**Abstract**

This Article analyzes seventeen years under the Digital Millennium Copyright Act ("DMCA") rulemaking mechanism and suggests changes to reinforce its successes whileremedying its failures. Part I briefly discusses the legislative history of the rulemaking mechanism and policy justifications for its adoption within the DMCA scheme. Part II reviews legal and evidentiary standards of the rulemaking and recent changes to its administrative procedure. Part III provides an overview of the prior rulemakings and their impact on non-infringing uses, with a particular focus on the “e-book” and “cellphone unlocking” exemptions. Part IV applauds the Breaking Down Barriers to Innovation Act of 2015—which suggests numerous improvements to the rulemaking mechanism—and then recommends other possible changes. Part V emphasizes the continued need for the rulemaking mechanism, but concludes with some modifications and restructuring.

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INTRODUCTION

“The advancement and diffusion of knowledge is the only guardian of true liberty.”

— James Madison

In 1998, Congress passed the Digital Millennium Copyright Act (“DMCA”) to provide greater protection to copyright owners against unauthorized access and copying of their works. The Act prohibits circumventing technological protection measures (“TPMs”) and trafficking in tools that circumvent TPMs, but also provides seven permanent exemptions to these prohibitions. Additionally, the DMCA institutes a periodic rulemaking proceeding to determine whether to grant additional exemptions from the DMCA prohibitions. The ultimate goal of such a rulemaking mechanism is to provide greater flexibility and responsiveness of copyright law to rapidly evolving technologies.


5 This Article uses the term “rulemaking mechanism” when discussing the triennial rulemaking proceeding under Section 1201 of the DMCA; similarly, terms “fail-safe mechanism” and “regulatory mechanism” refer to the above rulemaking and are used interchangeably. See 17 U.S.C. § 1201(a)(1)(C)–(D) (2000).

6 See H.R. REP. NO. 105-551, pt. 2, at 36 (1998) [hereinafter Commerce Comm. Report] (Congress being “concerned that marketplace realities may someday dictate a different outcome, resulting in less access, rather than more, to copyrighted materials that are important to education, scholarship, and other socially vital endeavors,” decided “to modify the flat prohibition against the circumvention of effective technological measures that control access to
This flexibility is meant to ensure that access to copyrighted works for legitimate purposes—such as education, scholarship, scientific research, comment, criticism, and other socially beneficial endeavors—is not unjustifiably hindered or suppressed.  

Seventeen years have passed under the DMCA regime. Under this regulatory mechanism, the Register of Copyrights (“the Register”) and the Librarian of Congress (“the Librarian”) periodically engage in rulemaking proceedings to determine classes of copyrighted works that will be given exemptions from the DMCA.  

So far, there have been six rulemakings.  Altogether, these represent seventeen years under the DMCA rulemaking mechanism, seventeen years of experience, and seventeen years of win-loss record for proponents of exemptions and public at large.  

Experience has demonstrated that DMCA rulemaking has both benefits and drawbacks.  

A significant benefit of the mechanism is that it allows lawmakers to amend the law in a faster and more efficient manner than the traditional legislative process or court copyrighted materials, in order to ensure that access for lawful purposes is not unjustifiably diminished.”).  

Id.  


Technically, seventeen years have passed under the DMCA regime as a whole; the actual DMCA rulemaking proceeding first commenced in 1999.  See Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 64 Fed. Reg. 66,139 (proposed Nov. 24, 1999) (codified at 37 C.F.R. pt. 201) (initiating the First Rulemaking).  

Consequently, rulemakings have become more flexible and are becoming broader both in number and scope.\textsuperscript{13}

Despite its legacy and importance, many believe that the rulemaking mechanism has not proven to be sufficiently effective.\textsuperscript{14} Critics of the process claim it is:

\textsuperscript{12} See Arielle Singh, \textit{Agency Regulation in Copyright Law: Rulemaking under the DMCA and Its Broader Implications}, 26 BERKELEY TECH. L.J. 527, 537 (2011) (giving an example that it took the court four years to enjoin \textit{Grokster} case and eight years to rule on the VCR, while it took Congress six years to legislate for DAT tapes and eight years for the audio cassette).


• **Unduly burdensome** — especially for proponents seeking renewals of prior exemptions, who are required to demonstrate actual or probable substantial harm to non-infringing uses of copyrighted works in every rulemaking;\(^{15}\)

• **Repetitive** — specifically, due to the *de novo* standard of review that applies equally to petitions requesting new exemptions and those requesting renewals of the existing ones;\(^{16}\)

• **Too narrow** — generally, only few exemptions are granted upon each rulemaking, and those granted are usually limited to a narrow class of works, do not extend to circumvention tools, and sometimes last even less than three years;\(^{17}\)


\(^{17}\) See, e.g., Singh, *supra* note 12, at 529 (discussing the criticism that the rulemaking process is too narrow in scope); Pan Lee, et al., *Report 2: Updating 17 U.S.C. § 1201 for Innovators, Creators, and Consumers in the Digital Age,*
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- **Too long** — typically, a rulemaking proceeding takes about one year to conclude, with exception for the 2010 Rulemaking that lasted almost twenty months;\(^\text{18}\) and

- **Overly complex** — which makes the process less comprehensible for the general public and often forces its participants to engage attorneys,\(^\text{19}\) thus making it quite costly.\(^\text{20}\)

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\(^{19}\) See, e.g., Lohmann & Hinze, supra note 14, at 2–25 (noting that without expert assistance, individual digital consumers cannot successfully participate in the DMCA rulemaking process); Hofmann & McSherry, supra note 15 (emphasizing that process tends to be dominated by legal experts); Press Release, New Copyright Rules Offer Improvements For Security Researchers, But Need For Legislative Reform Continues, OPEN TECH. INST. (Oct. 27, 2015), https://www.newamerica.org/oti/new-copyright-rules-offer-improvements-for-security-researchers-but-need-for-legislative-reform-continues/ (noting that the Librarian’s “new rules contain a number of wordy limitations that perpetuate the need for researchers, educators, and everyday consumers to consult legal counsel before proceeding with [their] activities”).

The Register’s Recommendation and the Librarian’s Final Rule are often overwhelmed with legalese and confusing limitations on granted exemptions that make them difficult to understand by non-lawyers. For instance, in the most recent rulemaking, the Librarian’s Final Rule consisted of twenty-one pages, whereas the Register’s Recommendation was 403 pages. Not many can comprehend such a read. See 2015 Exemption, supra note 9, at 65,944; see infra p. 222 and note 33.

\(^{20}\) This may discourage full-scale participation in the rulemaking. See It’s Time to Fix the DMCA, PUB. KNOWLEDGE, https://www.publicknowledge.org/what-people-are-saying-about-reforming-the-dmca (last visited Dec. 23, 2015)
Recent developments in copyright and technology demonstrate that these calls for change are being heard and the drawbacks of DMCA rulemaking may be soon remedied by legislative action.\textsuperscript{21}

- In 2012, the Librarian of Congress denied the renewal of the cellphone unlocking exemption, which was followed by public outcry condemning this decision.\textsuperscript{22}

(stressing that “[t]he application process is incredibly onerous” and “[i]n the absence of pro bono representation, it costs tens of thousands of dollars to hire a legal team to apply for each exemption” (citing Kyle Wiens, CEO, iFixit Repair Coal.)); see id. (adding that iFixit Repair Coalition wanted to petition for “exemptions to repair additional products (like hearing aids and wheelchairs),” but did not because could not afford the legal fees (citing Kyle Wiens, CEO, iFixit Repair Coal.)).

