



February 21, 2017

The Honorable Karyn Temple Claggett
Acting Register of Copyrights
U.S. Copyright Office
101 Independence Avenue, SE
Washington, DC 20559-6000

Re: Section 512 Study: Request for Additional Comments
Docket No. 2015-7 (November 08, 2016)

Dear Acting Register Claggett:

Google Inc. (“Google”) appreciates the opportunity to submit additional comments in connection with the U.S. Copyright Office (the “Office”) Request, *Section 512 Study: Notice and Request for Public Comment*, 80 Fed. Reg. 251. We share the Office’s interest in ensuring the efficiency and effectiveness of the safe harbor provisions contained in 17 U.S.C. § 512 for owners, online intermediaries, and users of copyrighted works. Our initial comments (“Google’s April 1 Comments”) explained why the stable safe harbor framework established by Section 512 is crucial not only to Google’s many online products and services but to the growth of the Internet, and shared some of the steps we have taken to combat piracy online. In these reply comments, we take the opportunity to explain the workings of Content ID, and to address certain of the Office’s additional questions.

Introduction

Section 512’s notice-and-takedown regime has met Congress’s twin goals: it has “facilitate[d] the robust development and world-wide expansion of electronic commerce, communications, research, development, and education,” S. Rep. 105-190 at 1, while also providing copyright owners with a useful tool to protect their works at scale without having to hire a lawyer or register works.¹ Moreover, Section 512 has produced a stable body of law² on which those who invest in the next generation of online service providers (“OSPs”) rely.³ Section 512 has laid a foundation, atop which established OSPs have developed innovative systems (like YouTube’s Content ID and other measures described in our April 1 Comments)⁴

¹ See Google’s April 1 Comments, at 1-4.

² See *id.* at 5, 12-16.

³ See *id.* at 17-18.

⁴ *Id.* at 13.



that go far beyond what the DMCA requires and enable copyright owners to monetize uploads of their content by third parties. At the same time, Section 512 preserves flexibility for less established platforms without the resources to develop and implement such systems.⁵

While the DMCA has not by itself eliminated rogue sites exploiting the copyrighted work of others, it has succeeded in fostering collaboration and economic growth, and in driving many rogue actors from the marketplace. The judicial record is clear, moreover, that rogue sites have found no shelter in the DMCA's safe harbors. Instead, this activity has successfully been driven out of the United States. The vast majority of the remaining rogue sites have moved offshore, out of the reach of the DMCA; further tinkering with the U.S. copyright regime is therefore unlikely to impact their behavior. As Ian Ballon put it at the San Francisco Roundtable, the issue of rogue sites is not a DMCA safe harbor issue.⁶ Online service providers and rightsholders have nevertheless continued to collaborate to develop voluntary cross-industry efforts, such as supply-side initiatives (making more lawful content available), coupled with follow-the-money strategies, to address these ongoing challenges.⁷ Early evidence suggests that these efforts are proving successful.⁸

In short, the DMCA has proven successful at fostering ongoing collaboration between rightsholders and online service providers, a collaboration that continues to pay dividends both in the U.S. and in international contexts.

Content ID

As described in our April 1 Comments, Content ID on YouTube is one example of the voluntary measures Google has taken, above and beyond the requirements of the DMCA safe harbors, to collaborate with and address the concerns of rightsholders.⁹ As a voluntary measure, Content ID is not directly relevant to the Office's inquiry regarding Section 512. Nevertheless, because Content ID was mentioned by several parties in the written and oral commentary presented to the Office in connection with the Section 512 Study, it may be helpful to provide additional facts about the system and its use in practice.

⁵ See *id.* at 3-4.

⁶ Transcript of May 12, 2016 Section 512 Public Roundtable, at 263 (comments of Ian Ballon, Stanford Law Sch. Ctr. for E-Commerce), available at https://www.copyright.gov/policy/section512/public-roundtable/transcript_05-12-2016.pdf ("There's a very big problem with rogue sites, but that's a separate problem from the DMCA, and I think that that's important.").

⁷ See Google's April 1 Comments, at 7-8.

⁸ A Bunch of Weak Anti-Piracy Measures Are Still a Pest to Pirates, TorrentFreak (Jan. 7, 2017), available at <https://torrentfreak.com/a-bunch-of-weak-anti-piracy-measures-are-still-a-pest-to-pirates-170107/>.

⁹ See How Google Fights Piracy, Google, available at <https://drive.google.com/file/d/0BwxyRPFduTN2TmpGajJ6TnRLaDA/view>.



In order to use Content ID, rightsholders identify the works they own or control by providing reference files of those works, along with metadata defining the scope of their copyright rights in those works. Those reference files are fingerprinted such that even small portions can be identified even if major changes are made to them (e.g., changes in dimensions, positioning, colors, or speed of playback). New user videos uploaded to YouTube are compared against that database of fingerprints, and YouTube then applies the business rules chosen by the relevant rightsholders. YouTube also scans the corpus of previously uploaded videos in order to locate matches against new reference files provided by rightsholders.

Using Content ID, rightsholders set various thresholds for declaring a match on their own content, as well as what to do with matches. Rightsholders can decide to block content from ever appearing on YouTube in the first place, to track usage of their material but otherwise take no action, or to monetize the claimed content by placing advertising against it. Although the use of Content ID is not conditioned on licensing any content for use on YouTube, more than 90% of all claims result in this third option, monetization. In fact, the major record labels opt to monetize their content more than 95% of the time. To put it another way, while Content ID today offers rightsholders the option to exercise “takedown-staydown” of their works, the overwhelming majority of rightsholders prefer to use Content ID to “leave-up-and-get-paid.”

