over 1.3 million students³ worldwide and over 3 million projects⁴ shared between students. PicoBoard is an educational tool that attaches to a computer and extends Scratch to the physical world. Students plug switches and sensors into the PicoBoard and use them to control their Scratch programs. SparkFun collaborated with MIT to create a new, open source version of PicoBoard that is easier to use, easier to build and uses lower cost components. As the PicoBoard is open source hardware any student, teacher or manufacturer can build the board. With low cost educational products such as PicoBoard and the programming language Scratch we can teach students in every corner of this country about programming and engineering. STEM education and open source are all catalysts to a brighter technological future for the United States of America. As manufacturing continues to move to other countries, we need the educational backbone to produce engineers here in America. The most direct route to fixing the gap is to collaborate through open sharing. It will be the *absence* of IP that will make these STEM initiatives successful.

As a business owner, the worst thing Congress can do is to allow monopolies and protectionism to interfere with market forces. For the economy to be healthy we need businesses innovating and competing. America is all about options. Businesses should

³ [http://en.wikipedia.org/wiki/Scratch_\(programming_language\)](http://en.wikipedia.org/wiki/Scratch_(programming_language))

⁴ <http://scratch.mit.edu/>

have multiple options as well, including IP. Intellectual property and copyright are important to the fabric of the economy but they are not the only option. In the future more companies and innovators will consider open source hardware and how it benefits their business. To enhance innovation I encourage Congress to consider providing the following options to future generations:

Recommendation #1: Provide an economic incentive for proprietors or shareholders of a company for each product that is proactively released open source. The benefit to all of society and the litigation burden that is removed from the economy will outweigh the cost.

Recommendation #2: Protect small companies from being bullied through litigation. There are too many small, innovative companies that are shying away from doing amazing work because they fear doing so will put their personal assets at risk.

Recommendation #3: Alter the years of protection patents give to a timeline that better reflects the pace at which technology is produced today. Rather than the protection of a monopoly of 20 years, shorten it to 5 years so that further innovation can be done once the technology is reaching the end of its lifespan.

Thank you for your time. If you have any further questions please do not hesitate to contact me at nathan@sparkfun.com

Mr. COBLE. Mr. Agrawal, good to have you with us, sir.

**TESTIMONY OF RAKESH AGRAWAL, FOUNDER AND CEO,
SNAPSTREAM MEDIA, INC.**

Mr. AGRAWAL. Thank you. Thank you for having me here today. My name is Rakesh Agrawal, and I am the Founder and CEO of SnapStream. At SnapStream, we make television search software. We make it so organizations like the Daily Show can record lots of television and then search inside those TV shows.

As some background, I am a Texan. I have lived in Houston all my life, except for two short stints, one here in D.C., one in New Delhi, India, and I founded SnapStream with a friend of mine after I graduated from Rice University. We employ 27 talented individuals, 25 at our headquarters in Houston and one in Austin and one in Ohio.

Let me start by explaining what SnapStream is and how it works. We are a cross between a DVR and a search engine. The SnapStream TV search appliance is a physical box that our customers buy and they install at their premises. And they use it to record television, up to 10 TV shows at a time on a single SnapStream TV search appliance, and then we index all those recordings and make them searchable in realtime. Search results are a lot of like what you would see from a web search engine, except they are TV search results. Each result is a TV show, the name of the show, the air date of the show, and the exact time where the mention occurred, and then there is an excerpt of the transcript with the matching words highlighted, and once you have found what you are looking for, you can create a clip and share that clip as a link, as an attachment, you can download the clip into a video editor, et cetera. It is not unlike how we are able to copy and paste text from news articles online or share a link to a news article online with someone. SnapStream simply lets you do those things with traditional television.

Our customers not only save time but they are able to accomplish creative feats that weren't possible before. I want to play a short TV clip for you-all now from one of our customers, The Soup on E! Entertainment.

Looks like it is playing in slow motion. Should we abort? It is nothing like seeing the clip itself, but I will describe it to you. It is a clip from a TV show called The Soup where they summarize what's been happening on television, and in this particular week, Twitter had experienced one of its big growth spurts. Oprah had joined Twitter, so there were a surge of mentions of Twitter, and what they were able to do with SnapStream was pull out every place where the word "Twitter" or "Tweet" was mentioned on TV and put that together in a 1-minute montage of probably 20 or 30 mentions of Twitter and the word Tweet to get across the point that everyone in the media was talking about Twitter that week. It was a fun clip, and it shows the kind of creative things that people can do with our TV search technology.

Our search technology is used pretty broadly. We have customers like the Daily Show and the Colbert Report. Another creative use of our technology is local TV stations use us for competitive intelligence. They will track the words "breaking news" on their com-

petitors' stations, and then they are notified immediately by email when those mentions show up on television. We are also used quite a bit here in Washington, D.C., possibly by some of you-all's offices. Our customers here include the White House, the Senate, the RNC, DNC, and different media watchdog organizations. State, county, and city governments use SnapStream like Mayor Bloomberg's office in New York and Mayor Annise Parker's office in Houston.

From the standpoint of copyright, SnapStream is no different than a VCR or a DVR. Our customers make recordings at their premises on hardware that they purchase from us. Being able to make recordings of television and fair use are both vital to our business and to our customers. Without fair use and the ability to make recordings, it would not be possible for governmental agencies to monitor television and quickly and efficiently respond to TV coverage, and without fair use and the ability to make recordings, the comedy programs like the Daily Show and in many cases the public awareness that they create would not be possible.

SnapStream's TV search technology brings the power of search and sharing, things that are a standard part of "new media to the old media" of broadcast television, and that is really the root of our product's innovation and the reason customers buy our product.

Consumer media consumption behavior has changed. SnapStream allows organizations to use the power of searching, clipping, and sharing with traditional television. Thank you.

Mr. COBLE. Thank you, sir.

Mr. KEELEY. They may be able to do it?

Mr. COBLE. Pardon?

Mr. Keeley. They may be able to do it now. I don't know.

Mr. COBLE. You still working with the——

VIDEO TECHNICIAN. On now.

Mr. COBLE. Okay.

Mr. KEELEY. Go ahead and watch it. We will watch it. You can go ahead and ask him—you can ask him to run it.

Mr. AGRAWAL. We going to play the clip?

[Video clip played.]

Mr. COBLE. Thank you.

[The prepared statement of Mr. Agrawal follows:]

Committee on the Judiciary
US House of Representatives

Sub-committee on Courts, the Internet and Intellectual Property
"Hearing on Innovation in America: The Role of Technology"

August 1, 2013

Prepared Statement Of

Rakesh Agrawal
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My name is Rakesh Agrawal. I'm the founder and CEO of SnapStream. At SnapStream, we make television search software -- we enable organizations to record LOTS of television and then search inside those TV shows. As one example, SnapStream's TV search is how the Daily Show with Jon Stewart finds their TV clips. More on that in a moment.

As some background, I'm a Texan -- I've lived in Houston all my life, except for short stints here in Washington DC and New Delhi, India. I founded SnapStream with a friend shortly after graduating from Rice University in Houston. We employ 27 people -- super talented software engineers, software testers, sales engineers, technical support staff and other "knowledge workers" -- 25 at our office in Houston, 1 in Austin, Texas and 1 in Ohio.

Let me start by explaining what SnapStream is and how it works. We're a cross between a DVR and a search engine. The SnapStream TV search appliance is a physical box that our customers buy from us, install at their premises, and use to record television-- up to 10 TV shows at a time on a single SnapStream TV search appliance. Then we index all the recordings and make them searchable using the closed captioning and some metadata that we license about the TV shows. TV shows can be recorded in standard definition or high definition and they can be searched in real-time -- as they are being recorded -- for any keyword.

Search results are much like those you get from a web search engine except they are TV search results. Each search result is a TV show with an air date and the exact time of the mention found. And the excerpt shown is a transcript of the TV show with the matching keywords highlighted. Using SnapStream's TV search technology, our customers are able to pinpoint things being said on television -- to find a "needle in a haystack" on television. Once they've found what they are looking for, they can create a clip and then do a variety of things with that clip -- import it into a video editor, share it via email, or share it via a private link online.

We enable our customers to not only save time, but to accomplish creative feats that weren't possible with the old method of recording television. The old method was basically buying a bank of VCRs or DVRs, using them to manually record a bunch of television and then manually scanning through the recordings to find clips (often using interns!). One of our customers is The Soup on E! Entertainment. I want to play a TV clip for you all now to demonstrate the kind of creativity that SnapStream enables (my apologies for the poor quality of the clip!).

<http://bcove.me/rbdsbiwv>

This clip shows you an example of the kind of creativity that SnapStream enables by letting media commentators find a needle in a haystack on television.

So, what are some of the other ways in which our TV search technology is used?

We have customers like the Daily Show with Jon Stewart and the Colbert Report. So if you've ever wondered how The Daily Show finds all those great TV clips for their show, that's us. That's SnapStream.

Another creative use of our search technology: many local TV stations use us for competitive intelligence -- because our TV search technology is "real-time", they can track the phrase "breaking news" on their competitor's channels so they're notified by email the moment their competition is beginning coverage of breaking news.

SnapStream is also used quite a bit here in Washington DC, possibly by some of your offices. Organizations that are SnapStream customers include the White House, the Senate, a number of individual Congressional offices, and the Majority and Minority Whip offices. We're also used by the RNC and the DNC and various media watchdog organizations.

State, county and city governments use SnapStream -- like Mayor Bloomberg's office in New York and Mayor Annise Parker's office in Houston.

SnapStream is used by journalism and media studies departments around the country so academics can study the ebb and flow of different terms on television and so academics can efficiently compare news coverage across TV channels. For example, they might use SnapStream to compare how Fox News' coverage of a story compared to that of CNN.

Outside the US, SnapStream is used a great deal in Canada, where many government agencies have standardized on using SnapStream. We have also recently begun to sell our TV search technology in the United Kingdom and Australia.

From the standpoint of copyright, SnapStream is no different than a VCR or a DVR. Our customers make recordings at their premises on hardware (running SnapStream software) they purchased from us. Being able to make recordings of television is vital to our business and to many other businesses in our industry. Fair use is also vital to how must our customers' use TV recordings and clips made with SnapStream. Without fair use and the ability to make recordings, it wouldn't be possible for government agencies to monitor television and quickly and efficiently respond to TV coverage and to hold TV content creators accountable. Without fair use and the ability to make recordings, the creative satire and comedy of programs like the Daily Show, and, in many cases, the public awareness and spirited public debates they create would not be possible. And these things are not only important to us, but to others in our industry which consists of approximately 50 to 100 clipping services that provide national or regional TV clipping as a service. These things are also important to non-profit public and private TV archives such as the Vanderbilt TV News Archive, the Internet Archive, and UCLA's recently launched NewsGate TV News Archive.

To summarize, SnapStream's TV search technology brings the power of search and sharing, things that are a standard part of "new" media, to the "old" media of broadcast

television. That's really at the root of our product's innovation and the reason we have hundreds of customers. Consumer viewing behaviors and paradigms have changed and we allow organizations to harness the power of those new paradigms to traditional TV.

Mr. COBLE. Mr. Lindberg, you are the cleanup man.

TESTIMONY OF VAN LINDBERG, VICE PRESIDENT OF INTELLECTUAL PROPERTY AND ASSOCIATE GENERAL COUNSEL, RACKSPACE, THE OPEN CLOUD COMPANY

Mr. LINDBERG. Thank you. Thank you. Chairman Goodlatte, Chairman Coble, Ranking Member Watt, Members of the Subcommittee, thank you for extending me this invitation to testify today.

Last week you heard from witnesses in the content industries about their views on copyright. This week we are talking about technology.

In truth, we are not so far apart. Technology companies and in particular Internet companies are also content creators. Copyrightable content is not only works of art and literature, movies, and music, it also includes all the software code written by professional computer programmers. Internet companies also empower individual citizens to create content. This includes cutting edge economics and political analysis. This includes people who write on blogs about subjects they love, and yes, it even includes videos about cats.

We can't exclude the interest of Internet companies and ordinary citizens from this important discussion about copyright. It is a new world. If we only focus on the traditional content creators, we miss out on the Internet, the greatest engine of content creation that the world has ever seen.

Because there are so many new content creators, there are many new business models for using copyrighted content to achieve success. We have heard today from a number—about a number of these business models. Some of these business models rely on exclusive control of their content. Some business models rely on fair use. Others depend on openness and the widespread sharing and dissemination of their work. We need to make sure that the conversation doesn't focus just on one business model to the detriment of all the others.