\textsuperscript{21} See, e.g., Gray, supra note 15, at 774–98 (proposing shifting the burden for renewals, incorporating fair use test in the analysis of exemptions, revisiting classes of works approach); see also Hofmann & McSherry, supra note 15 (suggesting that the rulemaking process be streamlined and simplified, and the Register revisit the long-standing \textit{de novo} standard for renewals and be more receptive to granting exemptions for innovative uses of new and emerging technologies); Elizabeth F. Jackson, \textit{The Copyright Office’s Protection of Fair Uses Under the DMCA: Why the Rulemaking Proceedings Might Be Unsustainable and Solutions for Their Survival}, 58 J. COPYRIGHT SOC’Y U.S.A. 521, 544–47 (2011), (suggesting congressional intervention and restructuring the rulemaking proceedings); Singh, supra note 12, at 568–74 (discussing suggestions for improvement, including expanding the authority of the Copyright Office in the regulatory copyright regime); Samuelson, supra note 17, at 561 (recommending the Librarian examine the impact of anti-trafficking prohibitions on the ability of particular classes of users to make non-infringing uses of copyrighted works, and proposing to authorize the Librarian to consider other possible unintended adverse effects of the anti-circumvention provisions that may be adverse to the public interest); see also \textit{It’s Time to Fix the DMCA, supra} note 20 (citing positions of public interest advocates that call for reform of the DMCA regime and rulemaking proceeding); see also New Copyright Rules Offer Improvements For Security Researchers, But Need For Legislative Reform Continues, supra note 19 (stressing “the continuing need for legislative reform to the 17-year-old DMCA”).

\textsuperscript{22} 2012 Exemption, supra note 13, at 265–66, 65,278; see also Make Unlocking Cell Phones Legal, https://petitions.whitehouse.gov/petition/make-unlocking-cell-phones-legal/1g9KhZG7 (last updated July 25, 2014) (petition signed by over 114,000 people calling to rescind the Librarian of Congress’s decision); see infra pp. 269–70 and notes 302–07.
This resulted in the passing of the Unlocking Consumer Choice and Wireless Competition Act of 2014.\footnote{See also Unlocking Consumer Choice and Wireless Competition Act of 2014, Pub. L. No. 113–144, 128 Stat. 1751 (2014); see infra p. 270 and notes 310–11.}

• The Unlocking Technology Act has been re-introduced to Congress to amend the DMCA’s prohibition on circumvention of TPMs to allow circumventing and trafficking in tools to enable circumvention for non-infringing uses, unless the intent is to infringe or facilitate copyright infringement.\(^27\)

• The Breaking Down Barriers to Innovation Act was introduced last year to Congress to improve the DMCA rulemaking and to ease restrictions on the use of certain statutory exemptions.\(^28\) Major consumer advocacy groups and even copyright holders’ representatives welcomed this Act.\(^29\)

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\(^{27}\) If enacted, this Act can make the DMCA rulemaking meaningless. Because the author is overall supportive of the rulemaking mechanism, this Article will focus on discussion and analysis of the legislative efforts to improve the rulemaking, rather than abandoning it altogether. See Unlocking Technology Act of 2015, H.R. 1587, 114th Cong. (2015).


• The Register of Copyrights recently suggested that the process of renewing granted exemptions should be amended to establish a regulatory presumption favoring renewals.  

• The Senate Judiciary Committee directed the Copyright Office to undertake a comprehensive study of the role copyright law plays in the software-enabled environment, so as “to better understand and evaluate...

(Notably, EFF is more enthusiastic about the Unlocking Technology Act, rather than the Breaking Down Barriers to Innovation Act; this conforms to their position expressed during the 1201 Section Hearing that Congress should overturn Section 1201 altogether.).

30 See The Register’s Perspective On Copyright Review: Hearing Before the Subcomm. On Courts, Intellectual Prop., and the Internet of the H. Comm. on the Judiciary, 113th Cong. 21 (2015), http://judiciary.house.gov/_cache/files/1c82a3a6-3b1b-4a51-b212-281454d1e56e/written-testimony-of-register-maria-a-pallante.pdf [hereinafter Register’s Perspective On Copyright] (statement of Maria A. Pallante, Register of Copyrights, U.S. Copyright Office) (“[I]t would be beneficial for Congress to amend Section 1201 to provide that existing exemptions will be presumptively renewed during the ensuing triennial period in cases where there is no opposition.”).

31 It is no coincidence that this request by the Senate was made during the last stages of the recent rulemaking proceeding—the very proceeding that presented new challenges to the DMCA prohibitions, which now apply to a variety of everyday software-containing products such as computer tablets, printers, cars, medical devices, etc. Nor is it a coincidence that this Senate’s request was authored by Sen. Grassley and Sen. Leahy. They were the ones who introduced the original bill for the Unlocking Consumer Choice and Wireless Competition Act in 2013. See Sen. Chuck Grassley, Chairman, S. Comm. on the Judiciary, Grassley & Leahy Call For Copyright Study: Senators Seek Copyright Review to Provide Clarity for Consumers, CHUCK GRASSLEY SENATOR FOR IOWA (Oct. 22, 2015), http://www.grassley.senate.gov/news/news-releases/grassley-leahy-call-for-copyright-study (providing a summary of the request for a study and its full text); Sen. Patrick Leahy, Ranking Member, S. Comm. on the Judiciary, Leahy & Grassley Call For Copyright Study: Senators Seek Copyright Review to Provide Clarity for Consumers, PATRICK LEAHY SENATOR FOR VERMONT (Oct. 22, 2015), https://www.leahy.senate.gov/press/leahy-and-grassley-call-for-copyright-study (providing a summary of the request for a study and its full text); see also Sen. Chuck Grassley, Grassley Praises Committee Passage of Cellphone Unlocking Bill, CHUCK GRASSLEY SENATOR FOR IOWA (July 10, 2014), http://www.grassley.senate.gov/news/news-releases/grassley-praises-committee-passage-cellphone-unlocking-bill; Sen. Patrick Leahy, Chairman, S. Comm. on the Judiciary, SJC Members Introduce

- The most recent rulemaking has resulted in an unprecedented number of exemptions—ten in total—covering as many as twenty-two types of uses.\footnote{See Thomas Fox-Brewster, DMCA Ruling Ensures You Can’t Be Sued For Hacking Your Car, Your Games Or Your iPhone, FORBES (Oct. 27, 2015), http://www.forbes.com/sites/thomasbrewster/2015/10/27/right-to-tinker-victory.} This is undoubtedly a big win for the digital rights community, researchers, educators, and end-users of works protected by TPMs, such as e-books, movies, video games, computer programs.\footnote{Grassley & Leahy Call For Copyright Study, supra note 31; see also Letter from Sen. Grassley and Sen. Leahy, supra note 32, at 2 (directing the Copyright Office to study and report on “whether, and to what extent, innovative services” and “the design, distribution, and legitimate uses of products are being enabled and/or frustrated by the application of existing copyright law to software in everyday products,” and “how the copyright law intersects with other areas of law in establishing how products that rely on software to function can be lawfully used,” etc.).}

The Senate’s request for the copyright study directs the Copyright Office to examine the role copyright law plays in determining how the software-containing products can be used.\footnote{Grassley & Leahy Call For Copyright Study, supra note 31; see also Letter from Sen. Grassley and Sen. Leahy, supra note 32, at 2 (directing the Copyright Office to study and report on “whether, and to what extent, innovative services” and “the design, distribution, and legitimate uses of products are being enabled and/or frustrated by the application of existing copyright law to software in everyday products,” and “how the copyright law intersects with other areas of law in establishing how products that rely on software to function can be lawfully used,” etc.).} The most recent rulemaking proceeding examined non-infringing uses of such products (e.g., computer tablets, smartwatches, smart
TVs, 3D printers, networked medical devices, cars, agricultural machinery, etc.\textsuperscript{36} Both developments demonstrate the broad implications of the DMCA scheme and the rulemaking proceeding on the digital marketplace and people’s daily lives. This is largely because the DMCA applies to copyrighted software,\textsuperscript{37} which is now embedded in virtually every device and product people use in their daily routine.\textsuperscript{38} As a result, these devices have become subjected to the DMCA,\textsuperscript{39} including its rulemaking provisions.\textsuperscript{40}

This Article analyzes seventeen years under the DMCA rulemaking mechanism and suggests changes to reinforce its

\textsuperscript{36} 2015 Exemption, \textit{supra} note 9, at 65,946–59 (providing an overview of all twenty-seven proposed classes of works for exemption); \textit{see also} \textit{Section 1201 Exemptions to Prohibition Against Circumvention of Technological Measures Protecting Copyrighted Works}, U.S. COPYRIGHT OFFICE, http://copyright.gov/1201 (last visited Nov. 15, 2015) (providing an administrative record of all petitions for proposed exemptions in the Sixth Rulemaking).