Content ID is currently used by more than 8,000 partners representing hundreds of thousands of rightsholders. The system contains more than 50 million reference files, and has allowed rightsholders to claim more than 400 million videos. YouTube has paid more than \$2 billion to rightsholders from Content ID alone, over and above other YouTube payments to rightsholders. After nearly a decade of constant improvement, Content ID can now match on video, sound recording, and even the melodies of musical compositions, each of which may be subject to different claims with different rules.¹⁰

While Content ID is being used by thousands of partners, Content ID is not a tool that is appropriate for everyone. It is an enterprise tool, providing a complex set of controls with platform-wide reach. Tools this powerful and complex can have significant consequences when misapplied. For example, a local news service that routinely claimed its news broadcasts forgot to exclude from its claim embedded NASA footage relating to the Mars rover landing. This resulted in mistaken claims on many other stories using the same, public-domain footage, and even a Content ID claim barring the video from appearing on NASA’s own site.¹¹ For this reason, YouTube carefully evaluates applications from those who want to become Content ID partners. In reviewing these applications, we take many factors into account, including how popular the applicant’s works are on the platform, how many DMCA notices have been

¹⁰ We note also that many of the examples offered by other commenters concerning Content ID’s operation are years old. As you might expect from any ongoing software project, the Content ID of 2007 or 2010 is barely relevant to the performance of the current Content ID, which continues to evolve.

¹¹ Timothy Lee, *As Curiosity Touches Down on Mars, Video Is Taken Down from YouTube*, *Ars Technica* (Aug. 6, 2012), available at <https://arstechnica.com/tech-policy/2012/08/as-curiosity-touches-down-on-mars-video-is-taken-down-from-youtube>.



sent on their behalf, the quality of the DMCA notices previously sent, and whether a significant portion of the applicant's catalog is already represented by existing Content ID partners.

For rightsholders who are not good candidates to be Content ID partners directly, a growing number of existing Content ID partners act as aggregators, representing smaller rightsholders.¹² Examples in the music field include The Orchard Music, AdRev, CD Baby, Believe Music, Ingrooves, Kontor New Media Music, Merlin, and Rumblefish. These are just a few of more than 30 such service providers operating on YouTube, who collectively manage more than 13 million sound recordings on YouTube on behalf of smaller rightsholders.

While Content ID has been a great success on YouTube, it is worth stressing again that its success is closely tied to its development as a voluntary measure, suited to the particular context of YouTube. As we explained in our April 1 Comments, the technical feasibility of such an automated system depends on the nature of the online service and the nature of the works to be identified.¹³ What is technically feasible for a public video hosting service like YouTube is not necessarily feasible for a private, encrypted messaging or file locker service, for a service that hosts non-video content, or for a service that primarily relies on sharing links rather than hosting content. For this reason, "staydown" obligations on service providers generally are better left to voluntary efforts, rather than legal mandates. In fact, Facebook, Tumblr, Twitch, SoundCloud, DailyMotion, and Scribd have all described similar voluntary efforts in their submissions to this Study.

The U.S. Copyright Office's Additional Questions

Characteristics of the Current Internet Ecosystem

Question 1: As noted above, there is great diversity among the categories of content creators and ISPs who comprise the Internet ecosystem. How should any improvements in the DMCA safe harbor system account for these differences? For example, should any potential new measures, such as filtering or stay-down, relate to the size of the ISP or volume of online material hosted by it? If so, how? Should efforts to improve the accuracy of notices and counter-notices take into account differences between individual senders and automated systems? If so, how?

Because the safe harbor system is working (as described in the Introduction), and because investors and others rely on the stability it has provided, imposing mandatory additional obligations on service providers, such as filtering, or stay-down, is unwarranted. As described above, many large OSPs have voluntarily developed systems that go far beyond the floor set by Section 512.¹⁴ But voluntary methods

¹² For more information, see the YouTube Creator Services Directory, available at <https://servicesdirectory.withyoutube.com/>.

¹³ Google's April 1 Comments, at 10.

¹⁴ See, e.g., Comments of Facebook, Inc., at 4, 6-8, In re Section 512 Study: Notice and Request for Public



that work in one context (e.g., Content ID for YouTube) cannot be freely transported to another (e.g., search engines and social networks, where the content at issue is not uploaded or otherwise possessed by the OSP and thus is unavailable for scrutiny).¹⁵ The virtue of Section 512 is that it allows flexibility; imposing stringent up-front requirements on large OSPs would displace this flexibility and produce little in the way of tangible results beyond disruption of the settled expectations that have driven investment.

Moreover, we are not aware of any principled or technically sound basis on which to discriminate among OSPs with respect to mandatory copyright obligations. As was pointed out during the roundtable sessions, neither the size of a company nor the number of users it serves is a good proxy for whether copyright infringement is a problem on a particular platform or whether an OSP can afford to shoulder additional legal and technical obligations to protect the interests of copyright owners. Drawing arbitrary lines to distinguish how copyright laws apply to different OSPs is likely only to encourage gamesmanship and create market distortions that hinder economic growth and competition.

Question 2: Several commenters noted the importance of taking into account the perspectives and interests of individual Internet users when considering any changes to the operation of the DMCA safe harbors. Are there specific issues for which it is particularly important to consult with or take into account the perspective of individual users and the general public? What are their interests, and how should these interests be factored into the operation of section 512?

It is important to remember that in the digital age, users are also creators. The world is in the grip of the biggest explosion of creativity in history.¹⁶ People everywhere use new digital tools to create, and can share their works worldwide through new platforms. In particular, it is easier than ever for creators large and small to connect with an audience, build a fanbase, and earn a living without traditional intermediaries. Every day, more than 1,000 YouTube channels cross the 1,000-subscriber milestone, and in the last 12 months, YouTube has paid artists more than \$1 billion from ad revenue alone. Many of these are individual artists who are reaching their audiences directly and earning a living. Increasing burdens on OSPs and decreasing legal certainty about the channels through which these new creators make their living threatens this renaissance. Accordingly, if the Office intends to get a complete picture of the functioning of the DMCA safe harbor system, it should reach out to these new creators on platforms like YouTube, Instagram, the iTunes App Store, Google Play, Etsy, Twitch, and DeviantArt, to name just a few.