To illustrate, let me tell you a success story about innovation in America. This success story comes from sharing copyrighted content as widely as possible. Almost exactly 3 years ago, Rackspace was looking for a new technology foundation to build our next generation cloud computing system. At that time, there were very few choices, and they were all locked down and proprietary. Even Rackspace's own legacy technology was proprietary. But we had seen the success of the open source movement. Open source is a model by which copyrighted code is shared and traded for the benefit of everyone. This open source code runs most of the Internet. We have decided to make an open source cloud computing system.

Some farsighted technologists at NASA also had this vision and joined us. We created OpenStack. When we created OpenStack, Rackspace became not just a technology company but also a content provider. We wrote thousands of lines of code, reams of documentation, and even a couple of books, millions of dollars worth of intellectual property. Rather than assume exclusive control, we made it available for everyone to use. The results have been astounding. OpenStack is not only used by NASA but by operations

throughout the Federal Government. It is an engine of growth backed by hundreds of companies worldwide, including technology giants such as Cisco, Dell, HP, IBM and Red Hat.

In terms of people, OpenStack has over a thousand individual authors. These authors have collectively written enough code and documentation that if it were all printed out, it would reach to the Moon. Because Rackspace gave away this code, we can incorporate contributions from other companies that benefit us in turn. Customers become more familiar with our products, making them more attractive to buy. OpenStack is driving breadth in our products and growth in our service and support business. OpenStack is making us money.

Across the industry, this one project, OpenStack, is directly responsible for tens of thousands of new American jobs and has driven billions of dollars of new growth and investment. This innovation and economic growth is the direct result of the deliberate spreading and dissemination of the copyrighted content provided by Rackspace, NASA, and these other contributors.

If changes to copyright law make sharing more difficult, it will discourage or prevent successes like OpenStack. That brings me back to the subject of this hearing. There is more than one way to engage with copyright. There is more than one business model, even among traditional media companies. For example, Radiohead and Nine Inch Nails are two music groups making money with a business model predicated on widespread sharing and distribution of their content.

At Rackspace we are on the frontlines of the battle against copyright infringers and other online criminals. We employ dedicated teams to take enforcement actions every day under the Digital Millennium Copyright Act and our own even stricter Acceptable Use policy.

One recurring suggestion that we received is that we should alter our technology, build in mechanisms to prevent copyright infringement. From our experience on the frontlines, we are wary of regulations that would substitute technological measures for human decision making. There are many things that computers do well, but one thing that they don't do well is understand the relationships between people.

Computers may be able to learn how to spot a movie or recognize a song, but they don't understand when someone has granted access for another person to use that copyrighted material. A software program is a lousy substitute for a conversation between humans.

For example, among the many companies that we at Rackspace host as customers include a movie studio and a jewelry vendor. I can't tell you how many times that we have actually received takedown notices from the movie studio to take down their own website. Just last week, we got a mistaken request from the jewelry vendor to take down the site of one of their authorized resellers. We have gotten takedown requests to take down the sites of famous museums who were displaying pictures of their own works in their own collections.

The reason we get these complaints is because they usually don't come from humans. They usually come from computers. The auto-

mated software that generates these notices doesn't understand that these are authorized uses. If there is any change to copyright at all, it needs to be a strengthening of the safe harbors that allow shared expression.

We get other requests to take down material because it is unpopular or unflattering to some business or some individual. For example, a highly critical review of a restaurant. These requests are most frequently couched as requests under the Digital Millennium Copyright Act. These requests are not really meant to stop copyright infringement. They are attempts to restrict free speech that someone doesn't like.

Distinguished Members of the Committee, I ask you to remember two things as you consider these important issues. First, remember that there are many new content creators and many new business models. We need to respect them all.

Second, remember that computers and software algorithms can never replace human judgment. Let's make sure that we empower all of America's industries and citizens to innovate. Thank you.

Mr. COBLE. Thank you, Mr. Lindberg.

[The prepared statement of Mr. Lindberg follows:]

**Statement of Van Lindberg
Vice President of Intellectual Property and Associate General Counsel
Rackspace, the Open Cloud Company**

United States House of Representatives, 113th Congress

August 1, 2013

"Innovation in America: The Role of Technology"

I would like to thank the committee for inviting me here today to talk about innovation in America. I am Van Lindberg, Vice President of Intellectual Property and Associate General Counsel at Rackspace, the Open Cloud Company. I am also a software developer, author, and chairman of the board of the Python Software Foundation, a nonprofit dedicated to advancing the open source programming language Python.

One of the things that struck me as I was preparing for this testimony was the implied dichotomy set up by the structure of these hearings. Last week you heard from witnesses representative of "content creators," about the role of copyright law in fostering innovation. This week we are talking about the role of technology in innovation. This implied dichotomy is interesting because it separates two groups that have more in common than they think.

My message today is that, in today's world, all sorts of individuals and organizations are creating content, including technology companies, independent foundations, and millions of individual users. Technology has enabled a massive wave of innovation and job creation, driven by the spread of knowledge, content and experience from one person to another. Copyrightable content today is not limited to only works of art and literature, movies and music. It also includes all of the software code written by developers who have brought us everything from powerful hand-held computers to digital medical diagnostic tools.

To illustrate, let me tell you two success stories about innovation in America.

Our first story starts Rackspace and NASA. Almost exactly three years ago, Rackspace was looking for scalable technology on which to base our public cloud, which hosts more than 200,000 businesses in 120 countries. At that time there were very few choices, and the choices that existed weren't going to meet our needs. All that the

market offered were closed, proprietary solutions that would cause customers to be locked into the technology of specific vendors. Even Rackspace's own legacy technology was proprietary.

But we had seen how successful the open source movement was, particularly software projects like Linux, Apache, Mozilla Firefox, and Android. We wanted to offer our customers open standards, rapid innovation, and choice. Some farsighted technologists at NASA had the same vision, so we joined forces and created OpenStack, an open source cloud computing system. Rackspace decided to become not just a technology company, but also a content provider. We wrote thousands of lines of code, reams of documentation, and even a couple of books—millions of dollars worth of intellectual property—and made it available for everyone to use.

The results have been astounding. In the past three years, OpenStack has grown so rapidly that it's not only used by NASA but by other operations across the federal government. It is an engine of growth, backed by hundreds of companies worldwide, including technology giants such as Cisco, Dell, HP, IBM, and Red Hat. This one project - OpenStack - is directly responsible for tens of thousands of new American jobs and has driven billions of dollars of growth and investment.

OpenStack is even more astounding in the human dimension. There are over a thousand individual contributors, who have collectively written enough code and documentation that, if it were all printed out, would reach to the moon.

These companies and these people are both technologists and content creators. This massive contribution to innovation is the result not of exclusive and tight control over their copyrighted content, but of the deliberate spreading and dissemination of their efforts.

The second success story stars a nonprofit, the Python Software Foundation. Each year, the foundation puts on a conference where thousands of software enthusiasts get together to learn, to teach, and to work together on projects and businesses. This year we brought in schoolkids for two days of free tutorials that introduced them to the basics of programming.

This was just the opportunity that nine-year-old Havana Wilson of Denver, Colo., needed. After Havana showed interest in building video games, her father Bruce looked around the web for other ways to get her involved. "It was my job to turn her desire into action," Bruce said. Both father and daughter came to the conference to attend the tutorials.

They had an amazing time. Havana left excited and energized to continue on her own. What they didn't expect was the effect of the experience on Bruce. "I was only going to [the conference] to help my daughter," he said, "but came away from the experience seriously motivated to dive into programming."

That is not the end of the story, though. The instructors who created the tutorials decided to make all of their teaching materials available online for others to use at no cost. In the past four months, the Python Software Foundation has supported over a dozen more tutorials using the same material, including presentations in Alaska, California, Colorado, Iowa, North Carolina, Ohio, Texas, Utah — and right here in Washington D.C.

Hundreds of children have had their eyes opened to technology – to innovation – because a network of volunteers, and especially these tutorial authors, decided to share their content as widely as possible.

That brings me back to the subject of this hearing. Copyright is a difficult and important subject. Shared creative expression plays an essential role in our society. Our culture is just the product of our many personal expressions mixed together. The Internet has made it possible for our culture and our society to be enriched in a way unimagined by previous generations.

At Rackspace, we believe in the bargain of copyright. We are on the front lines of the battle against copyright infringers and other online criminals. We employ dedicated teams that take enforcement actions every day under the Digital Millennium Copyright Act as well as our own even stricter Acceptable Use Policy.

From our experience on the front lines, we are wary of regulations that would substitute technological measures for human decision-making. There are many things that computers do well, but the one thing they don't do well, at least for now, is to understand the relationships between people. Computers may be able to learn how to spot a movie, or a song, but they don't understand when someone has granted another person approval to use that copyrighted material. A software program is a lousy substitute for a conversation between humans.

For example, among the companies that we at Rackspace host as customers are a movie studio and a jewelry vendor. I can't tell you how many times we have gotten a takedown notice from the movie studio asking us to take down their own website. Just last week we got a mistaken request from the jewelry vendor to take down the site of one of its authorized resellers. We have gotten complaints asking us to take down the sites of famous museums, displaying pictures of their own collections.

The reason we get these complaints is because they usually don't come from humans – they come from computers. The automated software that creates these notices doesn't understand that these are authorized uses. If there is any change to copyright at all, it needs to be a strengthening of the safe harbors that allow shared expression.

We get other requests to take down material because it is unpopular or unflattering to a particular business or a particular person, such as a highly critical review of a restaurant. These requests are most frequently couched as requests under the

Digital Millennium Copyright Act. These requests are not really meant to stop copyright infringement. They are attempts to restrict free speech that someone doesn't like.

As you deliberate on these important issues, I ask that you remember that we are almost all content creators now. Postings on Facebook, open course materials, and shared code all add to the wonder, culture, and innovation that is the mark of America throughout the world.

Respectfully submitted,



Van Lindberg

Mr. COBLE. Thank you-all for your testimony. We appreciate your presence here today. We try to apply the 5-minute rule to us as well, so we'll move along.

Let me start with you, Ms. Ringelmann. Has innovation in America become more centralized, and what impact does that have on the speed of innovation in America?

Ms. RINGELMANN. As innovation has become more——

Mr. COBLE. Centralized—decentralized.

Ms. RINGELMANN. Decentralized. Can you repeat the second half?

Mr. COBLE. What impact does that have on the speed of innovation in America?

Ms. RINGELMANN. As innovation becomes more decentralized, I think it will increase the speed of innovation. What is amazing about Indiegogo is that we don't judge, as I was saying. We don't decide who has the right to raise money and who doesn't. We don't decide which product designers get to design their product. We are open, and we leave it up to them to connect with their world and connect with their audiences. And because of that, what ends up happening is the folks that connect most directly with an audience of people who want that idea to come to life are the quickest to raise the money and the quickest to actually move forward with their project.

So, the huge barrier that we are attacking right now is the friction of finance. People have ideas every day. People have the willingness to work hard every day. Until Indiegogo came along, the one thing standing in their way was access to capital, and because we removed that friction, now the only thing that is in their way of bringing their idea to life is themselves and their willingness to work hard, and I think that is pretty American, so I would see it increasing.

Mr. COBLE. Anyone want to weigh in further? Any other comments?

Mr. FRUCHTERMAN. Well, I think the idea of the Internet enabling the community to actually contribute to things, whether it is contributing finance. I mean, it was blind people who built our library. That is what made it the biggest library is because the technology did it and they could do it fast. Instead of taking a year to record a book that hit the New York Times' bestseller list, our volunteers scanned it in a couple of days so the New York Times' bestseller list was always, within a week, up to date and on our site.

So, I think those are just examples of how when the technology empowers the community, that is so much more powerful than any one company can possibly be and that contributes to innovation and building these gigantic assets whether they are commercial or social.

Mr. COBLE. Thank you.

Ms. RINGELMANN. We actually have a campaign on our site right now called the Ubuntu Edge. It might be the largest crowdfunding campaign in crowdfunding's history. It is a campaign to raise \$32 million in 30 days to create a phone based on open source technology. So the creators and the guiders of this open source technology have gone on, reached out to the community that have contributed software and code to the actual software base, and through this community they are actually funding it, too. So they

are not just creating a phone together, they are actually funding it and making it happen, and not once was a gatekeeper, a third-party decision maker involved in that process.

Mr. COBLE. As American students prepare for the workplace, what challenges do you see in ensuring that they are prepared to work in technology?

Start with Mr. Seidle.

Mr. SEIDLE. I can try to field that one. The speed at which technology changes is astounding, and we have had a customer of ours who learned how to solder. We teach classes on how to assemble electronics, and this student kind of learned how to solder and then took it upon himself to continue to learn how to program via the Internet. There is community forums, and so he learned how to program and he sort of moved on and then began building projects. Designed the ornament on a Christmas tree that changes lights and does different things.