\textsuperscript{38} Grassley & Leahy Call For Copyright Study, \textit{supra} note 31 (noting that copyrighted software “is now essential to the operation of our refrigerators, our cars, our farm equipment, our wireless phones, and virtually any other device you can think of”).

\textsuperscript{39} \textit{See An Insecure Environment for Security Research: A Panel Discussion on Copyright Law, Your Property, and Cybersecurity}, CTR. FOR DEMOCRACY & TECH. (May 26, 2015), https://cdt.org/event/an-insecure-environment-for-security-research-a-panel-discussion-on-copyright-law-your-property-and-cybersecurity (discussing how the DMCA have come to apply to cars, tractors, printers, insulin pumps, etc. because of software embedded in many such products).

\textsuperscript{40} This could be one of the reasons that each new triennial proceeding examines more and more classes of works proposed for exemption. \textit{See Section 1201 Exemptions to Prohibition Against Circumvention of Technological Measures Protecting Copyrighted Works: Proposed Classes of Works}, U.S. COPYRIGHT OFFICE, http://copyright.gov/1201 (last visited Nov. 15, 2015) (providing a brief summary of proposed classes of works in the 2012 Rulemaking, ten it total); 2015 Exemption, \textit{supra} note 9, at 65,946–55 (there were twenty-seven classes of works in the 2015 Rulemaking).
successes while remedying its failures. Part I briefly discusses the legislative history of the rulemaking mechanism and policy justifications for its adoption within the DMCA scheme. Part II reviews legal and evidentiary standards of the rulemaking and recent changes to its administrative procedure. Part III provides an overview of the prior rulemakings and their impact on non-infringing uses, with a particular focus on the “e-book” and “cellphone unlocking” exemptions. Part IV applauds the Breaking Down Barriers to Innovation Act of 2015—which suggests numerous improvements to the rulemaking mechanism—and then recommends other possible changes. Part V emphasizes the continued need for the rulemaking mechanism, but concludes with some modifications and restructuring.

I. BACKGROUND

The DMCA affords copyright holders more than copyright enforcement against circumvention of TPMs added to their works. Despite its goal to decrease instances of circumvention and to stop copyright piracy, the DMCA prohibitions have been used to stifle various legitimate activities. TPMs consequently are used to hinder personal and educational uses, free speech, scientific

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41 In this Article, the “e-book” exemption refers to the rulemaking exemption that covers “literary works distributed electronically (i.e., e-books), for use with assistive technologies for persons who are blind, visually impaired or have print disabilities.” See Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 6.

42 In this Article, the “cellphone unlocking” exemption refers to the rulemaking exemption that covers computer programs that operate cellphones “to allow connection of a used device to an alternative wireless network.” See Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 6.

43 See generally Unintended Consequences: Fifteen Years under the DMCA, ELEC. FRONTIER FOUND. (Mar. 2013), https://www.eff.org/pages/unintended-consequences-fifteen-years-under-dmca#_ednref1 (arguing how the DMCA chills free expression and scientific research, jeopardizes fair use, impedes competition and innovation, etc.); see also David Kravets, 10 Years Later, Misunderstood DMCA is the Law That Saved the Web, WIRED (Oct. 27, 2008), http://www.wired.com/2008/10/ten-years-later (discussing how the copyright holders abuse anti-circumventions provisions, including to suppress legitimate competition).
research and innovation, of both copyrighted works (e.g., movies, video games, books, computer programs) and various software-containing devices (e.g., smartwatches, smart TVs, printers, medical devices, agricultural machinery, etc.). The unintended consequences of the DMCA prohibitions resulted in cellphones, computer tablets, cars, tractors, etc. that are locked to a certain manufacturer or service provider. As a result, not only does the DMCA often limit the end-users’ ability to use their own devices as they see fit (i.e., personal uses), but it also chills scientific research and security testing in these industries (i.e., fair uses) as researchers and scholars cannot freely test these devices without running into a risk of the DMCA liability.

Further, copyright owners more frequently use TPMs for

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45 Unintended Consequences: Fifteen Years under the DMCA, supra note 43.

46 An Insecure Environment for Security Research, supra note 39 (discussing how the DMCA provisions limit consumers’ ability to use, study, or modify products they buy legitimately).

47 Unintended Consequences: Fifteen Years under the DMCA, supra note 43 (reviewing extensive litigation by Apple, Sony, and Microsoft against journalists, publishers, researchers, scientists, programmers, and members of the public that have chilled their legitimate activities and deterred them from sharing their conclusions, findings, and research results with the public); see also EFF Wins Petition to Inspect and Modify Car Software: Exemption Requests Also Approved for Tweaking Abandoned Videogames, Jailbreaking Phones and Tablets, and Remixing Videos, ELEC. FRONTIER FOUND. (Oct. 27, 2015), https://www.eff.org/press/releases/eff-wins-petition-inspect-and-modify-car-software (noting that because of the DMCA broad prohibitions to unlock access control TMPs on the software, car companies have been threatening legal action against anyone who tried to unlock TMPs, regardless of whether the reason is legitimate or not); see also It’s Time to Fix the DMCA, supra note 20 (arguing that “overbroad use of the DMCA has been one of the main threats to independent research in the technology space” (citing Andy Sellars, Fellow, Berkman Ctr. for Internet & Soc’y)).
purposes that go well beyond and are often unrelated to copyright protection itself. As an example, TPMs are often used to control the market for copyrighted works (e.g., by locking devices to certain software and services and/or using geographical segmentation of markets) or to suppress legitimate competition (e.g., by blocking aftermarket competition and hindering independent security testing). Thus, copyright holders frequently use anti-circumvention measures as anti-competitive tools. This is not the likely outcome that Congress envisioned when the DMCA was drafted in 1998. As a result, similar to anti-circumvention laws in other countries, the DMCA stifles both

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48 See Register’s Recommendation for the Sixth Rulemaking, note 33, at 2 (noting that Section 1201 impacts “a wide range of consumer activities that have little to do with the consumption of creative content or the core concerns of copyright”); Section 1201 Hearing, supra note 13, at 43 (testimony of McSherry, Intellectual Prop. Dir., EFF) (arguing that the DMCA has been “used to thwart activities that are not just legal but that have nothing to do with copyright”); Kravets, supra note 43 (emphasizing that the DMCA provisions are often “used in cases that have nothing to do with copyright”).


50 In sum, TPMs have been used: (i) to ensure control over a technological platform (e.g., by locking iPhone and iPad consumers into buying digital music and apps from iTunes and App stores, or by locking Kindle into Amazon’s Kindle store), or (ii) to enforce geographical segmentation of markets (e.g., by region-coding for DVDs, Sony PlayStations, and 2-D printers, or geo-blocking of movie- and video-streaming), or (iii) to control access to devices that are not even protected by copyright law (e.g., to block aftermarket competition in garage door openers, 2-D printer cartridges, videogame console accessories, medical devices, computer tablets, cars, etc.). Id.; see also sources cited supra notes 46–47.