Comment (No. 2015-7), available at <https://www.regulations.gov/contentStreamer?documentId=COLC-2015-0013-90724&attachmentNumber=1&contentType=pdf>; Comments of Soundcloud Operations, Inc., at 13-14, In re Section 512 Study: Notice and Request for Public Comment (No. 2015-7), available at <https://www.regulations.gov/contentStreamer?documentId=COLC-2015-0013-90151&attachmentNumber=1&contentType=pdf>.

¹⁵ Google's April 1 Comments, at 10.

¹⁶ See Michael Masnick & Michael Ho, *The Sky Is Rising 2*, Floor64 (Jan. 2013), available at <https://www.techdirt.com/skyisrising2>; Michael Masnick & Michael Ho, *The Sky Is Rising*, Floor64 (Jan. 2012), available at <https://www.techdirt.com/skyisrising/>.



Operation of the Current DMCA Safe Harbor System

Question 3: Participants expressed widely divergent views on the overall effectiveness of the DMCA safe harbor system. How should the divergence in views be considered by policy makers? Is there a neutral way to measure how effective the DMCA safe harbor regime has been in achieving Congress’s twin goals of supporting the growth of the Internet while addressing the problem of online piracy?

The best way to measure whether Congress’s twin goals have been met is to consider the state of the online industry and the state of the content industries. Streaming services are displacing piracy.¹⁷ Music consumption is exploding worldwide¹⁸ and traditional-music-industry revenues are growing.¹⁹ The Internet is thriving. Television is in a second Golden Age.²⁰ These trends show that the DMCA has been effective in meeting both of Congress’s goals.

Those expressing negative views about the DMCA safe harbor often cite the large number of takedown notices submitted to Google Search as evidence that the safe harbor is ineffective.²¹ That premise does not follow—copyright owners would not submit a large volume of takedown requests unless they believed doing so was worthwhile. And other explanations for the increase in notices are more persuasive. First, in recent years, Google has streamlined its submission process, enabling rightsholders to send more notices more easily (while still continuing to reduce the average time to resolution to under six hours). Second, Google has provided new incentives to make heavy use of the DMCA takedown system. We now use the number of valid DMCA requests a domain has received as one of the inputs in making ranking determinations in search results, so rightsholders seeking to take advantage of this signal have further

¹⁷ Luis Aguiar & Joel Waldfoegel, *Streaming Reaches Flood Stage: Does Spotify Stimulate or Depress Music Sales?*, at 4 (European Joint Research Ctr., Working Paper 2015/05, 2015), available at <https://ec.europa.eu/jrc/sites/jrcsh/files/JRC96951.pdf> (concluding that an increase of 47 streams has the effect of one less pirate download); *id.* at 36 (presenting data and analysis to this effect).

¹⁸ “Music Consumption Exploding Worldwide” is in fact the subtitle of the IFPI’s own 2016 Global Music Report. IFPI, *Global Music Report* (2016), available at <http://www.ifpi.org/downloads/GMR2016.pdf>.

¹⁹ *Id.* at 8 (noting that global music revenue grew by 3.2% in 2015).

²⁰ See Jon Erlichman, *The ‘Golden Age of TV’ Has a Lot of People Worried – Here’s Why*, *Fortune* (Jan. 18, 2016), available at <http://fortune.com/2016/01/18/golden-age-tv-peak/> (noting a 94% increase in the number of scripted shows being created, and considering whether there may be negative market effects from *too much* television).

²¹ See, e.g., Transcript of May 2, 2016 Section 512 Public Roundtable at 54, available at https://www.copyright.gov/policy/section512/public-roundtable/transcript_05-02-2016.pdf (comments of Victoria Sheckler, RIAA); Joint Comments of American Association of Independent Music et al., at 25-26, In re Section 512 Study: Notice and Request for Public Comment (No. 2015-7), available at <https://www.regulations.gov/contentStreamer?documentId=COLC-2015-0013-89806&attachmentNumber=1&contentType=pdf>.



incentive to file notices.²² And third, the vendor ecosystem has matured; third parties that handle generation and submission of notices have become more sophisticated and automated, driving up submission numbers.

Additionally, a significant portion of the recent increases in DMCA submission volumes for Google Search stem from notices that appear to be duplicative, unnecessary, or mistaken. As we explained at the San Francisco Roundtable, a substantial number of takedown requests submitted to Google are for URLs that have *never* been in our search index, and therefore could never have appeared in our search results.²³ For example, in January 2017, the most prolific submitter submitted notices that Google honored for 16,457,433 URLs. But on further inspection, 16,450,129 (99.97%) of those URLs were not in our search index in the first place. Nor is this problem limited to one submitter: in total, 99.95% of *all* URLs processed from our Trusted Copyright Removal Program in January 2017 were not in our index.

In order to ensure that these URLs never appear in our search results in the future, we do accept notices for URLs that are not in our search index. Nevertheless, these “hypothetical” DMCA notices should not be assumed to correspond to a large number of suspicious URLs in Google’s search results. They instead reflect the fact that submitters file notices for URLs without regard to whether those URLs are in Google’s index, and thus could ever have turned up in search results. In fact, of the 35,000,000 URLs we processed in the latter half of September 2016 that were not in our index, fewer than 2% of those would have made it into our index in the intervening four months; notices for the other 98% therefore were at best unnecessary. The large number of takedown requests Google receives is thus not a good proxy for the number of allegedly infringing URLs that appear in Google’s index.