Quinn is going to turn 13 this year, and he has his own website. That wasn't enough. He now has his own website selling products.

So our students, the students today need every tool and every possibility to learn more and to compete in this global world. I believe the Internet and open source are sort of keys to enabling students today to stay as competitive as possible.

Mr. COBLE. Mr. Lindberg.

Mr. LINDBERG. We have a direct example of that. I work with the Python Software Foundation. Every year we have a conference. This year we invited school kids to participate in 2 days of free tutorials where they would learn how to program.

We had one of the people who attended was 9-year-old Havana, I don't remember her last name, from Denver, Colorado. But what was more is that the people who wrote those tutorials allowed us to use them and disseminate them freely, and so in the past 4 months since that original tutorial, we have had over a dozen other tutorials reaching out to hundreds of other school kids teaching them how to program, teaching them how to innovate.

Mr. COBLE. Yes, sir. Any other comment? My red light is about to illuminate, so I will recognize—who do you want to go with now?

Mr. WATT. Mr. Chairman, I am, as usual, going to defer and go last, so I will defer to Ms. Chu.

Mr. COBLE. The gentlelady from California, Ms. Chu. Good to see you here.

Ms. CHU. Thank you, Mr. Chair.

Mr. COBLE. You are recognized for 5 minutes.

Ms. CHU. I would like to address these questions to Mr. Lindberg. One person on the panel stated that attempting to stop pirates is a waste of time and that any anti-piracy law or technology can be cracked by 15-year-olds and that resources spent stopping pirates come at the expense of innovation, and yet we know that thousands of individual creators from songwriters, musician, visual artists, authors, and indeed those in the software industry rely on the protection of their intellectual property rights and copyrights so they can innovate.

And in fact, you described some striking examples of massive ways of innovation and job creation enabled by technology in two specific stories about innovation in America, but it is under the

current system. So, what do you believe the current copyright act has played in terms of enabling that technology and innovation? In other words, has our current copyright system, the protections it includes, has it impeded or not impeded technological growth and innovation?

Mr. LINDBERG. I think that that is an important question. In some ways, it is a little bit difficult. I go back to my earlier point about there are many different business models for innovation that rely on using copyrighted content in different ways. There are some models, such as those of songwriters, that really do rely on exclusive control, but then there are models such as that of Pandora, which rely on the ability to license and use that and to disseminate it as widely as possible. Both of these are important business models that we want to make sure that we encourage because innovation doesn't just come from control. It also can come from places and from people that you don't expect.

To the extent that we have seen the intersection of copyright leading up to innovation, it has frequently been about the further dissemination of that content, and we don't want—and we want to make sure that the laws that we pass don't stop that dissemination from occurring.

Ms. CHU. Well, in fact, you describe two instances where copyright owners chose to share their content as widely as possible and it created a greater good, but isn't a key aspect to each story the fact that the owners voluntarily made that choice; whereas piracy on the other hand strips owners of the choice of when and where and how to share their creations. So isn't it important to maintain a system where content owners such as yourself have the right to decide, even on the Internet, where, when, and how to share the creations, and doesn't the current system fully support an author's ability to decide to share his or her work for free?

Mr. LINDBERG. We do support the ability of copyright owners to make decisions about their content. That is both fair and right. We also need to recognize that there are times when there needs to be a wider dissemination. For example, this has been recognized in law in the mechanical royalties and other statutory licensing regimes. It has been recognized in the ability to use certain works under the principles of fair use.

So, yes, we fully support the ability of content creators to make choices about their content, but we also need to support the boundaries of copyright that allow fair use, fair use and dissemination of that content even in other situations.

Ms. CHU. Let me ask also about takedown notices, and you express concern about these erroneous takedown notices generated by computers rather than humans and this is no doubt very frustrating to receive. But what advice can you offer to small content owners, photographers or song writers, for example, whose works are infringed, hundreds of thousands of time on the Internet but who lack the resources to monitor those infringements, let alone prepare and send DMCA takedown notices to address them?

Mr. LINDBERG. Generally those—I think that we really need to approach this from sort of a business-to-business perspective. One of the things that we do at Rackspace is we work with content owners to make sure that infringing content is not posted or trans-

mitted through our network. We are—and I think we are not alone in this—open to people saying, you know what, this is not right and it needs to be taken down and we are very responsive to that. I think that obviously we can't police the entire Internet, we can only police our little corner of it, but I think that companies, Internet companies as a whole will be responsive to small businesses, independent song writers and those who really have legitimate interest.

Ms. CHU. Thank you. I yield back.

Ms. RINGELMANN. Can I jump in?

Mr. COBLE. The gentlelady's time has expired.

Ms. CHU. Well, actually my time expired.

Mr. COBLE. Ms. Ringelmann.

Ms. RINGELMANN. I will try to keep it short. Just to the point of the question about business model and business model innovation. What I recommend everybody do is actually Google the article that Kevin Kelly wrote back in 2006 called the Six Generatives of Free, and there he painted a picture of in a world where things become copyable things will just automatically get distributed. You can't fight it. So rather than trying to fight it, because it is like water rolling down a hill, try to embrace it. And think about given the fact that this is happening what other models could evolve around that where you could still make money? And he actually he lays out six themes, of which patronage is one of them. So when I think about copyright I think about all the artists on Indiegogo who are trying to get their start, they have been trying to crack into the music industry for years, and maybe they are making it or maybe they are not, they are in coffee shops at night, they are traveling, they are working hard to pursue their dream at night.

If they do get lucky enough to get a label, then it becomes the challenge of getting paid by the label and does the label promote. And we actually had an example of as a musician a punk band out of Canada actually who had "made it" because they had broken into the label system and was able to get picked up by a label, but financially they weren't making it because the current business model wasn't supporting them. And further the label was actually constraining them creatively, so they weren't actually making the music that they wanted to make. So rather than just keep fighting in that system they just embraced the fact there is a whole new world out there and instead of trying to sell their music that already existed, they turned to their fans and monetized their abilities by getting their fans to fund future music. So the fact that rather than fight and try to get paid for music that already existed, instead they are focusing their efforts on using Indiegogo to get paid for music that will exist and at the same time they are empowering their fans. So if you think about it it is just another way to get paid and it is a much more innovative way to get paid and it's actually a more sustainable and empowering way to get paid. And it allows them to keep creative control. And what I will see actually as a result is we are going to see a rising class of musicians bubble up, as well as a rising middle class of artists in other ways as well. So it might be actually a great time to be artists. Before you either had to be mainstream and Britney Spears or starving in the coffee shop. Now you actually can potentially make a liv-

ing by going direct to your fans simply because of embracing a new innovative model such as crowdfunding to make money for your music.

Mr. COBLE. The gentlelady's time has expired. The gentleman from Pennsylvania, Mr. Marino. I thank you for having covered for me last week and I am pleased to recognize you now for 5 minutes.

Mr. MARINO. Good morning, panel. I apologize for being late. I had to be in three places at one time this morning.

My children, who are 14 and 18, practically take my computer apart and put it together so it is more powerful so I can did things quicker. And if I have problems I go to them. So there is no question about that generation being lightyears ahead of us. But Mr. Seidle, am I pronouncing that right?

Mr. SEIDLE. Seidle.

Mr. MARINO. I am not quite sure, I didn't grasp what you meant as far as not having patents or not licensing them and other people using them. Do you believe that the inventor should make that decision as to whether to share that invention or do you think there should be some mechanism that makes that inventor share that invention so anyone can produce it?

Mr. SEIDLE. I believe the patent system and intellectual property system has its place, it is necessary. However, I believe there should be the capability to show that through prior art or through innovation that we can create new things, that we can stand on the shoulders of the people before us. It is the patent trolls and the defensive patents, the patent thickets that I believe are really hurting innovation in this country.

Mr. MARINO. How about the individual that—let's go to the extreme here. My son, daughter and I, we're Trekkie fans, Star Trek, so what if an 18-year-old working since he or she was 10 years old comes up with a method by which to transport a person or a thing just like Scotty does, okay, from Pennsylvania to California, just like that. Given the fact that there are emergency situations where that would be such a benefit, but also in industry and in the market it is a benefit as well. Should that individual be forced to open that 10 years of research and study to anyone else who wants to copy their device without being paid?

Mr. SEIDLE. It is very much their choice whether or not they wish to patent that technology. However, I would argue that if they choose to patent that technology, they will have a false sense of security. That technology will be copied regardless, it will be innovated upon, it will be made better. There will be another company producing a better teleporter within weeks.

Mr. MARINO. In some particular time, correct?

Mr. SEIDLE. Within weeks, that is the speed at which technology moves.

Mr. MARINO. But that second company that will develop or improve within weeks stole that idea from that 18-year-old and wouldn't be developing this transporter if it were not for the 18-year-old. So were you saying that the 18-year-old should not, if he or she chooses, financially benefit from the second company who would not have created a better transporter had it not been for the 18-year-old?

Mr. SEIDLE. I apologize, I am not an attorney, I am just a business person. I don't know patent law. But I believe that there are significant improvements that company two could make that is just going to happen.

Mr. MARINO. Okay, I understand that, you are quite clear, you are quite clear on that, but one does not have to be an attorney or a patent attorney. It is just a basic fairness.

How about the pharmaceutical company who after 20 years of research, hundreds of millions of dollars, maybe billions of dollars comes up with a cure to prevent the common cold and it prevents it, it cures it within a week. Do you think the company, the second company who takes that prescription, takes that drug and does research on it now can cure that cold within an hour, do you think that they are entitled to do that without compensating the company who has spent years and years and hundreds of millions of dollars?

Mr. SEIDLE. Humanity has been sharing for thousands of years. The way that we learn is by learning from each other.

Mr. MARINO. Okay, I understand that. And I would love to get into a philosophical debate, okay, but this isn't the time nor the venue. We have to talk about economics and the economy. What is that going to do to businesses?

Now I commend you on what you are doing.

Mr. SEIDLE. Thank you.

Mr. MARINO. Cost I think has a factor. I am not even going to ask you to get into your cost, that's proprietary and that's your business. But I can see there's a big difference if it costs me \$0.25 to manufacture something that I came up with that idea in a couple of weeks compared to a billion dollars over 20 years.

Mr. SEIDLE. Let me give you an example. I'm here today merely to point out that innovation is not linked to intellectual property.

Mr. MARINO. I agree with you 100 percent.

Mr. SEIDLE. Kodak got a patent on digital photography in 1978, that was a 30-year headstart on a multi-billion dollar industry.

Mr. MARINO. Look what is built from that point on.

Mr. SEIDLE. Kodak is now bankrupt. So it is not intellectual property that guarantees benefit.

Mr. MARINO. No, it is the ability to take advantage of the technology that's available or that is going to be available in the near future. If a company decides not to do the R&D and stick just singly on making a flash cube and does nothing else, the market will determine that.

If Mr. Lindberg, could you respond to my question concerning the protection of someone's investment?

Mr. COBLE. Mr. Marino, wrap up as quickly as you can.

Mr. LINDBERG. Absolutely. Mr. Marino, you are talking about real fundamental inventions. The real problem is that there are so many of these patents out there that really aren't on fundamental things. And in fact many of them should never have been granted at all, they were granted in error. So I can agree with you completely about the value and the importance of protection and of financial returns to those fundamental inventions. But when someone says, you know what, I patented using a rounded rectangle and they attempt to enforce that on other people without understanding

that these sorts of things existed before, then that is a real drain on invention.

Mr. MARINO. My time has run out, and I thank the Chairman for letting me go on here a little bit. But I will close with saying that don't you think that's better left up to the system and to the courts than to individuals?

Mr. LINDBERG. I think there is reform needed throughout the system.

Mr. MARINO. I don't dispute that at all. I'll yield back.

Ms. RINGELMANN. Can I just make a quick note? When we started Indiegogo we thought the idea was so obvious somebody was going to copy us and do it. And lo and behold, somebody did. In fact, rather than get mad about that what that did is it forced us to continue to innovate, and actually made us better and made us stronger. So I know this is a little tongue and cheek, but there is actually a Star Trek product on Indiegogo right now, it is called a Tricorder, it is a doctor in your pocket. So you scan yourself and you read your vitals and that literally came out of Star Trek.

Mr. COBLE. The gentlemen's time has expired.

Ms. RINGELMANN. Okay. Well, anyways, the quicker—if they were to come out with a 1-week cold remedy, and then somebody would come out with a 1-hour cold remedy, well that would help the guy who created the 1-week cold remedy come up with a 1-minute cold remedy. So you iterate and the whole world benefits. Sorry.