51 Australian Review of TPMs Exceptions, supra note 44; see also David Ray, Fair Use in the Digital Age: Theoretically Sound But Practically Impossible?, CTR. FOR ADVANCED STUDY & RESEARCH ON INTELLECTUAL
innovation and competition in technology and entertainment markets.\footnote{Prop. (2009) (on file with author) (noting that most EU countries have not taken sufficient steps to ensure private copying and fair use exceptions to TPMs, and as a result, the anti-circumvention provisions made to allow for fair use, in most cases either have not been implemented by the EU countries or have been simply denied by their courts).}

In contrast to other countries, the United States has a safety valve—the DMCA fail-safe mechanism—that can help fight, or at least neutralize, some of these harms.\footnote{Section 1201 Hearing, \textit{supra} note 13, at 43 (testimony of McSherry, Intellectual Prop. Dir., EFF); see also \textit{Unintended Consequences: Fifteen Years under the DMCA, supra} note 43.} The DMCA regulatory mechanism is a unique creation of the U.S. copyright system.\footnote{Gray, \textit{supra} note 15, at 773–72 (noting that rulemaking was meant to be “a safety valve to problems with the DMCA”); see also Kravets, \textit{supra} note 43 (stating that the DMCA scheme “includes a safety valve intended to combat such abuses [e.g., suppression of legitimate competition]”).} In accord with the constitutional directive of the Copyright Clause\footnote{U.S. CONST. art. I, § 8, cl. 8 (“The Congress shall have power . . . [t]o 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.”).} and fair use doctrine codified in Section 107 of the Copyright Act,\footnote{17 U.S.C. § 107 (1976), \textit{amended} by Pub. L. No. 102-492, 106 Stat. 3145 (allowing fair uses of copyrighted material, including for purposes of criticism, comment, news reporting, teaching, scholarship, or research, etc.).} this mechanism seeks to achieve a healthy balance between the competing interests of the copyright holders (i.e., content...
creators) and the public at large (i.e., content users, including ordinary consumers, educators, researchers, and copyright holders’ competitors, etc.).

A. Creation of the DMCA Section 1201 Rulemaking Mechanism

In 1998, Congress enacted the DMCA to bring U.S. law into compliance with the World Intellectual Property Organization’s (“WIPO”) Copyright Treaty and WIPO Performances and Phonograms Treaty. Provisions of these treaties required that country-members “provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures” used by copyright owners to protect their works from unauthorized access. But these provisions were very broad and did not define the terms “effective” and “technological measures.” The treaties instead merely established general


58 See WIPO Copyright Treaty, supra note 57 (requiring countries to “provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures that are used by authors in connection with the exercise of their rights under these Treaties or the Berne Convention and that restrict acts, in respect of their works, which are not authorized by the authors concerned or permitted by law”); WIPO Performances & Phonograms Treaty, supra note 57 (enacting similar provisions as in the WIPO Copyright Treaty); see also Urs Gasser & Michael Girsberger, Transposing the Copyright Directive: Legal Protection of Technological Measures in EU-Member States, BERKMAN CTR. FOR INTERNET & SOC’Y 6 (Nov. 2004), http://cyber.law.harvard.edu/media/files/eucd.pdf (discussing anticircumvention provisions of the WIPO treaties).

59 Gasser & Girsberger, supra note 58, at 6. Notably, although the rulemaking was adopted within the DMCA legal framework as a part of Congress’s legislative action to implement two WIPO treaties, no such provision was required under either treaty.

60 Id.
The DMCA rulemaking mechanism guidelines, giving member countries wide discretion to introduce their own definitions and set their own scope of protection.  

Congress consequently defined TPM as “a technological measure that effectively controls access to a work” protected under the Copyright Act. Congress also set forth the scope of protection against circumventing such TPMs by defining the act of circumvention as any act “to avoid, bypass, remove, deactivate, or impair a technological measure, without the authority of the copyright owner.”

The problem with these definitions is that Section 1201(a) applies too broadly. Not only does this Section extend to every act of circumvention, regardless of whether the circumvention is actually infringing upon copyright, but it also applies to all TPMs, despite that some of them are used for purposes which exceed the scope of copyright protection. This broad application has partially contributed to the problems with the DMCA scheme. In order to eliminate the potential impact of such broad application, the DMCA has divided TPMs into two categories—“access controls” and “copy controls.” Circumvention of access

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61 Id.
65 Gasser & Girsberger, supra note 58, at 9 (discussing similar issues with the Article 6(1) of the European Union Copyright Directive 2001/29/EC, particularly, that it does not concern whether the act of circumvention actually infringed copyrights or not, rather the act alone is relevant); Directive 2001/29, of the European Parliament and of the Council of 22 May 2001 on the Harmonisation of Certain Aspects of Copyright and Related Rights in the Information Society, art. 6(1), 2001 O.J. (L 167) 6 (EC) [hereinafter the EUCD], http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32001L0029 (directing all member states to “provide adequate legal protection against the circumvention of any effective technological measures, which the person concerned carries out in the knowledge, or with reasonable grounds to know, that he or she is pursuing that objective”).
66 See supra note 49 and accompanying text.
67 See sources cited supra notes 48–50.
68 The term stands for technologies used by copyright holders to protect access to their works, e.g., password-protected access to an e-book upon payment or subscription. See 17 U.S.C. § 1201(a)(1)(A), (a)(3)(B) (2000); see
controls is prohibited. But circumvention of copy controls is permitted to ensure that the public at large (content users) have the ability to make fair and other non-infringing uses of copyrighted material.

Congress, pressured by copyright holders and their representatives, imposed two distinct prohibitions: a ban on acts of circumvention (the “act prohibition”) and a ban on the distribution of tools and technologies used for circumvention (the “tools prohibition”). As a result, the distinction between the

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69 The term stands for technologies employed by copyright holders to restrict copying, distribution, or other uses of their works in the exercise of the authors’ exclusive rights under Section 106 of the Copyright Act, e.g., e-book interface that does not allow one to save it to any device or to print-out more than certain limited amount of pages at a time, or to use a read-aloud function. See 17 U.S.C. § 1201(b)(2)(B) (2000); 17 U.S.C. § 106 (2002); Gasser & Girberger, supra note 58, at 7; see also Circumventing Copyright Controls, supra note 68.

70 17 U.S.C. § 1201(a)(1), (b)(1) (2000); see also Circumventing Copyright Controls, supra note 68.

71 Id.; see also U.S. Copyright Office Summary, supra note 3, at 4 (noting that Section 1201 does not prohibit circumventing copy controls applied to the work because copying of a copyrighted material can be a fair use under certain circumstances).

72 During the DMCA debate in 1997–1998, the content industry was represented by Hollywood (Motion Picture Ass’n of Am.), record labels (RIAA) and music publishers (ASCAP, Ass’n of Am. Publishers, S/w Publishers Ass’n) who argued for a greater copyright protection. See generally Bill D. Herman & Oscar H. Gandy, Jr., Catch 1201: A Legislative History and Content Analysis of The DMCA Exemption Proceedings, 24 Cardozo Arts & Ent. L.J. 121 (2006); see also Kravets, supra note 43 (noting that Hollywood secured “a still-troubling anti-circumvention rule” that generally prohibits consumers to bypass copy control TPMs).

access control and copy control TPMs became meaningless. Without a technology to circumvent copy controls, only few users can take advantage of this “generous” permission to bypass copy control TPMs. Moreover, because some copyright holders merge access control and copy control TPMs into one, those users who could theoretically bypass copy controls (which is not prohibited) would not be able to do so without also circumventing access controls (which is prohibited).

Recognizing the risks of the overly broad prohibitions on circumvention of access controls, Congress also provided exemptions to them. Again, Congress understood that the lack of ability to waive such a broad prohibition could someday undermine otherwise legitimate uses of copyrighted works protected by TPMs. The result would significantly tip the balance in favor of copyright holders’ interests in protecting their works, while unduly limiting the general public in accessing such works to make non-infringing uses of them. Constitutionally mandated to

74 Because the DMCA outlawed the manufacture, sale, distribution, etc. of such tools and technologies, not many will take a risk of the DMCA liability for supplying a technology, device or service that enables users to bypass copy controls. See 17 U.S.C. § 1203 (2010) (subjecting Section 1201 violators to civil penalties, including statutory damages of $200–$2,500 per act of circumvention or device to circumvent); 17 U.S.C. § 1204(b) (2010) (subjecting Section 1201 violators to fines as high as $500,000–$1 million, or even a jail time (five to ten years of imprisonment)).

75 Fred von Lohmann, DMCA Triennial Rulemaking: Failing Consumers Completely, ELEC FRONTIER FOUND. (Nov. 30, 2005), https://www.eff.org/deeplinks/2005/11/dmca-triennial-rulemaking-failing-consumers-completely (pointing out that unless a user is an engineer or a computer scientist, or can afford to hire one, the user is not likely to be able to benefit from any exemptions).