Nor is the large number of takedown requests to Google a good proxy even for the volume of infringing material available on the Internet. Many of these submissions appear to be generated by merely scrambling the words in a search query and appending that to a URL, so that each query makes a different URL that nonetheless leads to the same page of results.²⁴ Other websites report similar experiences.²⁵

²² Google, Inside Search (Aug. 10, 2012), available at <https://search.googleblog.com/2012/08/an-update-to-our-search-algorithms.html>.

²³ Transcript of May 13, 2016 Section 512 Public Roundtable, at 77-78, available at https://www.copyright.gov/policy/section512/public-roundtable/transcript_05-13-2016.pdf (comments of Fred von Lohmann, Google).

²⁴ See, e.g., DMCA (Copyright) Complaint to Google (Aug. 29, 2016), archived at <https://lumendatabase.org/notices/12937354#>.

²⁵ 4shared: Copyright Holders Abuse Google’s DMCA Takedown System, TorrentFreak (Nov. 23, 2016), available at <https://torrentfreak.com/4shared-copyright-holders-abuse-googles-dmca-takedown-system-161123/> (“What we can see is that numerous complaints provide a redundant volume of links that look like some machine-built template as well as a large amount of non-informative links to various parts of the 4shared website... .”); see also Pirate Site with No Traffic Attracts 49m Mainly Bogus DMCA Notices, TorrentFreak (Feb. 19, 2017), available at <https://torrentfreak.com/pirate-site-with-no-traffic-attracts-49m-mainly-bogus-dmca-notices-170219/> (“Instead of



Looking beyond Google’s own experience, most OSPs experience a “relatively infrequent” volume of notices.²⁶ For these OSPs, the most comprehensive study on the topic has concluded that the notice-and-takedown process is working well: non-automated “notice and takedown is still the most common practice . . . , and, for most, it is still sufficient to manage the takedown requests they receive.”²⁷ Given this success, the study concluded that requiring “more expensive measures risks undermining the essential success of notice and takedown in supporting a robust, competitive marketplace for online speech platforms.”²⁸

Another sound metric for measuring the overall effectiveness of the DMCA safe harbors is to examine the diversity of voluntary measures being developed and deployed by OSPs to go beyond the requirements of Section 512. Congress emphasized that the DMCA was designed to foster collaboration and innovation in the battle against copyright infringement online, and, as explained here and in our April 1 Comments, it continues to succeed when measured against that standard. The list of voluntary measures deployed by various OSPs is long, with new strategies emerging and being refined by many market participants. In addition to the automated content recognition systems mentioned above, and the many Google-sponsored efforts described in our April 1 Comments, other OSPs are innovating with “follow the money” efforts, user education campaigns, and community norm-setting practices.²⁹ While stakeholders can be expected to disagree about the details of these voluntary efforts, it cannot be said that the DMCA safe harbors are failing in the face of this overwhelming evidence that these voluntary measures continue to grow both in number and diversity.

Question 4: Several public comments and roundtable participants noted practical barriers to effective use of the notice-and-takedown and counter-notice processes, such as differences in the

scanning the site and sending an accurate takedown notice to Google, APDIF tries to guess the URLs where MP3Toys stores its content. . . . APDIF makes up its own URLs, MP3Toys randomly generates a page of music that has nothing to do with the URL input, APDIF logs it as an infringement of its clients’ rights, and sends a complaint to Google.”).

²⁶ Jennifer Urban, Joe Karaganis & Brianna Schofield, Notice and Takedown in Everyday Practice, at 2 (U.C. Berkeley Pub. Law Research, Working Paper, No. 2755628, 2016), available at <https://ssrn.com/abstract=2755628>.

²⁷ *Id.* at 113.

²⁸ *Id.* at 119.

²⁹ See Transcript of May 13, 2016 Section 512 Public Roundtable, at 59-60, available at https://www.copyright.gov/policy/section512/public-roundtable/transcript_05-13-2016.pdf (comments of Charles Roslof, Wikimedia Foundation) (describing volunteer efforts and community standards relating to policing Wikimedia sites for potentially infringing content); Comments of Wikimedia Foundation, at 6-7, In re Section 512 Study: Notice and Request for Public Comment (No. 2015-7), available at <https://www.regulations.gov/contentStreamer?documentId=COLC-2015-0013-88846&attachmentNumber=1&contentType=pdf> (same); Copyright School, YouTube, available at https://www.youtube.com/copyright_school; White House Office of the U.S. Intellectual Prop. Enf’t Coordinator, Best Practices Guidelines for Ad Networks to Address Piracy and Counterfeiting, available at <http://www.2013ippractices.com/bestpracticesguidelinesforadnetworkstoaddresspiracyandcounterfeiting.html>.



web forms used by ISPs to receive notices or adoption by ISPs of additional requirements not imposed under the DMCA (e.g., submission of a copyright registration or creation of certain web accounts). What are the most significant practical barriers to use of the notice-and-takedown and counter-notice processes, and how can those barriers best be addressed (e.g., incentives for ISPs to use a standardized notice/counter-notice form, etc.)?

There now exists a robust ecosystem of third parties that have expertise in sending takedown requests. Similarly, the Copyright Alliance's recent survey of creators asks whether it should become such a clearinghouse. As mentioned above, several vendors already offer services navigating YouTube's Content ID.