Mr. COBLE. Thank you. I thank the panelist. The gentlelady from California is recognized for 5 minutes.

Ms. BASS. Yeah, I think I want to hear more about that invention you were talking about, scan and get your vitals. But I just had two quick questions, first for Mr. Lindberg. I believe in your written testimony you expressed concerns about takedown notices erroneously generated by computers rather than humans.

Mr. LINDBERG. Yes.

Ms. BASS. But I wanted to know what advice can you offer to small content owners, photographers or song writers for example, whose work are infringed hundreds of thousands of times.

Mr. LINDBERG. I think that it is important to work human to human, business to business with the various responsible companies who are doing things like Rackspace. We have an entire team dedicated to dealing with these issues. We are very responsive to a small songwriter, a small content owner because we don't want and we don't support copyright infringement on our network. There are things that we can't—we can't do things about other parts of the Internet but we can do things with ours. I believe we are not unique in that respect. Other network providers, other people who are responsible for different parts of the Internet will generally be responsive. I think that frequently when you are talking about the massive infringements you are really talking about things that are outside the United States, frequently outside of our jurisdiction.

Ms. BASS. You were mentioning that you do work with some of the artists. Could you describe, provide a couple of examples of that?

Mr. LINDBERG. I probably would like to answer that on the record so I can get you more specifics.

Ms. BASS. Okay. Do you want it on the record?

Mr. LINDBERG. In writing, yes.

Ms. BASS. Okay. You can be on the record right now.

Mr. LINDBERG. Sorry.

Ms. BASS. That's okay.

Mr. Seidle, did I get it right? You might want to respond to that also but I did have another question for you.

Mr. SEIDLE. I would encourage—the question was, let me see if I got this correctly, the photographers and the folks who generate images that are—please repeat the question.

Ms. BASS. No, no, go ahead. I was saying no to something else.

Mr. SEIDLE. I would recommend the folks that are challenged by duplication to find technological platforms that allow them to license their content as easily as possible. When I have the choice to view content on my TV, I can either download that illegally or I can pay the \$1.99 on Amazon and get it right then and there. It is so easy that I choose to buy it, to go the legal route. So to these photographers I would encourage them to use, I believe Getty Images was here last week, it is a fantastic platform for them to license their image regardless of the laws in place. If you make it easy for folks to license legally, that is the best means to get recuperation for the imagery sold.

Ms. BASS. Thank you. And following up on that, I believe you stated in your written testimony that innovation moves faster than the shield of IP protection. So I wanted to know what you might be suggesting in terms of updating IP laws to address technological advancement? Should we leave them alone?

Mr. SEIDLE. It is—I gave two or three recommendations in my written testimony about how we could update intellectual property law. The truth of the matter is I just don't want to see small businesses, barriers placed on small business that doesn't allow them to move as quickly as possible. So it is the types of content that is being generated today that we need to continue to allow. So businesses like myself we are not going to use the Patent and Trademark Office. We are going to go the open source route because we find that it generates more profit and better product because it forces us to innovate. It is those types of products.

Ms. BASS. Do you wind up getting into trouble then with patent trolls, people coming after you?

Mr. SEIDLE. So far in 10 years of business, no, we have been very, very lucky.

Ms. BASS. Thank you.

Mr. LINDBERG. If I could jump in there. Patent trolls are a massive, massive problem for our industry and for the computer and technology industry and for ours in particular. Just to address that point in particular, in the past 3 years we have had a 500 percent increase in the amount of legal spin that we need to do all because of baseless patent troll claims. These are things that don't even apply to our business. They are taking assertions and they are not even looking at our open source code that is available on the Internet where they could say—they could verify for themselves that we don't do the things that they say. They don't even bother it because they use the cost of litigation as a club to extort settlements out of companies that actually do things. If there's something that you

could do to really encourage innovation in America, it is to stop the patent troll problem and to really help us with this litigation abuse.

Ms. BASS. Well, let me just say in closing I know that my colleagues on the panel—on the dais here agree with you, we had hearings on that. I was in a meeting yesterday with the Internet Association hearing from a variety of companies about this problem and we do have several Members who have introduced legislation.

Thank you. I yield back the balance of my time.

Mr. COBLE. I thank the gentlelady. As evidenced by the response, folks, this issue has prompted many, many questions indicating the significance of the issue at hand. Again we thank you all for your contribution.

The gentleman from Missouri, Mr. Smith, recognized for 5 minutes.

Mr. SMITH OF MISSOURI. Thank you, Mr. Chairman. Mr. Seidle, I kind of wanted to know a little more information. You said that your company has manufactured more than or invented more than 700 products.

Mr. SEIDLE. Correct.

Mr. SMITH OF MISSOURI. And you have never done a patent on any of those 700 products.

Mr. SEIDLE. Correct.

Mr. SMITH OF MISSOURI. What is the longevity of like say you invent a product of how long you manufacture it to continue to sell it?

Mr. SEIDLE. Good question. This product in particular has been sold for I believe 3 to 4 years. So it has gone through probably 15 to 20 revisions, 15 to 20 improvements.

Mr. SMITH OF MISSOURI. Has it ever been a concern of yours that maybe one of your inventions someone takes notice of, say the Chinese company that expanded on it, they then patent it and then it would be illegal for to you produce it?

Mr. SEIDLE. That is a common concern. And again not an attorney, but I believe and I hope that prior art would invalidate any patent placed on an item that was released open source.

Mr. SMITH OF MISSOURI. It may, I don't know.

Mr. SEIDLE. That is the nature of the license. It is a viral license that causes it to always be open once opened.

Mr. SMITH OF MISSOURI. So then it would probably go back to your statement where you were talking about being bullied through litigation. And it would basically be decided in litigation with a lot of expense from your company of defending it that it was prior art, instead of whether it was an invention or not.

Mr. SEIDLE. That scenario has not happened before so I am not exactly sure it would play out.

Mr. SMITH OF MISSOURI. It sounds like it to me that that would be a prime legal case if somebody was coming after you. Just—I understand your argument of the innovation sometimes. How long does it take to go through the patent process on—you haven't done it, but maybe Mr. Lindberg.

Mr. LINDBERG. Yes, the patent process typically case 2 to 4 years, most often 3, costs anywhere from 25 to \$50,000 to actually get

through it and get a patent. I would note that this is a pretty substantial economic hit for a small business.

What is more when were you asking about the circumstance where somebody takes one of these products and they make a trivial improvement and then they would patent it. You know what? The patent isn't on the base chip, it is on that little improvement. The problem is that some of these patents are on these trivial improvements that would be easy for anybody who was in the industry to make. It just so happens that they were the ones who won the race to the courthouse and were willing to invest 25 or \$50,000 in getting a patent. And because they have got this it is really obvious to anybody that would be doing it they would then take this as a license to go and extort money from companies.

Mr. SMITH OF MISSOURI. So let me—you said most of the patents are just a little minor changes.

Mr. LINDBERG. Almost all of them.

Mr. SMITH OF MISSOURI. Since the gentleman from Colorado, he never did a patent on his, why could that company not have patented the whole thing? Do you see what I am saying? It wouldn't have been a minor change, they may not have changed it a little bit from his invention but there was no proof that that was his invention.

Mr. LINDBERG. One of the things that he would need to do is he would say, here is my board, my chip that is the same except for all these things, and that would be the prior art and he would say the leap from my product to this tiny improvement is very small and that would be under section 103 about obviousness. So he could use that as a piece of prior art. The problem is not that he couldn't prove that, the problem is that patent litigation costs from 2 to \$5 million. Even if you are right, getting there is so expensive that it can kill your business.

Mr. SMITH OF MISSOURI. Do you have any suggestions of how to streamline the patent process?

Mr. LINDBERG. A number of those and I will give some now and I would like to also supplement this in my written testimony.

Mr. SMITH OF MISSOURI. Actually to shorten the time period to 2 to 4 years.

Mr. LINDBERG. I think for some areas shortening the time period would work. I think an important one is making sure that we have—that these patent trolls are forced to put—to make their allegations clear up front. A big part of this is that they hide the ball for years trying to ride out the time, spread out the cost to get these settlements.

Another thing is making people, making the money people behind these shell companies really pay the price. So many times these patent trolls are small, no name entities that actually have a financial backer, either a group of investors, another company, but they try and shield themselves away from—they shield themselves away by putting it in the shell company. Illuminating those relationships would be huge.

Mr. SMITH OF MISSOURI. Just a quick question, you were talking about one of the problems that some of the patents are not fundamental in nature. Could you give me maybe three patents that are not fundamental in nature?

Mr. COBLE. Mr. Lindberg, as briefly as you can. Sorry to hold a stopwatch on you, but—

Mr. LINDBERG. It is hard to bring up three specific examples from my mind. I will do that in the written testimony. But I can say in my experience I have personally looked at thousands and thousands of patents. I have personally gone to the Patent Office with evidence invalidating hundreds of them. I have yet to find a patent that was asserted against me or one of my clients in prior work that was not invalid over prior art.

Mr. SMITH OF MISSOURI. I would just love to see three.

Mr. LINDBERG. Yes.

Mr. COBLE. And Mr. Lindberg, feel free to follow up in writing as you pointed out.

Mr. LINDBERG. I would love to do that, thank you.

Mr. COBLE. The gentleman from Florida is recognized.

Mr. DEUTCH. Thank you, Mr. Chairman. Thank you for holding this hearing. The witnesses here today are great examples of American entrepreneurial spirit. And even beyond my overall interest in the purpose of this hearing to examine the role of copyright law, I was actually really interested to hear from the panelists and read your testimony about your innovative companies, so thanks for being here.

Mr. Lindberg, I found your testimony related to your company's development fascinating. As a Floridian, I am very familiar with the great innovations that have happened because of NASA's work, either products that NASA has developed itself or they were created as a result of work that NASA has done. I don't think enough people appreciate the full extent to which NASA impacts our daily lives. In the example that you cited it was interesting to hear about your collaboration with NASA in search of a solution to a common problem. You said that you worked with them because they shared your vision about your project's potential. Can you elaborate on that a little bit?

Mr. LINDBERG. Yes. NASA had been struggling with their sort of the management of their computing resources for some time. There was a group—Chris Kemp, who at that time was I believe the CTO or CIO of NASA, he had said you know what, we need to create something that works better. And so they actually created something and they released it just in the open saying we have got the start on something that we think could be great. When our managers, when the executives at Rackspace saw that and we saw that it dovetailed exactly with what we were doing there was an initial email that said we see that we are trying to solve the same problem, let's cooperate.

It is that cooperation, the trading and the sharing of intellectual property that enabled the success.

Mr. DEUTCH. I appreciate that. Mr. Seidle, it is great that you found a way for patentless innovation model to work for you, that you have chosen not to pursue patents, it has been successful for you. But fundamentally it is a choice and it is a choice that you have made, and it is one that doesn't work for a whole host of other companies. I have met with a lot of entrepreneurs who work primarily or exclusively in the open source side of things, and they compete like Mr. Lindberg's Rackspace by having apparently fanat-

ical customer support. That's something that all of you I think can relate to. That kind of service base model is great, but I don't see how the success of one business model means that we should necessarily give preference to a proprietary model or why the government should set itself in the business of picking winners and losers on either side. So just as you have been clear about the down sides of the patent system, can you acknowledge though that your approaches and the approach that works for everyone there is a fundamentally important role that the copyright and the patents play for others.

Mr. SEIDLE. I agree that intellectual property and copyright is part of the fabric of our economy. What I don't want to see is the situation where companies cannot be open, cannot innovate. So the types of patent trolls and types of litigation that are coming into play are in fact causing problems for small business. So the fact that SparkFun has not experienced any kind of patent infringement litigation doesn't mean it doesn't keep me up at night.

Mr. DEUTCH. So as an author of one of the various pieces of legislation that so many Members on this Committee have introduced to try to address the issue of patent trolls, I am very sensitive to that. On the other hand, there is the issue in this hearing about copyright, too, there is the issue that ultimately there are copyright holders, forget patent holders, but there are copyright holders whose work is sustained by that copyright that they hold. Obviously that doesn't become open source simply because it would be beneficial in the creation of a new company, right?

Mr. SEIDLE. True. I don't believe people should be forced to be open. I don't believe open source is the only way or should be the only way. I believe it is a balance system. I just worry that people believe that copyright is the salve that will fix their problems, it is not.