76 Circumventing Copyright Controls, supra note 68.

77 17 U.S.C. § 1201(d)–(j) (2000); see also supra note 3.

78 Commerce Comm. Report, supra note 6; see also Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,687–88.

79 See supra notes 55–56; 17 U.S.C. § 110 (2005) (permitting educational uses of copyrighted material, including in the course of face-to-face teaching, a live classroom session, etc.); 17 U.S.C. § 117 (2004) (affording certain uses of computer programs, such as maintenance and repair, etc.); Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,688, 55,690 (noting that Congress recognized importance of protecting non-infringing uses that could be affected
maintain this balance,\textsuperscript{80} as well as pressured by educators, technologists, and consumer advocacy groups to remedy potential misbalance,\textsuperscript{81} Congress subjected the DMCA prohibitions to a number of permanent exceptions.\textsuperscript{82}

Given the changing marketplace realities and rapidly evolving technologies, Congress understood that the DMCA required a certain level of flexibility to keep pace with such changes and advances.\textsuperscript{83} But Congress felt that exemptions would not be sufficient to eliminate the “threat of a diminution of otherwise lawful access to works and information.”\textsuperscript{84} To afford flexibility to adapt to changing and unforeseeable realities, Congress added an ongoing administrative rulemaking proceeding to the DMCA scheme.\textsuperscript{85} This fail-safe mechanism was meant to keep track of developments in the marketplace for copyrighted works and to allow temporary exemptions when necessary to preclude diminution in the availability of a particular class of works to

\textsuperscript{80} See supra note 55.

\textsuperscript{81} See Herman & Gandy, supra note 72, at 138, 152 (generally discussing that educators, technologists, and civil society advocates (e.g., the Digital Future Coalition) called for limits to broad grants of protection afforded by the DMCA).

\textsuperscript{82} See sources cited supra note 3; see also Singh, supra note 12, at 544 (discussing the reasons behind congressional decision to provide the statutory exemptions and institute the triennial rulemaking process).

\textsuperscript{83} Singh, supra note 12, at 529 (noting that because Congress recognized it could not predict the future technology landscape, it included the rulemaking proceedings in the DMCA scheme to create flexibility (citing H.R. Rep. No. 105-551, pt. 2, at 36 (1998))).

\textsuperscript{84} Commerce Comm. Report, supra note 6, at 36; see also Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,688.

consumers who want to make legitimate uses of them. As enacted in Section 1201(a), this mechanism directs the Librarian, the Register, and the Assistant Secretary for Communications and Information of the National Telecommunications and Information Administration (“NTIA’s Assistant Secretary”)\(^8\) to engage in the triennial rulemaking proceedings to determine which copyrighted works, if any, should be exempted from the access control prohibitions.\(^8\) Thus, the Register shall consult with the NTIA’s Assistant Secretary and make a recommendation to the Librarian as to whether TPMs that control access to a particular class of copyrighted works are likely, to adversely affect the ability of certain groups of users to make non-infringing uses of these works in the succeeding three-year period.\(^9\) Based on the Register’s recommendation, the Librarian decides which classes of works to exempt from the prohibition on circumventing access control TPMs for the succeeding three-year period.\(^9\) A potential issue, however, is that the Librarian’s authority is limited to adoption of exemptions only for circumventing access control TPMs.\(^9\) He has no authority to grant

\(^8\) Commerce Comm. Report, supra note 6, at 36 (explaining that the rulemaking “mechanism would monitor developments in the marketplace for copyrighted materials, and allow the enforceability of the prohibition against the act of circumvention to be selectively waived, for limited time periods, if necessary to prevent a diminution in the availability to individual users of a particular category of copyrighted materials”).

\(^9\) See About NTIA, Nat’l Telecomm. & Info. Admin., http://www.ntia.doc.gov/about (last visited Nov. 17, 2015) (stating that the Assistant Secretary for Communications and Information leads the National Telecommunications and Information Administration of the U.S. Department of Commerce (“NTIA”), located within the U.S. Department of Commerce).
exemptions for manufacturing and trafficking in products and services to circumvent these TPMs.  

II. RULEMAKING PROCEEDING

Pursuant to Section 1201(a)(1)(C), the DMCA rulemaking proceeding is to be conducted by the Register (who is also the Director of the Copyright Office) and overseen by the Librarian. Unfortunately, Congress provided little guidance for the rulemaking process itself. Section 1201(a)(1)(C) provided no

Section 1201(a)(1) prohibition to circumvent access control TPMs that are adopted by the Librarian are hereinafter referred to as “rulemaking exemptions.” Similarly, discussion of exemptions considered or declined by the Librarian in the rulemaking proceeding refers to exemptions from the prohibition to circumvent access controls applied to copyrighted works.


93 It is no coincidence that Congress entrusted the Register to aid the Librarian in the rulemaking proceeding. Since its creation in 1897, the Copyright Office, as a part of the Library of Congress, has proven to be a tremendous asset to Congress itself. 17 U.S.C. § 1201(a)(1)(C) (2000); Conference Report, supra note 88, at 64 (entrusting the Register to conduct the rulemaking proceedings); see also Oversight of the U.S. Copyright Office: Hearing Before the Subcomm. on Courts, Intellectual Property, and the Internet, Comm. on the Judiciary, 113th Cong. 2, 6 (2014) (statement of Maria A. Pallante, Register of Copyrights, U.S. Copyright Office) (discussing the role of the Copyright Office in the copyright system and its legal and policy work performed, including policy assistance and expert studies to Congress and to the public, legal assistance to federal agencies, conducting rulemakings, etc.); see also The Register’s Perspective On Copyright Review, supra note 30, at 4–5 (summarizing the Copyright Office’s work during the last four years); see also Overview of the Copyright Office, U.S. COPYRIGHT OFFICE, http://copyright.gov/about (last visited Dec. 13, 2015); see additionally Strategic Plan 2016-2020: Positioning the United States Copyright Office for the Future, U.S. COPYRIGHT OFFICE 4, http://copyright.gov/reports/strategic-plan/USCO-strategic.pdf (last visited Dec. 25, 2015) (summarizing the role of the Copyright Office in balancing copyright holders’ rights with the public interest).


95 Conference Report, supra note 88; see id. (prescribing only that “the Register of Copyrights will conduct the rulemaking, including providing notice of the rulemaking, seeking comments from the public, consulting with the Assistant Secretary for Communications and Information of the Department of Commerce and any other agencies that are deemed appropriate, and
instruction as to how the Copyright Office must conduct the proceedings, or what weight should be given to the opinion of the NTIA’s Assistant Secretary. Nor did the DMCA define the term “a particular class of copyrighted works,” as to which the exemptions to be considered by the Register and the Librarian, or provide the standard of harm to justify such exemptions.

Left with such little statutory direction, the Register faced a hard task of defining the process and other applicable legal standards. To fill in the gaps in the statutory language, the Register has often resorted to the legislative history of the DMCA, and more specifically, to the Reports of the House of Representatives when the DMCA was drafted and enacted. For instance, based on the hint that Congress left in one of these reports—specifically, that 1201 rulemaking was to be conducted “as typical with other rulemaking under title 17”—the Register decided to consult with the Administrative Procedure Act (“APA”) that governs rulemaking under Title 17 and sets forth the general principles of agency rulemaking. Consequently, the Register construed the 1201 rulemaking proceeding as one of a notice-and-comment type, which seems more appropriate (than, the formal type), given Congress’ goal of DMCA’s flexibility.