Nevertheless, during the roundtables, we heard smaller rightsholders express concerns about the obstacles they face in accessing and making the best use of the kinds of sophisticated online enforcement vendors and tools that larger rightsholders rely on today. To address these barriers, the Office could convene a multistakeholder discussion about ways to allow smaller entities to take advantage of tools voluntarily developed by larger-scale entities to address any impediments in notice-and-takedown procedures, perhaps through collaboration with intermediaries or clearinghouses. It may be that by aggregating demand for these services, intermediaries like the Copyright Alliance can serve a valuable role, developing both the strategic expertise to advise smaller rightsholders about the requirements and capabilities of available enforcement tools, as well as aggregating enough supply-side demand to reach a scale that will attract the enforcement vendors that have traditionally served larger rightsholders. OSPs and Internet users, for their part, could benefit as well, insofar as intermediaries who develop expertise with existing tools are less likely to misunderstand or misuse those tools.

In contrast, mandating standardized practices for OSPs would hinder efficient processing of notices. Different OSPs have different processes, as befits the enormous range in the volume of notices and the size of the OSPs' businesses. Attempts to ignore this diversity, and to curtail flexibility, will only create problems.

We also must take the opportunity to clear up some misinformation about Google's own submission process. One commenter at the New York Roundtable aimed a number of criticisms at Google's process in particular.³⁰ He complained that use of Google's DMCA forms requires a Google account, which is true. Requiring a Google account reduces abusive notices from anonymous users and also allows us to show submitters a dashboard displaying the status of their previous notices, a feature that was requested by many rightsholders. And, of course, we continue to receive notices through several other channels that do not require a Google account. The commenter also pointed out that we explain at the appropriate step

³⁰ Transcript of May 2, 2016 Section 512 Public Roundtable, at 71-72, available at https://www.copyright.gov/policy/section512/public-roundtable/transcript_05-02-2016.pdf (comments of Stephen Carlisle, Nova Se. Univ.).



in our form that merely being the subject of a photo does not give one a copyright interest in the photo.³¹ In our experience, this warning dramatically cut down on the number of misguided notices. This, in turn, streamlined the removal process for meritorious notices and decreased our turnaround time for removal of images. Another participant in that roundtable claimed that Google “until recently” made it impossible to paste a URL into our DMCA web form.³² That is incorrect. While we welcome feedback about our own process, which we continue to refine, none of these issues rises to the level of requiring legislative attention, and even if they did, what works for large OSPs like Google would not be the right solution for smaller OSPs.

Question 6: Participants also noted disincentives to filing both notices and counter-notices, such as safety and privacy concerns, intimidating language, or potential legal costs. How do these concerns affect use of the notice-and-takedown and counter-notice processes, and how can these disincentives best be addressed?

Google remains concerned that the existing counter-notice remedy has not prevented abuses of the notice-and-takedown process.³³

Additional recent examples of inappropriate takedown notices include:

- A man seeking to remove from Google’s search index the DOJ press release announcing his guilty plea.³⁴
- A social media monitoring service seeking to remove its brochure from Scribd after its activities were the subject of a critical report by the ACLU.³⁵
- A lawyer seeking removal of a blog post criticizing the lawyer for plagiarizing content on his website.³⁶

³¹ *Id.*

³² Transcript of May 2, 2016 Section 512 Public Roundtable, at 25, available at https://www.copyright.gov/policy/section512/public-roundtable/transcript_05-02-2016.pdf (comments of Eugene Mopsik, Am. Photographic Artists) (“A friend of mine who engages regularly in notice-and-takedown said that until recently, in trying to get notice-and-takedown with Google, when they coded their field for putting in the URL, they wouldn’t allow you to paste.”).

³³ See Google’s April 1 Comments, at 11 (identifying examples).

³⁴ DMCA (Copyright) Complaint to Google, Lumen (Nov. 25, 2016), available at <https://lumendatabase.org/notices/13439312#>.

³⁵ Mike Masnick, Geofeedia, In Damage Control Mode, Issues Bogus DMCA over Brochure Posted by Reporter, TechDirt (Oct. 21, 2016), available at <https://www.techdirt.com/articles/20161019/00080135834/geofeedia-damage-control-mode-issues-bogus-dmca-over-brochure-posted-reporter.shtml>.

³⁶ Mike Masnick, Questionable DMCA Takedown Notice Filed over Post Calling Lawyer Out for Copyright Infringement, TechDirt (Jul. 11, 2016), available at



- A lawyer seeking removal of a document revealing his salary from Google’s search index.³⁷
- A person posing as a representative of a police department filing DMCA notices demanding that Google remove from the search index mugshot photographs included in news stories related to arrests.³⁸

Other recent examples of inappropriate notices illustrate the challenges of identifying ownership and fair use.

- A movie studio issued a takedown notice for a “neural network” experiment related to Blade Runner, plainly a fair use.³⁹
- A movie studio issued a takedown notice for public source software that it indisputably does not own.⁴⁰

Potential Future Evolution of the DMCA Safe Harbor System

Question 12: Several study participants have proposed some version of a notice-and-stay-down system. Is such a system advisable? Please describe in specific detail how such a system should operate, and include potential legislative language, if appropriate. If it is not advisable, what particular problems would such a system impose? Are there ways to mitigate or avoid those problems? What implications, if any, would such a system have for future online innovation and content creation?

Google has addressed this question previously in both our April 1 Comments and at the San Francisco Roundtable. We continue to believe that while “staydown” technologies can play a valuable role in both preventing infringement and fostering new business models (as Content ID does), they are best developed in the context of voluntary efforts between rightsholders, OSPs, and user communities. A legal mandate

<https://www.techdirt.com/articles/20160711/11004234937/questionable-dmca-takedown-notice-filed-over-post-calling-lawyer-out-copyright-infringement.shtml>.

³⁷ Mike Masnick, Sony Pictures Legal Affairs VP Files Bogus DMCA Notice Because His Salary Is Listed on Wikileaks, TechDirt (Jul. 11, 2016), available at <https://www.techdirt.com/articles/20160711/01191434930/sony-pictures-legal-affairs-vp-files-bogus-dmca-notice-because-his-salary-is-listed-wikileaks.shtml>.