Mr. FRUCHTERMAN. And—

Mr. DEUTCH. I am sorry, Mr. Fruchterman, I am running out of time. I just wanted to go back to something my colleague from North Carolina, Mr. Watt, mentioned last week in a hearing, his intention to pursue legislation to correct a loophole in our copyright law that has long bothered me as well, and I just want to commend him on taking on that task. That includes the bipartisan agreement that everyone deserves to be compensated for their work and specifically that includes all those involved in the creation of music from song writers, to musicians, recording artists, records labels, all the others who come together to produce the music that captivates fans throughout the world. I appreciate what you are doing. Chairman Coble and full Committee Chairman Goodlatte have given us a wonderful opportunity this hearing and the last to reflect on both the importance of our copyright law in areas we might want to make changes. I look forward to the continuation of hearings like these and hope that my colleague Congressman Watts' efforts to ensure true parity and fair market rates for music will be included in those discussions.

Thank you, Mr. Chairman. I yield back.

Mr. MARINO [presiding]. Thank you. The Chair recognizes Congressman DeSantis from Florida.

Mr. DESANTIS. Thank you, Mr. Chairman. Thank you to the witnesses, really appreciate you coming here and speaking with us.

Mr. Lindberg, in your testimony you said you didn't think there was that much of a divide between kind of the traditional content folks and the more tech side of things. With that said, could you articulate the one or two issues that you do think there is a significant difference between the two groups?

Mr. LINDBERG. On the copyright side I think that the primary difference is that number one we do have different business models around copyrighted content. We need to make sure that all these different business models are understood and accepted and promoted because they are all about innovation in different aspects.

Number two, more specifically, there has for a long time been the thought that the answer to the machine is the machine. I think that that was a fairly common thing that when some of these—like the Digital Millennium Copyright Act was created, they thought you know what, we can simply mandate that technology companies make sure that copyright infringement doesn't occur. As a practical matter, that has resulted in fragile products, it has resulted in massive amounts of difficulty and costs which are being born by technology companies, not by the content creators.

Now we don't support, we certainly don't support the copyright infringement, but when we have an issue with copyright infringement—if our infringement of some of our IP rights, we take care of it ourselves, we don't ask others to do it for us. As a matter—I have talked about it all the time and the effort that we spend enforcing copyright. This is because it actually ends up being a dedicated team of people who work every day, all day answering these complaints. It really—in spite of the fact that there are all these technological measures that people attempted to put in place, it really has come down to the expense of us employing people to monitor, monitoring these things. I don't think that—I think that the thought in the traditional content industry that you can use computers to do their job for them is just false.

Mr. DESANTIS. Mr. Seidle, I think you in your testimony you had talked about embracing a more free market approach and you decried which you considered protectionist policies. I just wanted to flesh that out. Are you saying that traditional copyright and patent protections are a form of protectionism that undercut free market?

Mr. SEIDLE. We have seen a few instances of technologies being disallowed from being imported into the U.S. because of IP infringement. So yes, I believe this is bordering on protectionism because we are strangling innovation within the U.S. because these technologies aren't allowed here.

Mr. DESANTIS. And what is an example? Can you articulate a specific—

Mr. SEIDLE. I can, it is rather odd. There are these black chips, they are sensors, they are sensors that are in our cell phones all around us that allow us to detect acceleration, orientation and space. There is two competing companies. One company is not producing a very good sensor. There's another company that's producing a vastly better, improved sensor. This is manufactured outside the U.S. and is not allowed to be imported into the U.S. because of IP law.

Mr. DESANTIS. Understood. I think—and I take that point, but I also think you go back to Adam Smith, you can go back to the Founding Fathers. They believed that this was a form of property rights that was kind of underlying a free market system. And so I am happy to look at some of those issues, but I don't think that having patent copyright writ large is akin to protectionism. I mean I think that that's part of where we are.

And I look at something like that the drug industry, it's very expensive. And I agree with my Chairman—my colleague from Florida about different industries. I see where you guys are coming from, but I look at like the drug industry where that intellectual property right is huge because they are spending billions of dollars to develop these drugs. So if you water that down they have less of an incentive to innovate. I think in that sense it fosters more innovation.

Mr. FRUCHTERMAN, you stalked about Silicon Valley basically making money by giving away content. And I understand that and I understand how folks certainly in the tech community have done well with that. But for some people in say the music industry or whatever, that core product is really what they have. So when that's given away, I think a lot of them will say, well, wait a minute, I am not being compensated for my work.

My time has expired, but can you do 15 seconds responding to people maybe outside the Silicon Valley community who may have concerns about that model?

Mr. FRUCHTERMAN. I think I was referring to people choosing to give away their core product and making money through advertising or services and the like. And I think we have some great example here. People are making plenty of money giving away their core product and competing on price and quality and services. And so I don't think that IP owners necessarily should be expected to give away their content. But I think the weight of most intellectual property is obscurity and lack of any economic power. I think the power of this kind of model is actually giving away your music could actually make you more money other than the very richest acts that we are talking about. The enemy of the average artist is obscurity and not making a living. Giving away their music actually might make them a better living through better concerts and other subsidiary products, which is how a lot of Silicon Valley companies make their money.

Mr. MARINO. Thank you. The Chair now recognizes Congressman Jeffries from New York.

Mr. JEFFRIES. Thank you. Let me thank the Chair and the Ranking Member and all of the panelists for your participation here today.

It seems as if the challenge that we have as Members during this copyright review and the overall intellectual property evaluation that we must undertake is to ensure that we continue to make sure that our intellectual property laws promote the progress of science and useful arts. That in fact is a constitutional charge that we have inherited Article I, Section 8, but to do it in the context of the technology revolution that we have been experiencing that of course will greatly benefit society as we move forward. But it does seem that this balance between content protection and technology and

innovation is one where if we pit them against each other at the end of the day it is not a useful approach when the reality is coexistence I think would be most mutually beneficial. As evidenced by the groups that are on the panel, I guess Benetech benefits from the creation of literary content. SnapStream benefits from the creation of television content, both of which are made possible by strong copyright laws, intellectual protection.

Let me start with Mr. Lindberg. As it relates to open source software, it is my understanding that there is sort of a spectrum. There's free software available in this context, there's software available simply by attribution.

Mr. LINDBERG. Uh-huh.

Mr. JEFFRIES. There is software available by what colloquialists call a beer license.

Mr. LINDBERG. A what license?

Mr. JEFFRIES. A beer license.

Mr. LINDBERG. Oh, yes.

Mr. JEFFRIES. I am going to resist the temptation to inquire any further, and you can elaborate. And then substantial fee. So that is the sort of the spectrum. I am interested when someone is making a decision to put their software forward, how were these nuances made in terms of the decision to make it available free on one of the end spectrum or perhaps just by attribution or at the other end of spectrum a substantial fee?

Mr. LINDBERG. You know, that's a fascinating question. It really gets down—we talked earlier about Adam Smith and capitalism. You know back when Adam Smith was writing he was really fighting against an economic system called mercantilism where they said, you know what, take all this wealth and ship it back and so that we own it all. And he said you know what, everybody can be richer, everybody can be better off when you trade, when you share.

Open source is really about enabling trade in intellectual property. Most of our current system is really a mercantilist system when they say, you know what, all the copyrights, all these patents, all these types of intellectual property I am going to try and own it and hold it as close as possible as I can. And they think that that is what will make them rich.

Mr. JEFFRIES. You have indicated in your testimony that you have an even stricter Acceptable Use policy than the DMCA.

Mr. LINDBERG. Yes, that is correct.

Mr. JEFFRIES. So how would you define the confines or how do you define the confines of what is acceptable use as it relates to your company?

Mr. LINDBERG. One of the things that, for instance, that is not explicitly dealt with in the DMCA but we don't allow in our typical use policy is we don't allow the knowing transmission of infringing content across our network. That is something that is not explicitly dealt with and is not actually any sort of violation by us. But, we still to the extent we become aware of it, we stop it.

Mr. JEFFRIES. Mr. Fruchterman, you stated in your testimony that there needs to be balanced intellectual property regimes that allow for socially beneficial applications while allowing industry to make money.

Could you comment on not just sort of striking a balance that allows industry to make money, but what is the appropriate balance that actually allows artists in the broadest possible way, creators, innovators to make money separate and apart from how you might describe industry?

Mr. FRUCHTERMAN. Well, I think the idea is that the Internet actually makes so many other business models possible. And so I think what we want to do is don't bake certain business models into law, don't bake certain ways of solving social problems or technical problems into law. Basically set the objectives. The objective of copyright law and patent law is to encourage people to invest in creation and to actually allow them to be compensated. There are a lot of different business models that make that possible. And a lot of the complaints that you are hearing today are about sort of asymmetric costs of some of our existing things, automated DMCA notices.

I'm an inventor. I hold two patents but they are mainly because my lawyer said "be defensive." I think software patents are a terrible idea. I just don't think there are very many software patents that are actually the kind of patents that you talking about when you talk about inventing something really core. And so I think this is where you guys have to look at what is the end goal? It is economic development while taking care of society's interest, whether that is fair use, for educational reasons and helping disabled people. So as long as we keep that balance in mind, we can do well. Because as you point out in the beginning, we have the dualing moral high grounds, the right to innovation, the rights of property owners and authors. We can actually meet the needs of both those people, but don't just enact laws that just take big companies that are big content holders and implement their interest solely. We don't want to leave out society's interests.

Mr. JEFFRIES. I see my time has expired. I just wanted to note in closing as the gentlelady from California indicated I think there is near uniform agreement on this Committee and perhaps beyond to deal with the problem of abusive patent litigation.

Mr. MARINO. The Chair now recognizes Congresswoman Jackson Lee from Texas.

Ms. JACKSON LEE. I, too, thank this Committee for holding the hearing. And I particularly want to welcome my fellow Texan here and as well to greet your father for me, give him my regards. It is very good to see you.

Coming at the end of this hearing and listening and using extra-sensory perception that even though I was not in this chair listening to all that occurred, see if you'll believe that, but I have a sense because of the sort of tracking of our hearings have been to try to get our hands around the best direction to take for a variety of industries and whether or not we confront the one-size-fits-all directly. So I am going to ask a broad question as I understand one of the themes of this hearing of course is to determine copyright in the technology arena. I'd ask this question of each of you, whether or not we need to scrap the traditional framework of copyright when it comes to technology because it is fast moving, it is investors make their own determination as to whether or not this is what I want to invest in, and whether there should be some sort

of registration, filing online if you will, that we design through either legislation or through the Patent Office that keeps pace with the idea of the fastness of your technology.

And I am just going to start, you may come at it from different perspectives, but do we need to step away from the traditional copyright which has the lengthy process, the ultimate litigation sometimes?

Ms. Ringelmann? And I have other questions if you could just—this really needs to be sort of a yes or no with a sentence and I will come afterward.

Ms. RINGELMANN. I think so. In listening to the testimony today, as an entrepreneur I am constantly thinking what is the new innovative way to address this issue. Then I was thinking, and here I am going to give it away, somebody steals it and somebody iterates on it. Why don't we have a Wikipedia for patent registration, why don't we have a crowd-sourcing solution just like Mr. Fruchterman has a crowd-sourcing solution to take books and turn them into books for blind people in a far more efficient way. Why don't we have a system that can do that. I would encourage you to crowd source that and put it open source and see what happens because the world out here of innovators might actually come up with a much better solve than anybody in closed doors that doesn't have experience innovating could ever.

Mr. FRUCHTERMAN. I support registration for the very few copyrighted works that actually have economic value that should be maintained and letting almost all the rest of this incredible amount of content we are creating just free to benefits of society because it is never going to be economic.

Ms. JACKSON LEE. Mr. Seidle.

Mr. SEIDLE. I echo Ms. Ringelmann's comment about crowd sourcing. The option I believe the vast majority of small businesses out there don't have a loud enough voice to communicate what they need. Crowd sourcing it may solve that absolve.

Ms. JACKSON LEE. Mr. Agrawal.

Mr. AGRAWAL. Very nice to see you, too, Congresswoman Jackson Lee.

Ms. JACKSON LEE. Thank you.

Mr. AGRAWAL. This is happening crowd sourcing of invalidating patents for example is happening. There was a site that I learned about a week or two ago from a giant in the software industry named Joel Spolsky called askpatents.com. It is worth looking at. I understand they work with the Patent Office. And as an expert in some area of software I am able to go online and look at patents and provide examples of prior art that would invalidate those patents. And it's working well, they have developed a very streamlined system for doing this kind of crowd sourcing.

Ms. JACKSON LEE. Thank you.

Mr. LINDBERG. I think that some sort of registration system would help a lot with the problem of orphan works, works that are no longer in circulation, that there's no known—it is not economic or there's no known copyright holder. These are the vast majority of works and it is not promoting the progress of science and useful arts to have these things locked up and inaccessible. A registration

system that would help these noneconomic works move into public domain would certainly boost innovation.