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98 Gray, supra note 15, at 764.
99 Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,688–90; see also Gray, supra note 15, at 765; Singh, supra note 12, at 545 n.123; see also Commerce Comm. Report, supra note 6, at 36–37; Section-by-Section Analysis of H.R. 2281 as passed by the United States House of Representatives on August 4, Comm. of Judiciary, 113th Cong. 6 (1998) [hereinafter House Manager’s Report]; Conference Report, supra note 88, at 64.
100 Conference Report, supra note 88, at 64; Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,688, 55,690.
101 17 U.S.C. § 701(e) (1998); Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,689.
102 Singh, supra note 12, at 542 (noting that “[m]ost agencies choose the latter because it is less cumbersome,” and “[g]iven this general preference as well as rapid technological advances and the goal of flexibility, this notice-and-comment approach would appear to be the obvious form for the DMCA’s rulemaking process”).
But that was only the beginning of the journey. Other important issues were to be resolved by the Register and the Copyright Office, such as the burden of proof on proponents of and opponents to exemption, the extent of harm necessary to justify exemption and, amongst others, the definition of a class of works to be exempted.103

A. Established Legal and Evidentiary Standards

Since the DMCA rulemaking mechanism was instituted, the Copyright Office has been trying to define the standards of the proceeding by referring to the statutory language and congressional intent in the House Reports.104 Although the Register refined her interpretations of that intent over time,105 legal and evidentiary standards of the process have been relatively finalized in the last two rulemakings, and fully outlined by the Register in the 2015 proceeding.106 This part will discuss the standards of the rulemaking proceeding as defined by the Copyright Office.

1. Burden of Proof

Those who seek an exemption carry the burden of proof against the prohibition on circumvention of access control TPMs.107 To satisfy

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103 Gray, supra note 15, at 764.
104 Id. at 765; see also Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,688–90; Singh, supra note 12, at 545.
105 Gray, supra note 15, at 764–69 (discussing the evolution of the Copyright Office’s approach to the rulemaking proceedings, e.g., rejecting “user-based” approach in defining a class of works in 2000 and 2003 rulemakings, but applying it in the following rulemakings); see also Jackson, supra note 21, at 533–40 (providing an overview of the rulemakings—including 2000, 2003, 2006, and 2009—noting the Copyright Office’s broadened interpretation of “class of works” and lowered standard of proof for some classes of works).
106 Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 13–19; Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,689–91; see also Singh, supra note 12, at 547.
107 5 U.S.C. § 556(d) (2011) (“Except as otherwise provided by statute, the proponent of a rule or order has the burden of proof.”); 2015 Exemption, supra note 9, at 65,945; Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 13; Notice of Inquiry for the Sixth Rulemaking, supra note 9, at
this burden, proponents of an exemption must demonstrate by a preponderance of the evidence that the harm alleged “is more likely than not.” This rule, the Copyright Office justified, stems from Section 1201(a)(1)(C) itself, as well as from general principles of agency rulemaking under the APA. Particularly, Section 1201(a)(1)(B)-(C) requires a demonstration that individual users are, or are likely to be adversely affected by the prohibition on circumvention of access control TPMs. The APA, in turn, requires proponents to support their submissions by “reliable, probative, and substantial evidence.” When a proponent

55,689.


110 5 U.S.C. § 556(d) (2011); Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 14.


112 5 U.S.C. § 556(d) (2011) (emphasis added); Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,689 (emphasis added); see also Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 14 (emphasis added); see id. at 14 n.50; see also Steadman v. SEC, 450 U.S. 91, 102 (1981). The Copyright Office explained that preponderance of evidence standard conforms to basic principles of administrative law and referred to the “reliable, probative, and substantial evidence” language in the APA to support its position. Then, the Office cites the Steadman case, which held that the APA “was intended to establish a standard of proof and that the standard adopted is the traditional preponderance-of-the-evidence standard.” Such an approach tends to blend two different standards—substantial evidence and preponderance of evidence—in one. The DMCA itself does not provide any reference to the substantial evidence burden of proof. But the statutory language “are, or are likely to be” is closer to the preponderance of evidence standard, and is therefore, more appropriate (though not the most optimal) for the purposes of the DMCA rulemaking than the substantial evidence standard. Id.; 17 U.S.C. § 1201(a)(1)(B)–(C) (2000).
satisfies the burden in justifying an exemption, the burden then shifts to an opponent to rebut this evidence by showing that exemption is not justified.\footnote{113}

2. Standard of Proof

To satisfy the burden of proof, those who seek an exemption for a particular class of works must demonstrate that: (i) the uses affected by the prohibition in Section 1201(a)(1) are or are likely to be non-infringing,\footnote{114} and (ii) the adverse impacts on these uses, i.e., the alleged harm, are or are likely to be substantial (as opposed to \textit{de minimis}),\footnote{115} and (iii) there is a causal connection between the prohibition on circumvention and adverse effects on those uses.\footnote{116} In addition, the Register must examine the statutory factors set forth in Section 1201(a)(1)(C), as well as whether positive effects of the prohibition outweigh adverse effects claimed by proponents.\footnote{117}

The Copyright Office explained that showing a particular use could be non-infringing is not enough.\footnote{118} Rather, proponents must

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  \item \textit{\footnote{113} However, the Copyright Office has not clearly indicated whether the rebuttal of the exemption is subject to the preponderance of evidence standard as well. See Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 14.}
  \item \textit{\footnote{114} 17 U.S.C. § 1201(a)(1)(B) (2000) (emphasis added); 2015 Exemption, supra note 9, at 65,945 (emphasis added); Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 14–15 (emphasis added); Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,690 (emphasis added).}
  \item \textit{\footnote{115} 17 U.S.C. § 1201(a)(1)(C) (2000) (emphasis added); 2015 Exemption, supra note 9, at 65,945 (emphasis added); Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 15–16 (emphasis added); Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,690 (emphasis added).}
  \item \textit{\footnote{116} 2015 Exemption, supra note 9, at 65,945 (emphasis added); Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,690 (emphasis added); Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 16; see also Singh, supra note 12, at 557, 566 (emphasis added).}
  \item \textit{\footnote{117} 17 U.S.C. § 1201(a)(1)(C)(i)–(v) (2000) (emphasis added); 2015 Exemption, supra note 9, at 65,945 (emphasis added); Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 16 (emphasis added); Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,690 (emphasis added).}
  \item \textit{\footnote{118} 17 U.S.C. § 1201(a)(1)(C); Register’s Recommendation for the Sixth}
demonstrate that the proposed use “is likely to qualify as non-infringing under relevant law,”\textsuperscript{119} not merely that it might plausibly be deemed non-infringing.\textsuperscript{120} This means that a more stringent standard than the “rule of doubt” applies.\textsuperscript{121}

Further, the Copyright Office clarified that adverse effects on non-infringing uses of a particular class of copyrighted works must be  \textit{substantial}.\textsuperscript{122} The Copyright Office derived such a standard of harm from the language of the House Reports on the DMCA that the Copyright Office often refers to.\textsuperscript{123} Particularly, that Congress intended the rulemaking proceeding to “focus on distinct, verifiable, and measurable impacts”\textsuperscript{124} and “not [to] be based upon  \textit{de minimis} impacts.”\textsuperscript{125} Likewise, the Copyright Office continued, Congress instructed that the primary focus of the rulemaking should be on whether “a substantial diminution of that availability is  \textit{actually occurring}”\textsuperscript{126} (i.e., actual substantial harm) in the

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\item \textsuperscript{119}Id. (emphasis added).
\item \textsuperscript{120} Register’s Recommendation for the Sixth Rulemaking,  \textit{supra} note 33, at 15; \textit{see also} Notice of Inquiry for the Sixth Rulemaking,  \textit{supra} note 9, at 55,690 (citing Recommendation of the Register of Copyrights, \textit{Section 1201 Rulemaking: Fifth Triennial Proceeding to Determine Exemptions to the Prohibition on Circumvention}, U.S. COPYRIGHT OFFICE 7 (Oct. 2012)).
\item \textsuperscript{121} Register’s Recommendation for the Sixth Rulemaking,  \textit{supra} note 33, at 15 (explaining that ‘there is no “rule of doubt” favoring an exemption when it is unclear that a particular use is a fair or otherwise non-infringing use’ (citing Recommendation of the Register of Copyrights, \textit{Section 1201 Rulemaking: Fifth Triennial Proceeding to Determine Exemptions to the Prohibition on Circumvention}, at 7 (Oct. 2012))).
\item \textsuperscript{122} Notice of Inquiry for the Sixth Rulemaking,  \textit{supra} note 9, at 55,690.
\item \textsuperscript{124} Commerce Comm. Report,  \textit{supra} note 6, at 37 (emphasis added); Register’s Recommendation for the Sixth Rulemaking,  \textit{supra} note 33, at 15–16 (emphasis added) (citing the Commerce Comm. Report at 37).
\item \textsuperscript{125} Id.
\item \textsuperscript{126} House Manager’s Report,  \textit{supra} note 99, at 6 (emphasis added); Register’s Recommendation for the Sixth Rulemaking,  \textit{supra} note 33, at 15–16 (emphasis added) (citing the House Manager’s Report at 6).
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marketplace for a particular class of works.\textsuperscript{127} The Copyright Office also emphasized that “\textit{mere inconveniences}, or individual cases . . . do not rise to the level of a substantial adverse impact.”\textsuperscript{128} The Register’s reliance on this language caused problems in the past, particularly, with e-book and cellphone exemptions, which will be further discussed in Part III of this Article.\textsuperscript{129}

When, however, proponent’s claim relies on future rather than existing adverse impacts, the statute requires the proponent to demonstrate that such future impacts are “\textit{likely}” to occur.\textsuperscript{130} But an exemption, the Copyright Office noted, can be based on the anticipated impact “only in \textit{extraordinary circumstances} in which the \textit{evidence of likelihood} of future adverse impact during that time

\textsuperscript{127} Id.