³⁸ Mike Masnick, Burlington Police Insist Someone Is Pretending to Abuse Copyright Law to Censor News Stories About Arrests, TechDirt (Nov. 21, 2016), available at <https://www.techdirt.com/articles/20161121/00395236095/burlington-police-insist-someone-is-pretending-to-abuse-copyright-law-to-censor-news-stories-about-arrests.shtml>.

³⁹ Aja Romano, A Guy Trained a Machine to “Watch” Blade Runner. Then Things Got Seriously Sci-Fi, Vox (Jun. 1, 2016), available at <http://www.vox.com/2016/6/1/11787262/blade-runner-neural-network-encoding>.

⁴⁰ Mike Masnick, Another Day, Another Anomaly: Paramount Issues DMCA Takedown on Ubuntu Linux Torrent, TechDirt (Sept. 13, 2016), available at <https://www.techdirt.com/articles/20160912/09295735500/another-day-another-anomaly-paramount-issues-dmca-takedown-ubuntu-linux-torrent.shtm>.



imposing “notice-and-staydown” on OSPs, in contrast, would not be advisable.

We have already described the technical feasibility issues and fair use equities that would make a “staydown” legal mandate on all OSPs impossible to implement.⁴¹ Comments from a wide range of OSPs in this Study, moreover, make it clear that the tools to implement a “staydown” obligation are often nonexistent or too expensive for most OSPs. Nor has there been any evidence submitted to suggest the existence of any difficulty with the DMCA’s notice-and-takedown approach as applied to the vast majority of OSPs who rely on the DMCA safe harbors. In fact, research submitted by Professors Urban, Karaganis, and Schofield suggests that for the vast majority of so-called “DMCA Classic” providers, the notice-and-takedown process is working well for service providers and rightsholders alike.⁴²

This is not to say that the DMCA’s notice-and-takedown regime should be viewed as a “ceiling” on OSP efforts. In fact, the record developed in this Study establishes that many OSPs have undertaken voluntary measures to go well beyond the requirements of the DMCA safe harbors. Some of those voluntary measures have included automated “staydown” systems, where technically feasible, appropriate for the platform, and justified by the scope of the problem. These voluntary efforts are entirely consistent with the DMCA’s stated goal of fostering collaboration between rightsholders and service providers.

It is difficult to see how a legislative mandate for “staydown” could improve this state of affairs. For the OSPs that have already moved ahead with these technologies on a voluntary basis, the legislative mandate would be redundant and constraining, reducing the flexibility to experiment with different measures where appropriate. For the “DMCA Classic” OSPs, for whom notice-and-takedown is a well-functioning response to the scale of the infringements on their platforms, a legislative “staydown” mandate would impose huge new costs for no significant benefit to rightsholders. And for the rogue sites operating beyond the reach of the DMCA, legislative “staydown” mandates would be a meaningless gesture (even as other voluntary measures are proving effective).⁴³

Other Developments

Question 14: Several study participants mentioned concerns regarding certain case law interpretations of the existing provisions of section 512. Additionally, two new judicial decisions have come out since the first round of public comments was submitted in April 2016. What is the impact, if any, of these decisions on the effectiveness of section 512? If you believe it would be appropriate to address or clarify existing provisions of section 512, what would be the best ways to address such provisions (i.e., through the courts, Congress, the Copyright Office, and/or voluntary

⁴¹ See Google’s April 1 Comments, at 10.

⁴² Jennifer Urban, Joe Karaganis & Brianna Schofield, Notice and Takedown in Everyday Practice, at 114-15 (U.C. Berkeley Pub. Law Research Paper No. 2755628, 2016), available at <https://ssrn.com/abstract=2755628>.

⁴³ A Bunch of Weak Anti-Piracy Measures Are Still a Pest to Pirates, TorrentFreak (Jan. 7, 2017), <https://torrentfreak.com/a-bunch-of-weak-anti-piracy-measures-are-still-a-pest-to-pirates-170107/>.



measures)? Please provide specific recommendations, such as legislative language, if appropriate.

The Second Circuit’s decision in *Capitol Records, LLC v. Vimeo LLC*, 826 F.3d 78 (2d Cir. 2016), correctly interprets section 512(c) and the protections it provides to both service providers and rightsholders. First, the Second Circuit was correct to read section 512(c) to encompass pre-1972 sound recordings. As the *Capitol Records* court noted, Congress crafted a careful compromise in section 512(c) between promoting the growth of the Internet economy on the one hand, and preventing the infringement of copyrighted material on the other. Requiring service providers to police user content for state copyright law violations, while alleviating the burden of doing so for federal copyright violations, would eviscerate that compromise and force service providers to “incur heavy costs of monitoring every posting to be sure it did not contain infringing pre-1972 recordings, or incur[] potentially crushing liabilities under state copyright laws.” *Id.* at 90. This would defeat the statute’s purpose and “either dissuade service providers from making large investments in the expansion of the growth and speed of the Internet (which Congress sought to encourage) or perhaps cause them to charge so much for the service as to undermine substantially the public usefulness of the service Congress undertook to promote.” *Id.* at 92-93.

Second, the *Capitol Records* Court correctly interpreted the safe harbor’s “red flag” provision to preclude liability where a service provider’s employee merely viewed some or all of a video that included a copyrighted work. As the court sensibly acknowledged, such a viewing could be for many different reasons, including technical assessment, or the detection of inappropriate obscenity or bigotry; it could be done with the sound on or muted. *Id.* at 96. Moreover, determining whether a given video, image, song, or text is infringing requires background knowledge about, among other things, whether the item is protected by copyright, who owns the relevant copyrights, who posted the item, the poster’s relationship with the rightsholder(s), whether one of the copyright owners licensed or otherwise approves of the use of the content, and whether that use is fair or otherwise permitted by law. The *Capitol Records* Court rightly understood that a service provider’s employee cannot be expected to know or understand each of those factors, and therefore, cannot be found to have “red flag” knowledge based simply on a viewing. The *Capitol Records* Court properly interpreted section 512(c) in so holding.