Ms. JACKSON LEE. Thank you. And Mr. Agrawal, just would follow up on your citation of a cite. Europe's SnapStream is unique. And the question is with your experience in patents, do you manage the patent troll issue? And are you concerned—again, this is the broad base, are we concerned with this kind of technology and the inventiveness that comes with places like China and other places taking the inventiveness, taking the technology as their own?

Mr. AGRAWAL. We don't have a lot of experience at my company with patents. We haven't—we don't have patent protection on the technology that we have developed. That's a choice that we have made as a company.

Ms. JACKSON LEE. And so you don't see the impact of others building on it, growing on it, impacting your economic bottom line?

Mr. AGRAWAL. We—there have been—there are a number of things that we license in our product that we pay royalties for that we have to pay for because those companies have patent protection. In some cases they have built up such a strong portfolio we don't have a choice but to pay those patents. Gemstar, which has a patent on program guides, is one example of that, and we do pay—we have a licensing deal with Gemstar. So that does affect our bottom line. We were able to manage it to something—we were able to make it something manageable, but that's—it's a challenge for a lot of companies, that particular patent, anybody who wants to do a program guide.

Mr. MARINO. The gentlewoman's time has expired.

Ms. JACKSON LEE. Mr. Chairman, if I might just conclude by just saying to the Committee and Ranking and Chairman to thank them again. And from these witnesses know we have to go another route to be able to increase your inventiveness in technology and we thank you very much for your testimony today. Thank you.

Mr. MARINO. Thank you. The Chair recognizes Ranking Member, Congressman Watt, from North Carolina.

Mr. WATT. Thank you, Mr. Chairman. It has been very interesting and thought provoking hearing and I want to thank all the witnesses for being here and helping enlighten us.

I want to try to make sure I understand each of the business models a little bit more. I think I understand Mr. Fruchterman. He is nonprofit so he is not trying to make a profit. I think I understand Mr. Seidle. He is open source, no patents. He has made a lot of money and been very successful at it or making an increasing amount of money and being successful at it. When I see the sales of the magnitude, it is small, yet it is large to some people. Mr. Agrawal, I think you may have been just in your response to Ms. Jackson Lee's question clarified your business model. You don't own any patents, but you use the patented products of other people who do have patents or copyrights, protected materials. So you are kind of one foot in the free source and one foot in the protected source; is that right?

Mr. AGRAWAL. We don't—our product isn't open sourced, it's a proprietary product. So we don't publish the source code for the software that we have written but we don't have patent protection

for it either or copyright protection—we have copyright protection for it, not patent protection for it.

Mr. WATT. Got you. And you have managed to use that system to build a business model that has a monetized return I guess.

Mr. AGRAWAL. Yeah, absolutely, yeah.

Mr. WATT. Mr. Lindberg, let me be clear on you. You started out with Rackspace. Does that own any patents?

Mr. LINDBERG. Rackspace does have some patents.

Mr. WATT. Okay. And then you evolved to the joint venture you did with NASA and that's open source; is that correct?

Mr. LINDBERG. Yes, that is correct.

Mr. WATT. And you—what you—am I okay to conclude that you made money on the patents and you made money on the open source. So you have been kind of successful on both sides or—

Mr. LINDBERG. That's actually incorrect. The only reason that we have patents is because we are concerned about patent assertion from other entities. It is a purely defensive portfolio. In fact we freely license our patents out to those who are—

Mr. WATT. You license them, that means you charge somebody when you license.

Mr. LINDBERG. No, we license them freely without royalty.

Mr. WATT. You give them away.

Mr. LINDBERG. Exactly. For those who are willing to basically reciprocally do the same thing to us.

Mr. WATT. All right. And that's on the Rackspace side and on the NASA side that you do that?

Mr. LINDBERG. Yes, I can't really comment for NASA, but for things that we have it is purely for defensive purposes only.

Mr. WATT. But you have taken advantage of the ability to defend them if you need to defend them.

Mr. LINDBERG. You know we really see that the ability to defend is about cross licensing for those who are going to be more assertive and choose to fight in the courtroom instead of in the market.

Mr. WATT. Okay, I got you.

Now that brings me to Ms. Ringelmann, whose business model I don't understand. Tell me, you create a platform for other people to attract money. Are they attracting it through sales, are they attracting it through investors? And how in the process of doing that do you—does your company make a profit?

Ms. RINGELMANN. Sure. So Indiegogo is an open funding platform where anybody can fund what matters to them. So if you are someone who wants to start a business, say it is a food truck or you want to invent the Scanadu, which is the doctor in your pocket Tricorder, you use Indiegogo to create a campaign that you share with your network and friends and customers via social media, Internet technology, et cetera and then—

Mr. WATT. Are my customers investors or are they purchasers?

Ms. RINGELMANN. They are neither, they are neither. What they are are people who fund you, they give you money in exchange for perks and you as the campaign owner decide what perks you want to offer, it can range anything from intangible items like a Twitter shout out or thank you note or the ability for their name to show up on your Web site to a product, the actual product.

Mr. WATT. How does your company get paid?

Ms. RINGELMANN. Indiegogo makes money by taking 4 percent of the funds raised on our site. What is interesting to note though is that we don't have any patents.

Mr. WATT. I didn't think you had any patents. I was just trying to figure out what each of your personal business models, each of which seemingly has been successful and therefore justifiable that you would be defending that process because you have been successful at doing it, but it is always very important to understand for us exactly how your system works. I would just like to get that into the record. I am not trying to embarrass anybody.

Ms. RINGELMANN. Yeah.

Mr. WATT. All of this we found or at least most of it—even for a nonprofit works itself back to somebody making a profit or getting a return of some kind. So there's, as we say, there's generally no free lunch.

So I thank all of you and I commend all of you for the success you have had in this and we do keep trying to do our responsibility which is, Mr. Seidle, constitutional. We didn't write this, the Founding Fathers wrote it when they said we have the responsibility to promote the progress of science and useful arts by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries. We have some—a lot of discretion in how we do that, but we don't have any discretion not to do it because—unless we amend the Constitution. So all we are trying to do is to figure out the time limits to put on it, which is a good debate to have, and what our constraints we put around it. We are just trying to get information we need in these hearings to be better informed about how best to do that, and we thank all of you for sharing your expertise.

Mr. Chairman, before I yield back let me ask unanimous consent to submit for the record, open source, a writing from the National Writers Union expressing their views on the subject of today.

Mr. MARINO. Without objection.*

Mr. WATT. I yield back.

Mr. MARINO. Thank you. Ladies and gentlemen, this concludes today's hearing. I want to thank all the witnesses. It is enlightening as usual, and this is very informative. So we all appreciate it. I speak on behalf of all my colleagues up here. Listening to your insights, we take these thoughts and share them, talk to our colleagues about them and you help us try to improve the quality of life for all Americans. I want to thank our guests who came to visit us, sitting back there listening to us.

And with that, without objection all Members will have 5 legislative days to submit additional written questions for the witnesses or additional materials for the record, and this hearing is adjourned. Thank you.

[Whereupon, at 11:30 a.m., the Subcommittee was adjourned.]

*The information referred to can be found on page 133.

SUBMISSIONS FOR THE RECORD

Prepared Statement of the Honorable Sheila Jackson Lee, a Representative in Congress from the State of Texas, and Member, Subcommittee on Courts, Intellectual Property, and the Internet

First, I would like to thank Chairman Coble and Ranking Member Watt for holding today's hearing in which we will take a look at the role of copyright in American innovation. Americans from Houston, Texas, Chicago, New York, the Bay Area, and all across this great nation benefit from new technologies many of which depend on our copyright system which consists of the laws which undergird the system, buffeted by the policy and practices by which tech innovators, artists, writers, musicians, and other creators of all stripes benefit. The system stands on principles of balance and fairness which allow for continued innovation while not infringing on the property rights of others.

The roots of these laws go back many centuries, from the ancient Egyptians and people of the African Gold Coast, whose leader, Mansa Musa of ancient Ghana, traded books for gold, to the likes of political philosopher John Locke of Great Britain, who further wrote and expounded on the ideas and theory of property rights.

The purpose of today's meeting is to examine the role of technology which is quite similar, I might add, to last week's hearing which examined intersection between copyright law and policy, and the impact, whatever that might be, on innovation in America. I would note that this hearing is a good follow-up from that hearing that this Subcommittee held last week.

I am honored to have two Texans on this morning's panel, Van Linberg of Rackspace Hosting based in San Antonio, and our very own Rakesh Agrawal of Snapstream Media, which is in the heart of the 18th Congressional District. It is my hope that the economy of Texas, and Houston continue to flourish so that entrepreneurs continue to make our state and city their business and professional destination of choice.

This dichotomy between laws and new technology is the challenge that has faced patents, trademarks, and of course, copyright, in the age of technology. It is a good problem to have because it means innovation is taking place, new products are coming to market, and the wheels of entrepreneurship are turning—hence today's hearing.

The memorandum for today's hearing pointed out that technology is regulated by the Commerce Clause of the U.S. Constitution but I would go further and add that federal policies affect scientific and technological advancement on several levels.

The federal government directly funds research and development activities to achieve national goals or support national priorities such as funding basic life science research through the National Institutes of Health or new weapons of mass destruction detectors through the Department of Homeland Security. The federal government establishes and maintains the legal and regulatory framework that affects science and technology activities in the private sector. Tax, intellectual property, and education policies can have tremendous effects on private sector activity. The federal government also directly regulates certain aspects of science and technology such as limiting who is allowed to perform research with certain dangerous biological pathogens through the select agent program or who is allowed to use portions of the radio frequency spectrum for commercial purposes. The balance between innovation and societal protection is apparent in this space.

Today, because of technological advances, the average citizen in Houston rarely buys CDs, and the mention of a “piano roll” will draw blank stares from all but a handful of people; but piano rolls were all the rage in the first decade of the last century. Today, the typical music fan surfs the web to download music—legally and illegally—and has access to thousands of songs. Music service providers wishing to offer a song must search physical card files and incomplete databases to identify and locate the copyright owner. I find this to be utterly fascinating.

Mr. Chairman, I am interested in hearing from our witnesses and their perspectives on these issues. I am particularly interested in their views regarding the efficacy and feasibility of developing products which can help facilitate technology access to those on the lower end of the economic scale and not just the ultra-sophisticated high-end users who read ten blogs a day and can easily snap-up the latest and greatest in innovative products without batting an eyelash.

Thank you again for convening this hearing, Mr. Chairman. I yield back the remainder of my time.



**Prepared Statement of the
Computer & Communications Industry Association**



Before the

United States House of Representatives Committee on the Judiciary
Subcommittee on Courts, Intellectual Property, and the Internet

Regarding

“Innovation in America: The Role of Technology”

August 1, 2013

Statement of the
Computer & Communications Industry Association

The Computer & Communications Industry Association (CCIA) represents large, medium-sized, and small companies in the high technology products and services sectors, including computer hardware and software, electronic commerce, telecommunications and Internet products and services – companies that collectively generate more than \$250 billion in annual revenues. As with CCIA’s submission regarding last week’s hearing on the role of copyright in U.S. innovation,¹ this submission furnishes the committee with available empirical data relevant to the subject of the hearing. CCIA requests that this statement be included in the record of this hearing.

II. The Economic Impact of Internet-Enabled Technology on the Economy

The impact of technology, and more specifically, Internet-enabled technology, has transformed the U.S. economy, and this transformation will continue in the years ahead. The Internet accounted for 21% of GDP growth in mature economies in recent years, and, on average, 3.4% of GDP across the large economies that make up 70 percent of global GDP.² If the Internet were a nation, it would have surpassed Italy and Brazil in 2010,³ and by 2011 it

¹ Available online at <http://www.cciainet.org/CCIA/files/eclibraryFiles/Filename/00000000814/CCIA%20Stmnt%20on%20Innovation-Role%20of%20Copyrights.pdf>.

² James Manyika & Charles Roxburgh, *The great transformer: The impact of the Internet on economic growth and prosperity* (McKinsey Global Institute, October 2011), at 1, available at http://www.mckinsey.com/insights/high_tech_telecoms_internet/the_great_transformer.