\textsuperscript{128} Id. (emphasis added). However, the Commerce Committee Report does not have such a “substantial diminution” language that is present in the House Manager’s Report. The former was prepared by the Commerce Committee, the very committee that proposed the rulemaking mechanism in the first place. The latter however was prepared by the Judiciary Committee after the DMCA bill was passed by the full House. For these reasons, the House Manager’s Report is seen by some as a less reliable source of congressional intent for the rulemaking framework, and therefore, more weight should be given to the Commerce Committee Report in determining rulemaking standards. See Commerce Comm. Report, supra note 6, at 37 (explaining that “primary goal of the rulemaking proceeding is to assess whether the prevalence of these technological protections, with respect to particular categories of copyrighted materials, is diminishing the ability of individuals to use these works in ways that are otherwise lawful”); Gray, supra note 15, at 783 (noting that some commentators do not consider the House Manager’s Report a reliable indicator of Congress’s intent for the rulemaking process); see also Herman & Gandy, supra note 72, at 169 (noting that the House Manager’s Report was intended to impose “a stricter ban than the one that resulted from Conference Committee and was passed by the full House and Senate”); Aaron Perzanowski, \textit{Evolving Standards & the Future of the DMCA Anticircumvention Rulemaking}, 10 J. INTERNET L. 1, 14 (2007), \textit{available at} http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=1114367 (characterizing the House Manager’s Report as “[o]ffering a slightly different interpretation” than the Commerce Committee Report).

\textsuperscript{129} See infra p. 266 and notes 277–83.

\textsuperscript{130} 17 U.S.C. § 1201(a)(1)(B) (2000) (emphasis added); Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 16; Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,690.
period is highly specific, strong and persuasive.” Thus, the standard for an exemption based upon anticipated adverse impacts is even higher, and therefore, much harder to meet. Finally, those who seek an exemption must also show that “the TPM is the cause of the claimed adverse impact.” Accordingly, adverse impacts that are not “clearly attributable” to the TPM’s enforcement or come from other sources (e.g., price, quality of copies available on the market, safety regulations, etc.), are irrelevant and will not be considered within the scope of rulemaking.

In addition to the above requirements, the Register and the Librarian must also consider potential exemptions under the following statutory factors: (i) availability for use of copyrighted works; (ii) availability for use of works for nonprofit archival, preservation, and educational purposes; (iii) impact that the prohibition on the circumvention of technological measures applied to copyrighted works has on criticism, comment, news reporting, teaching, scholarship, or research; (iv) the effect of circumvention of technological measures on the market for or value of copyrighted works; and (v) such other factors as the Librarian considers appropriate. The fifth factor provides the

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131 House Manager’s Report, supra note 99, at 6 (emphasis added); Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 16 (emphasis added) (citing the House Manager’s Report at 6).

As noted earlier, the Copyright Office’s reliance on the House Manager’s Report rather than on the Commerce Comm. Report might not be the best way to interpret congressional intent with respect to the rulemaking standards. See discussion and sources cited supra note 128.

132 Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,690.

133 Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 16.

134 See Commerce Comm. Report, supra note 6, at 37 (emphasis added); Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 16 (emphasis added) (citing the Commerce Comm. Report, supra note 6, at 37); see id. (providing a few examples of adverse effects stemming from other sources, including “marketplace trends, other technological developments, or changes in the roles of libraries, distributors or other intermediaries” (citing the House Manager’s Report at 6)).

135 17 U.S.C. § 1201(a)(1)(C)(i)–(v) (2000); 2015 Exemption, supra note 9, at 65,945; Register’s Recommendation for the Sixth Rulemaking, supra note 33,
Librarian broad discretion.\textsuperscript{136} The Librarian has exercised this discretion only once in the 2010 Rulemaking, when he granted renewal of e-book exemption despite the Register’s recommendation to the opposite.\textsuperscript{137} Lastly, in addition to negative impacts, the Register and the Librarian may also consider the benefits that TPMs bring for “the overall creation and dissemination of works in the marketplace.”\textsuperscript{138}

Because the Register and the Librarian are required to make all the above determinations and weigh all the above factors, those who seek exemptions bear a heavy burden in proving their case before them. And thus, petitioners should carefully address above considerations in their proposals, which in turn, might require a lawyer’s assistance.\textsuperscript{139}

3. \textit{De Novo} Review

In addition to the above burdens and standards, there is also a \textit{de novo} standard of review.\textsuperscript{140} This standard requires that each

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\textsuperscript{137} Within the past seventeen years, the Librarian approved all the exemptions proposed by the Register of Copyrights, only once overriding the Register’s rejection to extend an exemption and granting renewal of the e-book exemption for the blind and visually impaired readers. See Gray, supra note 15, at 779–80; Singh, supra note 12, at 545 (citing 75 Fed. Reg. 43,825, 43,838–39 (July 27, 2010)); see id. at 568 n.289–90 (citing 75 Fed. Reg. 43,825, 43,837–38); see also 2010 Exemption, supra note 13, at 43,838–39.

\textsuperscript{138} 2015 Exemption, supra note 9, at 65,945; Register’s Recommendation for the Sixth Rulemaking, note 33, at 16.

Again, the Copyright Office derived such a requirement from the House Manager’s Report. Neither Section 1201, nor Commerce Comm. Report, include such a language. See House Manager’s Report, supra note 99, at 6 (explaining that “the rulemaking proceedings should consider the positive as well as the adverse effects of these technologies on the availability of copyrighted materials’’); Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 16 (citing House Manager’s Report, supra note 99, at 6); see also discussion supra note 128.

\textsuperscript{139} See supra note 19 and accompanying text.

\textsuperscript{140} Commerce Comm. Report, supra note 6, at 37 (explaining that “[t]he rulemaking will be repeated” and “on each occasion, the assessment of adverse impacts on particular categories of works is to be determined \textit{de novo}’’);
triennial rulemaking is considered anew, which means that prior rulemakings do not have any precedential effect on the following rulemakings.\textsuperscript{141} Likewise, the Copyright Office noted, the fact that an exemption has been previously granted creates no precedent for the following rulemakings, meaning that a proponent must provide relevant evidence in every rulemaking to justify the continuation of the existing exemption.\textsuperscript{142} It is worth noting that this approach has created problems in the past, specifically, with e-book and cellphone unlocking exemptions, which will be further discussed in Part III of this Article.\textsuperscript{143}

In the most recent rulemaking, the Register noted that where proponents seek to renew an existing exemption, they may attempt to meet their burden by showing “the conditions that led to the adoption of the prior exemption continue to exist today (or that new conditions exist to justify the exemption).”\textsuperscript{144} The Register also explained that this burden could be satisfied by demonstrating that failure to renew such an exemption will “adversely impact users’ ability to make non-infringing uses of the class of works covered by the existing exemption.”\textsuperscript{145} Further, the Register acknowledged that in case of existing exemptions, the evidence “may be weak, incomplete or otherwise inadequate to support the

\textsuperscript{141} Id.; see also Commerce Comm. Report, supra note 6, at 37 (clarifying that “[t]he regulatory prohibition is presumed to apply to any and all kinds of works, including those as to which a waiver of applicability was previously in effect, unless, and until, the [Librarian] makes a new determination that the adverse impact criteria have been met with respect to a particular class and therefore issues a new waiver”) (emphasis added); see also Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,690 (citing the Commerce Comm. Report, supra note 6, at 37).