Question 15: What approaches have jurisdictions outside the United States taken to address the question of ISP liability and the problem of copyright infringement on the Internet? To what extent have these approaches worked well, or created problems for consumers, content creators, ISPs, or other stakeholders?

The DMCA’s Section 512 safe harbor regime has proven to be the blueprint for a growing international consensus with respect to how to address the role of OSPs in countering copyright infringement on the Internet. The notice-and-takedown and “no monitoring” concepts, in particular, were adopted by the European Union in the E-Commerce Directive shortly after the DMCA became law in the United States. The core structure of Section 512 (notice-and-takedown and no obligation on OSPs to monitor) has also been mirrored in numerous multilateral and bilateral trade instruments, championed in particular by the U.S. Trade Representative. The U.S. has included these provisions in trade agreements with Australia,



Bahrain, Chile, Colombia, Korea, Morocco, Oman, Panama, Peru, and Singapore. Similar provisions have been adopted by numerous other countries as well, including Japan, Brazil, and New Zealand.⁴⁴

The global nature of the Internet means that the ability of OSPs to do business is fostered by increasing international legal harmonization, including in the area of copyright. Given the international adoption of the norms set forth in Section 512, as well as the success of the U.S. Internet sector in the global economy, we urge the Office to be cautious before recommending any substantial deviation from this established transnational legal norm. Reliance on the global applicability of provisions in U.S. law, such as Section 512, has enabled the U.S. to generate a significant annual trade surplus in digitally deliverable services of over \$158 billion.⁴⁵ Pulling the rug out from under this global standard would put this trade surplus at risk and damage U.S. digital leadership. Furthermore, a demonstration that the U.S. is open to tinkering with core components of Section 512 may inadvertently inspire other countries to do the same—tinkering with their industrial policy frameworks to increase regulation, liability, and outright blockage of U.S. OSPs. These approaches would harm not only U.S. Internet providers, but also millions of U.S. consumers and hundreds of thousands of U.S. small businesses and content creators that leverage OSPs to reach global customers.

As the Office is aware, several countries are actively seeking to develop frameworks for dealing with online infringement. For example, the European Union is currently considering a proposal as part of its “Digital Single Market” proceeding that would impose a filtering mandate on online hosting providers. The proposal has been widely criticized as ill-advised and unworkable, for many of the same reasons that have been aired during this Study.⁴⁶

Other countries lack any intermediary liability protections at all, while some countries such as Ukraine and Vietnam are considering or maintaining approaches that are inconsistent with U.S. values around an open Internet.⁴⁷ Given the rise of overbroad liability or monitoring measures that threaten the growth of

⁴⁴ See generally Stanford Ctr. for Internet & Society, World Intermediary Liability Map, available at <http://cyberlaw.stanford.edu/our-work/projects/world-intermediary-liability-map-wilmap>.

⁴⁵ U.S. Dept. of Commerce, Econs. & Statistics Admin., Digitally Deliverable Services Remain an Important Component of U.S. Trade (May 28, 2015), available at <http://esa.doc.gov/economic-briefings/digitally-deliverable-services-remain-important-component-us-trade>.

⁴⁶ See, e.g., European Copyright Society, Answer to EC Consultation on the Role of Publishers in the Copyright Value Chain, at 7 (Jun. 15, 2016), available at <https://europeancopyrightsocietydotorg.files.wordpress.com/2016/06/ecs-answer-to-ec-consultation-publishers-role-june16.pdf> (raising concerns that the proposal “will distort competition in the emerging European information market”); Sophie Stalla-Bourdillon et al., A Brief Exegesis of the Proposed Copyright Directive (Working Paper, 2016), available at https://papers.ssrn.com/sol3/papers2.cfm?abstract_id=2875296; Sophie Stalla-Bourdillon et al., Open Letter to the European Commission - On the Importance of Preserving the Consistency and Integrity of the EU Acquis Relating to Content Monitoring within the Information Society (2016), available at https://papers.ssrn.com/sol3/papers2.cfm?abstract_id=2850483.

⁴⁷ See Comments of Internet Association, at 12, 17-18, 2017 Special 301 Review, available at



the global Internet, and the centrality of Section 512 to the growth of the U.S. economy, this is a critical time for U.S. leadership to support and promote Section 512 in the U.S. and abroad.⁴⁸

Question 16: Please identify any other pertinent issues that the Copyright Office may wish to consider in conducting this study.

Google would like to take this opportunity to correct the record on several issues that came up in others' written comments and at the roundtables. We offer these corrections respectfully, in the hope that more accurate information will lead the U.S. Copyright Office to a better result in its effort.

- Contrary to a statement made by Fox during the May 12, 2016 Roundtable in San Francisco,⁴⁹ Google does employ a hash matching system on Google Drive to prevent further public sharing of files for which we have received valid takedown notices.⁵⁰
- Contrary to a statement made by the Digital Media Licensing Association during the May 3, 2016 New York Roundtable,⁵¹ Google Image search does have a warning on its results pages that "Images may be subject to copyright."
- Jonathan Taplin suggested at the May 12, 2016 San Francisco Roundtable that YouTube was exploiting The Band's anthem "The Weight" without properly compensating legendary musician Levon Helm.⁵² Our records show that the relevant rightsholders have claimed the song, and that YouTube is paying royalties on it.⁵³

<https://www.regulations.gov/document?D=USTR-2016-0026-0046>; Comments of Computer & Communications Industry Association, at 7, 12, 2017 Special 301 Review, available at <https://www.regulations.gov/document?D=USTR-2016-0026-0034>.