³ David Dean et al., *The Connected World: The \$4.2 Trillion Opportunity - The Internet Economy in the G-20* (Boston Consulting Group 2012), at 3, available at https://publicaffairs.linx.net/news/wp-content/uploads/2012/03/bcg_4trillion_opportunity.pdf.

outranked Spain and Canada in terms of GDP, and demonstrated a growth rate faster than the Brazilian economy. In fact, in numerous advanced economies, the Internet accounted for 10% of GDP growth over the past 15 years.⁴ So rapidly has the Internet grown that its contribution to the U.S. economy now exceeds that of the U.S. Federal Government, and by 2016 is estimated to reach \$4.2 trillion across all G-20 economies.⁵ This growth is not localized within the ‘tech sector;’ research indicates that 75% of the positive impact of the Internet accrued to traditional industries through efficiency gains and expanded markets. Moreover, SMEs who heavily utilized the Internet exported twice as much as those that did not.⁶ Among selected G-20 countries in recent years, “high-Web” SMEs experienced revenue growth 22% higher than those with low or no Web usage.⁷

It is difficult to overstate the impact of this sector. Search technology alone provided at least \$780 billion in value worldwide in 2011,⁸ and while the growth of “consumer-facing” sites like Facebook, YouTube, and Twitter, have revolutionized the economy, the sector also includes a largely overlooked consumer support layer, including advertising, that contributes substantially to growth and job creation.⁹ Additional potential for growth still exists: a recent publication of the World Economic Forum concluded that the Internet “can be a powerful tool to unlock SME export potential”, and that removing barriers to Internet-enabled international trade could increase cross-border opportunities for small businesses by 60% to 80%.¹⁰

III. Impact of Technological Innovation on the Market for Content

Although new technology has considerably changed how modern users access and experience content, and in many cases disintermediated old gatekeepers, this sea change has broadly benefited both artists and consumers. Research in 2012 observes that consumers have

⁴ Matthieu Pélissier du Rausas *et al.*, *Internet matters: The Net’s sweeping impact on growth, jobs, and prosperity* (McKinsey Global Institute, May 2011), at 1, available at http://www.mckinsey.com/insights/high_tech_telecoms_internet/internet_matters; see also Manyika & Roxburgh, *supra*.

⁵ Dean *et al.*, *supra*, at 3.

⁶ du Rausas *et al.*, *supra*, at 3.

⁷ Dean *et al.*, *supra*, at 14.

⁸ Jacques Bughin *et al.*, *The impact of Internet technologies: Search* (McKinsey Global Institute 2011), at 1, available at http://www.mckinsey.com/insights/marketing_sales/measuring_the_value_of_search.

⁹ John Deighton, *Economic Value of the Advertising-Supported Internet Ecosystem* (Interactive Advertising Bureau 2012), available at http://www.iab.net/media/file/iab_Report_September-24-2012_4clr_v1.pdf.

¹⁰ World Economic Forum, *Enabling Trade, Valuing Growth Opportunities* (2013) at 19-20.

increased spending on content across the board in the last decade, as new technology has increased options for content consumption. Video, book publishing, music, and video games, have all grown over the decade since the Internet explosion.¹¹ These findings seem to be corroborated by independent academic research, which confirms that the advent of the Internet has increased the overall supply and reduced concentration in the market for recorded music.¹²

Insofar as a lack of lawful, affordable options contribute significantly to global media piracy,¹³ the availability of new outlets and platforms for content consumption help to diminish this effect. Research just published by Spotify indicates that the introduction of the service into the Netherlands and Sweden substantially decreased unlawful music downloads in those countries, whereas it still remains quite prevalent in Italy, where Spotify only just launched.¹⁴ A study just released by Norwegian firm Ipsos MMI found that the introduction of both Netflix and Spotify into that country were followed by a 50% reduction in video piracy and 80% reduction in music piracy.¹⁵

IV. Impact of Copyright Regulation on Technology Intermediaries

Although most technology and Internet sectors businesses are themselves beneficiaries of the intellectual property system, the burdens imposed in the form of IP compliance must be weighed against these benefits. Copyright regulations have as great an impact on early-stage investment, and consequently, innovation, as the economy.¹⁶ Interviews with hundreds of angel

¹¹ Michael Masnick & Michael Ho, *The Sky is Rising* (Floor64 2012), available at <http://www.cciainet.org/CCIA/files/ccLibraryFiles/Filename/0000000000586/TheSkyIsRising7-130.pdf>.

¹² A review of 30 years' data of new works of recorded music, including album sales, and traditional and Internet radio airplay, found that the total quantity of new albums released annually has increased sharply since 2000, driven by independent labels and purely digital products, along with a corresponding decreased concentration of sales in the top albums. The review also found increasing numbers of albums find commercial success without substantial traditional airplay; independent label albums account for a growing share of commercially successful albums. See Joel Waldfogel, *And the Bands Played On: Digital Disintermediation and the Quality of New Recorded Music* (Univ. Minnesota, NBER 2012 (prelim. draft)) available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2117372.

¹³ Joe Karaganis, ed., *Media Piracy in Emerging Economies* (Social Science Research Council 2011), available at <http://piracy.americanassembly.org/wp-content/uploads/2011/06/MPRE-PDF-1.0.4.pdf>.

¹⁴ Will Page, Spotify, *Adventures in the Netherlands*, July 17, 2013, available at <http://press.spotify.com/uk/2013/07/17/adventures-in-netherlands/>.

¹⁵ Sophie Curtis, *Spotify and Netflix Curb Music and Film Piracy*, The Telegraph, July 18, 2013, available at <http://www.telegraph.co.uk/technology/news/10187400/Spotify-and-Netflix-curb-music-and-film-piracy.html>.

¹⁶ Matthew Le Merle et al., *The Impact of U.S. Internet Copyright Regulations on Early-Stage Investment A Quantitative Study* (Booz & Company 2011), available at

¹⁶ <http://www.booz.com/media/file/BoozCo-Impact-US-Internet-Copyright-Regulations-Early-Stage-Investment.pdf>.

investors and venture capitalists found them to be overwhelmingly wary of new regulations and to seek an unambiguous copyright regime. In particular, increasing user or website liability would negatively affect innovation by driving early investors into other areas. Polling conducted by Booz & Co. found that such risk could have the effect of reducing the pool of interested angel investors by 81%, and that increased exposure for users would likely reduce the pool of interested angel investors by 48%.¹⁷ In general, 80% of investors polled reported being uncomfortable investing in business models in which the regulatory framework is ambiguous.¹⁸

Changes in copyright law and policy that provide more certainty for intermediaries, such as the Court of Appeals for the Second Circuit's decision in *Cartoon Network, LP v. CSC Holdings, Inc.* ("*Cablevision*"), positively impact venture capital investment in cloud computing. The *Cablevision* decision led to additional incremental investment in U.S. cloud computing firms that ranged from \$728 million to approximately \$1.3 billion over the two-and-a-half years after the decision; the approximate equivalent of \$2 to \$5 billion in traditional R&D investment.¹⁹ After the *Cablevision* decision, the average quarterly investment in cloud computing in the United States increased by approximately 41 percent.²⁰ In contrast with the U.S. law, European courts took a different approach, reaching decisions that increased risk for the online intermediary platforms that account for 1.4% of the European GDP.²¹ Copyright decisions in France and Germany unfavorable to cloud computing led to an average reduction in VC investment in French and German cloud computing firms of \$4.6 and \$2.8 million per quarter, respectively, implying a total decrease in French and German VC investment of \$87 million from the time these decisions were handed down through the end of 2010.²²

¹⁷ *Id.* at 6.

¹⁸ *Id.*

¹⁹ Josh Lerner *et al.*, *The Impact of Copyright Policy Changes on Venture Capital Investment in Cloud Computing Companies* (Analysis Group 2011), at 1, available at http://www.analysisgroup.com/uploadedFiles/Publishing/Articles/Lerner_Fall2011_Copyright_Policy_VC_Investments.pdf.

²⁰ *Id.* at 9.

²¹ Copenhagen Economics, *Online Intermediaries: Assessing the Economic Impact of the EU's Online Liability Regime* (FDiMA 2012), at 24, available at <http://www.europeandigitalmedia.org/uploads/Press/documents/Copenhagen%20Economics-Online%20Intermediaries-201201.pdf>.

²² Josh Lerner *et al.*, *The Impact of Copyright Policy Changes in France and Germany on Venture Capital Investment in Cloud Computing Companies* (Analysis Group 2012), at 1, available at http://www.analysisgroup.com/uploadedFiles/News_and_Events/News/2012_EU_CloudComputing_Lerner.pdf.

As CCIA has previously noted, much of this important industrial activity benefits from various limitations and exceptions to copyright.²³ The balance inherent in U.S. copyright law, including limitations such as fair use, has nurtured an environment of productive growth, and economic expansion. In 2008 and 2009, industries benefiting from limitations and exceptions to copyright accounted for an average of 4.6 trillion in revenues, and contributed an annual average of \$2.4 trillion in “value added” to the U.S. economy, or approximately 17 percent of total U.S. current dollar GDP (roughly one-sixth of the economy.) This ‘fair use economy’ employs 17 million people, about 1 in 8 U.S. workers, and in 2008-09 generated a payroll averaging \$1.2 trillion. Exports of goods and services related to fair use industries increased to \$266 billion in 2008-09. Notably, exports of trade-related services, including Internet or online services, were the fastest growing segment, increasing nearly ten-fold from \$578 million in 2002 to more than \$5 billion annually in 2008-2009.²⁴

V. Conclusion

Scholars have furnished numerous proposals by which Congress can ensure that IP regulations promote continued growth in the 21st century business landscape,²⁵ and these proposals may merit consideration at the appropriate time. As CCIA stated in response to the Committee’s prior hearing, however, a broader copyright reform effort should begin with objective research, as called for by the National Academies’ recent report, *Copyright in the Digital Era*.²⁶ Providing for such research will be an essential first step in this process of reviewing the Copyright Act.

²³ Thomas Rogers & Andrew Szamoszegi, *Fair Use in the U.S. Economy: The Economic Contribution of Industries Relying Upon Fair Use* (CCIA 2011), available at <http://www.cciact.org/CCIA/files/ecl.libraryFiles/Filename/000000000526/CCIA-FairUseintheUSEconomy-2011.pdf>.

²⁴ *Id.* The U.S. is not alone in this experience. Research indicates that the introduction of fair use amendments in Singapore substantially increased the growth of industries relating to private copying technology, while having a negligible impact on copyright industries. Royce Ghafale & Benjamin Gibert, *The Economic Value of Fair Use in Copyright Law: Counterfactual Impact Analysis of Fair Use Policy On Private Copying Technology and Copyright Markets in Singapore* (Oxford Ltd. 2012), available at http://works.bepress.com/royce_ghafale/12. Research in Europe also indicates a substantial reliance on copyright “flexibilities”, although not as substantial as in the United States. See P. Berni Hugenholtz & Martin R.F. Scuffelen, *Fair Use in Europe. In Search of Flexibilities* (Universiteit van Amsterdam 2011), available at <http://www.ivir.nl/publications/hughenoltz/Fair%20Use%20Report%20PUB.pdf>.

²⁵ See, e.g., Michael Carrier, *Innovation for the 21st Century: Harnessing the Power of Intellectual Property and Antitrust Law* (Oxford Univ. Press 2009), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1368931.

²⁶ National Research Council, *Copyright in the Digital Era: Building Evidence for Policy* (2013) at ix, available at http://www.nap.edu/catalog.php?record_id=14686.

Prepared Statement of Dorian Daley, General Counsel, Oracle Corporation

Statement of Dorian Daley, General Counsel, Oracle Corporation
House Judiciary Committee, Subcommittee on Courts, Intellectual Property and the
Internet
Hearing on “Innovation in America: The Role of Technology”
August 1, 2013

Oracle Corporation is the world’s largest enterprise software company. With more than 390,000 customers—including all of the Fortune 100—and with deployments across a vast array of industries in more than 145 countries, Oracle offers an optimized and fully integrated stack of business hardware and software systems. Oracle’s human and financial capital is deeply committed to research and development—with more than 32,000 full time employees and \$5 billion a year dedicated to those efforts—and that commitment has resulted in products that range from servers and storage, to databases and middleware, to the world’s leading business applications. Through the creativity of its software designers, the ingenuity of its engineers, and the acumen of its business people, Oracle delivers systems that provide unmatched performance, reliability, security, and flexibility, thereby increasing its customers’ productivity.

Oracle’s past and continued success depends significantly on the continued availability and consistent application of our copyright laws, so I am grateful that the Subcommittee has given me the opportunity to provide it with this written testimony. Our company also commends the Subcommittee on its undertaking of a review of these laws. It is particularly gratifying that, in a time of extremist positions and shrill voices in the various copyright debates, the Subcommittee has set a higher standard for discourse with a calm and neutral review of the law, rather than rushing to revise it.

Copyright Is Essential to Technology Companies

Copyright law by its very nature is intended to promote progress. The constitutional mandate that required Congress to create exclusive rights in authors was directed toward “the progress of science and the useful arts,” so that creators will be incentivized to create—and to disseminate—their work, confident that they will enjoy both the recognition of their creation and any financial rewards for a defined period of time.¹ Thus companies like Oracle rely on the robust protections provided by the existing copyright laws when they continue their innovation in software and pursue the research and development efforts that will bring that software to its most productive uses for consumers. Without such protections, competitors, both foreign and domestic, all too easily are able to copy the successful results of these labors without making similar investments.

It is for this simple reason that the software industry has come to rely so heavily upon copyright law. Without its protections, the products of creativity are a common feast, and the incentive (and even the capacity) to innovate is correspondingly diminished. Thus, those who would frame the essential copyright debates as between the content community, on the one hand, and the technology community, on the other hand, are missing an essential point: technology companies rely on copyright law protections just as media and entertainment companies do. As this Subcommittee has correctly recognized during the last three copyright review hearings,

¹ U.S. CONST. art. I, § 8, cl. 8; *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 432 (1984) (“The immediate effect of our copyright law is to secure a fair return for an ‘author’s’ creative labor. But the ultimate aim is, by this incentive, to stimulate artistic creativity for the general public good.”); *CCC Info. Servs., Inc. v. Maclean Hunter Mkt. Reports, Inc.*, 44 F.3d 61, 65 (2d Cir. 1994) (“[T]he objectives of the copyright law, which are, as dictated by the Constitution, to promote the advancement of knowledge and learning by giving authors economic incentives (in the form of exclusive rights to their creations) to labor on creative, knowledge-enriching works.”); *Pac. & S. Co., Inc. v. Duncan*, 744 F.2d 1490, 1498–99 (11th Cir. 1984) (noting that the copyright laws, consistent with the Constitution, are intended to benefit society as a whole by providing authors with an incentive to create).

copyright law reflects a complicated balance among many different interests, and the technology sector, along with others, relies on both copyright law's protections as well as its limitations for its continued viability.

This balance can only be maintained if the copyright laws are clear and consistent. We have long heard cries to change the copyright laws each time a significant new technology emerges, but doing so would upset the expectations of those making substantial contributions based upon existing understandings of the bounds of the law. In the face of new means of creating copyrightable works, or of sharing them, or of infringing them—as with the many permutations of file-sharing technologies—the responsible public policy approach is to judge those new technologies' uses against the core principles of the existing law, not to alter the law to accommodate the new technologies. Thus, as this Subcommittee proceeds in its review, it is Oracle's hope that it will do so with an acknowledgement that, for the most part, the copyright laws continue to serve their intended purpose, and that creators and innovators in American industry, including the software industry, rely on them in making continued investments in our country's economic future.

Software Relies Heavily on Clear and Consistent Copyright Protection

Software is ubiquitous in American life. In a single generation, software has been created to enhance the development of many different industries, as well as the productivity and entertainment of people. Whether it is NASA scientists, financial analysts, or families at home, the powers of computers have been harnessed to assist individuals in every personal and professional endeavor. The functionality provided by software includes wired and wireless communications, security and encryption, management and analysis of the world's data,

graphical display and the reproduction of sound, and any number of additional and critical functions. With the proliferation of mobile devices, the majority of Americans now keep what at one time would have been considered a supercomputer in their pockets.

Every one of these devices—the cell phones, the GPS in cars, the trading software used on the New York Stock Exchange, the Copyright Office’s electronic registration system, and this Subcommittee’s website—operate using computer software. The creation of that software took a substantial investment of creativity, time, and money. Complicated code—the code that we rely on to land our planes, to maintain our phone calls, and to operate the Internet—requires years of intense consideration and design, and then years of reevaluation and amendments. Software engineers face countless choices in designing their software. Each choice can affect the structure, aesthetics, and performance of the software. Each choice also relies on the ones that have come before it and that will come after it. It is not surprising that those who design these monoliths of computer code are referred to as architects.

The code designers and systems architects of the United States lead the world in software innovation. Our industry creates and supports high-skill, high-wage jobs that drive our country’s economic growth.² Those jobs and the success of the American economy, however, depend critically on the continued availability of robust copyright protection for software. In the digital age, it is far too easy to appropriate others’ creative work; we know too well the effectiveness of

² Economics and Statistics Administration and U.S. Patent and Trademark Office, *Intellectual Property and the U.S. Economy: Industries in Focus*, March 2012, at 54 (“Exports of IP-intensive service-providing industries totaled about \$90 billion in 2007, accounting for approximately 19 percent of total U.S. private services exports. As shown in Figure 10, exports of software publishers, at \$22.3 billion, were the largest group of services exports in 2007”); see also *id.* at 41 (noting 2.4 percent job growth in copyright-intensive industries during the 2010-2011 economic recovery period, outpacing other IP-intensive industries (patent and trademark) and non-IP-intensive industries), 45 (“While IP-intensive industries accounted for 18.8 percent of all jobs in the economy in 2010, their \$5.06 trillion in value added in 2010 represented 34.8 percent of total GDP.”), available at http://www.uspto.gov/news/publications/IP_Report_March_2012.pdf.

the new and emerging means of acquiring, copying, altering, and deconstructing copyrighted works. The widespread, popular use of unauthorized music and movie downloading—and the content industry’s outcry against such thievery—has made most Americans quite familiar with digital media piracy, but software piracy deserves much more attention. One recent study found that a one percent increase in the use of properly licensed software, instead of pirated software, would lead to a \$15.1 billion increase in economic value for the United States.³

The copyright laws form a crucial defense against the unauthorized copying of computer software. In 1978, the National Commission on New Technological Uses of Copyrighted Works recognized that the “need for protecting the form of expression chosen by the author of a computer program ha[d] grown proportionally with two concurrent trends. Computers ha[d] become less cumbersome and expensive . . . [and] programs ha[d] become less and less frequently written to comply with the requirements imposed by a single-purpose machine.”⁴ Those trends only have intensified in the years since CONTU’s final report. There is no question that software—as an “original work of authorship fixed in a tangible medium of expression”—merits copyright protection.⁵ There should be no question that it continues to do so.

³ BSA: The Software Alliance, *Competitive Advantage: The Economic Impact of Properly Licensed Software*, May 21, 2013, at 4.

⁴ National Commission on New Technological Uses of Copyrighted Works, *Final Report*, July 31, 1978, at 10.

⁵ 17 U.S.C. § 102(a); *see also* 17 U.S.C. § 101 (“A ‘computer program’ is a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result.”); *Computer Associates Int’l, Inc. v. Altai, Inc.*, 982 F.2d 693, 702 (2d Cir. 1992) (“It is now well settled that the literal elements of computer programs, i.e., their source and object codes, are the subject of copyright protection.”) (citing *Whelan Assocs., Inc. v. Jaslow Dental Laboratory, Inc.*, 797 F.2d at 1233 (source and object code); *CMS Software Design Sys., Inc. v. Info Designs, Inc.*, 785 F.2d 1246, 1247 (5th Cir.1986) (source code); *Apple Computer, Inc. v. Franklin Computer Corp.*, 714 F.2d 1240, 1249 (3d Cir.1983), *cert. dismissed*, 464 U.S. 1033, 104 S.Ct. 690, 79 L.Ed.2d 158 (1984) (source and object code); *Williams Elecs., Inc. v. Artic Int’l, Inc.*, 685 F.2d 870, 876–77 (3d Cir.1982) (object code)).

Copyright law also forms the backbone for the wide variety of proprietary and open source distribution models available to modern software developers. Some developers sell their software under proprietary licenses. Some choose to distribute their software under one of the vast array of available open source licenses, each with its own set of requirements and limitations.⁶ And yet others choose to distribute their software without restrictions. No matter which model a software developer chooses, it is copyright law that serves as a backstop to the enforcement of those licenses. This is particularly true in the case of open source licenses, which typically do not contain separately enforceable contract provisions that could serve as the basis for a breach of contract claim. As the Federal Circuit noted, “Copyright holders who engage in open source licensing have the right to control the modification and distribution of copyrighted material.”⁷ Simply because a software developer decides not to commercialize its product in exchange for monetary compensation does not mean that the developer does not extract value from its software and does not mean that it should be deprived of control over its work.⁸ Copyright law is not the enemy of the open source software movement; quite to the contrary, it provides an important mechanism for maintaining its long-term viability. Without enforceable copyright license terms, popular open source projects such as Linux, Apache HTTP Server and MySQL could fragment and splinter into oblivion.

⁶ *Jacobsen v. Katzer*, 535 F.3d 1373, 1378 (Fed. Cir. 2008) (“Public licenses, often referred to as ‘open source’ licenses, are used by artists, authors, educators, software developers, and scientists who wish to create collaborative projects and to dedicate certain works to the public. Several types of public licenses have been designed to provide creators of copyrighted materials a means to protect and control their copyrights.”).

⁷ *Id.* at 1381.

⁸ *Id.* at 1381–82 (“Copyright licenses are designed to support the right to exclude; money damages alone do not support or enforce that right. The choice to exact consideration in the form of compliance with the open source requirements of disclosure and explanation of changes, rather than as a dollar-denominated fee, is entitled to no less legal recognition. Indeed, because a calculation of damages is inherently speculative, these types of license restrictions might well be rendered meaningless absent the ability to enforce through injunctive relief.”).

Copyright Is, and Should Remain, Medium-Neutral and Technology-Indifferent

As we all consider reviewing the copyright laws, some have suggested that the emergence of new technologies—and the new functionalities they offer that directly implicate copyrighted works—justifies amending the copyright laws to accommodate them. This proposal is worse than unwise—it is dangerous.

The copyright laws generally are designed to be medium-neutral. The Copyright Act provides that “copyright protection subsists . . . in original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.”⁹ In fact, though not separately enumerated, computer programs are protected under the Copyright Act as literary works. Congress confirmed as much when it enacted a statutory definition of the term “computer program” in Section 101.¹⁰ Congress also declined to enact special rules that would apply only to computer programs, other than the narrow exceptions permitting an owner of a copy to create a copy or adaptation “as an essential step in the utilization of the computer program in conjunction with a machine” and to make a backup copy.¹¹ In all other respects, Congress clearly intended the copyright laws to apply to computer programs based upon the same principles that apply to other literary works. Similarly, musical works; dramatic works; pantomimes and choreographic works; pictorial, graphic, and sculptural

⁹ 17 U.S.C. § 102(a) (emphasis added); see also *Greenberg v. Nat’l Geographic Soc.*, 533 F.3d 1244, 1257 (11th Cir. 2008) (“[T]he principle of media neutrality is a staple of the Copyright Act . . .”).

¹⁰ *An Act to amend the patent and trademark laws*, Pub. L. No. 96-517 §10(a), 94 Stat. 3015, 3028 (1980).

¹¹ 17 U.S.C. § 117.

works; motion pictures and other audiovisual works; sound recordings; and architectural works, all are defined as works of authorship under the statute's non-exclusive definition.¹²

The decision to keep the copyright laws neutral and to provide the opportunity that future works will be afforded the same protections as known works is important to continued innovation in society. By keeping the laws medium-neutral, those that develop new technologies and new works are guaranteed to receive the same protections as the developers of existing works. Similarly, companies that, as discussed above, heavily invest in existing technologies are able to rely upon the fact that copyright law will continue to protect their investments to the same extent as newer technologies.

The suggestion to revise the copyright laws each time a new technology is developed would threaten this careful balance. Instead, as crafted by the current legal regime, the courts are capable of applying the Copyright Act's general principles to new technologies. The U.S. judicial system is able to determine what a work of authorship is, what constitutes a reproduction or a distribution, and when a use should qualify as an exception to copyright infringement. It simply is not the case that new technologies need special protections in order to flourish. To the contrary, advances in digital technologies have made the unauthorized copying and widespread distribution of copyrighted works easier. Every year, software piracy becomes a greater threat to the United States' position as a leader in computer innovation. If anything, additional protections are needed to safeguard the investments made by copyright holders against such acts. Such changes, like any other changes to the copyright laws, should only be made after careful reflection.

¹² 17 U.S.C. § 102(a).

Some commentators are clearly tempted to cast the current debate about copyright law as a battle between content companies and technology companies, and treat the periodic emergence of some new technology as a facile justification for distorting the copyright laws to protect that technology, rather than as a moment to consider how best to preserve the fundamental promises of the Copyright Act. The copyright laws should not become the tools of an agenda that has more to do with protecting the latest technology or business model than with promoting the progress of science and the useful arts. As a technology company, Oracle is well-placed to declare that it is the rights inhering in the “fixed expressions” that the copyright code should consider, not the possibility of exploiting those exclusive rights for the technological innovation or business model of the moment. We thank the Subcommittee for its dedication to the task of ensuring a healthy and robust system of copyright, and appreciate the opportunity to add Oracle’s voice to the conversation.