⁴⁸ See Markham Erickson & Sarah Leggin, Exporting Internet Law Through International Trade Agreements: Recalibrating U.S. Trade Policy in the Digital Age, 24 Catholic U. J. L. Tech. 317, 343-49 (2016).

⁴⁹ Transcript of May 12, 2016 Section 512 Study Public Roundtable, at 167, available at https://www.copyright.gov/policy/section512/public-roundtable/transcript_05-12-2016.pdf (comments of Elizabeth Valentina, Fox Entm't Grp.).

⁵⁰ Google Drive Uses Hash Matching to Detect Pirated Content, TorrentFreak (Feb. 11, 2017), available at <https://torrentfreak.com/google-drive-uses-hash-matching-detect-pirated-content/>.

⁵¹ Transcript of May 3, 2016 Section 512 Study Public Roundtable, at 74, available at https://www.copyright.gov/policy/section512/public-roundtable/transcript_05-03-2016.pdf (comments of Nancy Wolff, Dig. Media Licensing Ass'n).

⁵² See Transcript of May 12, 2016 Section 512 Study Public Roundtable, at 337-38, available at https://www.copyright.gov/policy/section512/public-roundtable/transcript_05-12-2016.pdf (comments of Jonathan Taplin, Annenberg Innovation Lab, Univ. of S. Cal.).

⁵³ Google is not in a position to look behind music industry contracts allocating rights to musical works when it distributes Content ID royalties. For more on The Band and Levon Helm's personal tragedies, see Allen St. John, The Hard-Won Lessons of Levon Helm's Life in the Record Business, Fortune (Apr. 19, 2012), available at



- A music industry company alleges in its written comments that it devoted “multiple full-time equivalent staff members” to removing a track by B.o.B from YouTube.⁵⁴ Our records show only 34 notices using our automated tools, comprising 109 videos, between 2010 and 2015, and only 857 manual claims of that track in the last seven years. This represents only 1.5% of the total number of claims, showing that Content ID is properly identifying the vast majority of this content.
- The same company alleges it made a similar effort to remove “A Head Full of Dreams” by Coldplay. Of the 1,887 videos blocked by vendors using our automated tools, more than half were already subject to a Content ID claim for the music. This means the vendor’s block caused a rightholder that already had chosen to monetize to lose out on future revenue from that claim.
- The Music Community submission repeats Cary Sherman’s assertion that vinyl sales generated more revenue “for the industry” than ad-supported streaming in 2015.⁵⁵ This comparison overlooks significant differences between these two forms of content delivery.⁵⁶
- The Content Creators Coalition commented at the May 13, 2016 San Francisco Roundtable that Content ID’s terms require a creator to license its entire back catalogue to YouTube in order to

<http://www.forbes.com/sites/allenstjohn/2012/04/19/the-real-world-business-lessons-of-levon-helms-hardscrabble-life/#47558a926f73> (quoting Helm: “When *The Band* came out we were surprised by some of the songwriting credits. In those days we didn’t realize that song publishing—more than touring or selling records—was the secret source of the real money in the music business. ... Back then we’d get a copy of the album when it came out and that’s when we’d learn who’d got the credit for which song.”); John Barry, A Statement From Michael Pinsky, Attorney for Levon Helm, Poughkeepsie J. Sonic Storm Blog (Oct. 28, 2007), available at <http://blogs.poughkeepsiejournal.com/sonicstorm/2007/10/28/a-statement-from-michael-pinsky-attorney-for-levon-helm/> (“The failure of record labels, movie, publishing and production companies to pay Levon and his Band mates their fair performance and publishing royalties added insult to injury during this time when every dollar counted. (Record and movie deals negotiated by The Band’s trusted lawyers and accountants, in retrospect, seem designed to work for the entertainment companies and not for the artists.)”).

⁵⁴ Comments of Warner Music Group, at 8, In re Section 512 Study: Notice and Request for Public Comment (No. 2015-7), available at <https://www.regulations.gov/document?D=COLC-2015-0013-86022>.

⁵⁵ Joint Comments of American Association of Independent Music et al., at 3 & n.6, In re Section 512 Study: Notice and Request for Public Comment (No. 2015-7), available at <https://www.regulations.gov/contentStreamer?documentId=COLC-2015-0013-89806&attachmentNumber=1&contentType=pdf>.

⁵⁶ See Timothy Geigner, Despite Massive Streaming Revenue Gains, RIAA Still Lying & Crying, TechDirt (Mar. 24, 2016), available at <https://www.techdirt.com/articles/20160323/10074433993/despite-massive-streaming-revenue-gains-riaa-still-lying-crying.shtml> (“First, retail value isn’t *actual* revenue, as it ignores the reality of discounts and other pricing differences. Second, and more importantly, you’re leaving out the fact that much of the money from retail value doesn’t go to the labels, but to the retailers, distributors and to cover production costs of the actual records. Third, with free streaming, you have none of those costs, **and** the contracts you have with streaming companies mean a much greater percentage of the revenue actually goes to the labels. Fourth, free streaming does two useful things that you ignore: (1) moves people away from infringement, where you earn nothing and (2) moves many people up the chain to paid streaming.”).



make use of Content ID.⁵⁷ As Fred von Lohmann testified at the time,⁵⁸ and as we reiterate here, that is untrue.

* * *

Google appreciates the opportunity to share its perspective and experience, and we look forward to continued engagement with the Office on these topics.

⁵⁷ Transcript of May 13, 2016 Section 512 Study Public Roundtable, at 41-42, available at https://www.copyright.gov/policy/section512/public-roundtable/transcript_05-13-2016.pdf (comments of Tom Murphy, Content Creators Coal.).

⁵⁸ *Id.* at 78-79 (comments of Fred von Lohmann, Google).