\textsuperscript{142} Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 14 (explaining that proponents cannot “simply rely on the fact that the Register has recommended an exemption in the past, but must instead produce relevant evidence in each rulemaking to justify the continuation of the exemption”).

\textsuperscript{143} See infra pp. 263, 265 and notes 266, 273.

\textsuperscript{144} 2015 Exemption, supra note 9, at 65,495; Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,690.

\textsuperscript{145} Id.
request for renewal” as, for instance, happened with the cellphone unlocking proposal in the 2012 Rulemaking proceeding. The Register nonetheless did not elaborate as to how such cases will be dealt with. Similarly to petitions for new exemptions, as soon as a proponent satisfies his burden of proof for re-adoption of an existing exemption, the burden shifts to the opponent to demonstrate that the exemption is no longer justified.

Such an approach might indicate the Register’s willingness to reconsider standard of proof for renewals to afford a presumption favoring proponents seeking re-adoption of existing exemptions, for instance, with respect to a class of works exempted or non-infringing uses covered by exemption. While it is a step forward compared to the Register’s recommendations in 2010 and 2012, the Register may be reluctant to lower the standard prescribed by Congress without an express congressional directive. Consequently, the Register suggested that Congress amend the rulemaking proceeding “to create a presumption in favor of renewal when there is no meaningful opposition to the continuation of an exemption.”

Hopefully, the situation with renewals will be remedied should the Breaking Down Barriers to Innovation Act of 2015 or the like bill be passed.

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146 Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 4.
147 See infra pp. 265–66 and notes 273, 280–82.
148 See infra pp. 263–66 and notes 266, 273, 276, 280.
149 This does not necessarily mean that the standard should be the same for petitions that request modification or expansion of existing exemptions, as they may involve issues that go beyond the scope of previously granted exemptions.
150 Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 4; see also supra note 30 and accompanying text.
4. Class of Works

Pursuant to Section 1201(a)(1)(B), the Register must define “a particular class of works” for purposes of an exemption. Aside from the statutory language, Congress only indicated that this class must “be a narrow and focused subset of the broad categories of works” defined in Section 102 of the Copyright Act. Again, because Congress left little guidance on the issue, the Copyright Office has been trying for the past seventeen years to figure out an appropriate, workable standard in defining a class of works. At first, the Copyright Office started with a too rigid approach that was based solely on Section 102 categories and reference to a medium and/or access control TPM applied to the work. But since then, the Register has gradually leaned towards a more flexible interpretation by adding function- and user-based approaches.

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153 17 U.S.C. § 1201(a)(1)(B) (2000) (providing that an exemption adopted as part of the DMCA rulemaking must be defined based on “a particular class of works”); Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 17; Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,690.

154 Commerce Comm. Report, supra note 6, at 38 (emphasis added); Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 17 (citing the Commerce Comm. Report at 38).


156 See infra notes 157–58.

157 See U.S. Copyright Office, Recommendation of the Register of Copyrights in RM 2005-1: Rulemaking on Exemptions from Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies 10 (2006) [hereinafter Register’s Recommendation for the Third Rulemaking] (noting that in the earlier rulemakings, the Register declined proposals to classify works by the type of user (e.g., libraries) or use (e.g., scholarly research)); see also Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 18 (citing Register’s Recommendation for the Third Rulemaking, at 10); Gray, supra note 15, at 766–68; Jackson, supra note 21, at 529–30.

158 It was the 2006 Rulemaking, when the Register for the first time in the rulemaking history defined a class of works by referring to “the particular type of use and/or user to which the exemption will apply.” See Jackson, supra note 21; see also Register’s Recommendation for the Sixth Rulemaking, supra note
Accordingly, in the 2015 Rulemaking, the Register noted that the list of Section 102 categories is “a starting point” for defining a “particular class.” The Register then may depart from these categories, being bound only by Congress’ general guidelines that such a class should not be too broad, as well as not too narrow. For this reason, the Copyright Office has recommended that proponents avoid seeking general (too broad) exemptions (e.g., for “all wireless devices,” “all computer tablets,” or “all motor vehicles”), as well as overly specific (too narrow) exemptions (e.g., for a “particular genres” of motion pictures, such as comedies, dramas, thrillers, or science fiction). Otherwise, it would be difficult to justify such an exemption. On the other hand, those petitions that focus on a specific category of devices (or a particular class of works), such as all-purpose tablet computers, or dedicated e-book readers, etc., are more likely to succeed. Therefore, those who want to get an exemption should adhere to the Congressional directive that a class of works must be neither overly broad, nor overly narrow to be exempted.

33, at 18 (acknowledging that “classifying a work solely by reference to the medium on which the work appears, or the access control measures applied to the work, would be inconsistent with Congress’ intent in directing the Register and Librarian to define a ‘particular class’ of works” (citing Register’s Recommendation for the Third Rulemaking, at 10); Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,691 n.11 (discussing the evolution of the Register’s approach in defining a class of works).

159 House Manager’s Report, supra note 99, at 7; Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 18 (citing the House Manager’s Report at 7).

160 House Manager’s Report, supra note 99, at 7 (explaining that “the category of ‘literary works’ embraces both prose creations such as journals, periodicals or books, and computer programs of all kinds,” but “these two categories of works, while both ‘literary works,’ do not constitute a single ‘particular class’ for purposes” of the rulemaking. of this legislation); Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 18 (citing the House Manager’s Report at 7); Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,690 (citing the House Manager’s Report at 7).

161 Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,690–91 (citing the House Manager’s Report, supra note 99, at 7).

162 Id. at 55,691.

163 Id. at 55,690.

164 In the 2015 Rulemaking, the Copyright Office declined to consider three
In sum, when defining a class of works for a proposed exemption, the Register will refer to the following considerations: (i) the medium on which the works are distributed, (ii) a particular type of use and/or user which the exemption should cover, (iii) particular access control TPMs applied to them, or even (iv) the adverse effects that an exemption may have upon the “market for or value of copyrighted works.” Additionally, the Register will also refer to the specific record that is submitted. Therefore, in order to be granted an exemption, proponents should take the above criteria into account when preparing their submissions.

B. Administrative Procedure and Procedural Changes to the 2015 Rulemaking

As discussed above, the DMCA rulemaking constitutes a notice-and-comment proceeding, which calls for active participation of the general public and all interested parties. But because the rulemaking is overwhelmed with legal and evidentiary standards, it can be hard for non-lawyers to follow or participate in petitions because they sought to allow circumvention of “any and all TPMs that constituted digital rights management with respect to unspecified types of copyrighted works for the purpose of engaging in unidentified personal and/or consumer uses.” See Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 20 (emphasis added) (citing 79 Fed. Reg. 73,856, 73,859 (Dec. 12, 2014)).

Id. at 18; Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,691.

165 This factor in defining a class of works mirrors the fourth statutory factor in Section 1201, and it is similar to one of the fair use factors in Section 107. See 17 U.S.C. § 1201(a)(1)(C)(iv) (2002); 17 U.S.C. § 107 (1992); see also House Manager’s Report, supra note 99, at 7 (“Deciding the scope or boundaries of a ‘particular class’ of copyrighted works as to which the prohibition contained in section 1201(a)(1) has been shown to have had an adverse impact is an important issue to be determined during the rulemaking proceedings.”); Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,691 (citing the House Manager’s Report, supra note 99, at 7); Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 18–19.

167 Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 18.

168 See sources cited supra note 102 and accompanying text.
the process.\textsuperscript{169} Less and less individual users are submitting proposals to the Copyright Office.\textsuperscript{170} Even interested parties, such as copyright holders, advocacy groups, educational and research institutions, must often resort to attorneys and experts in the field to build a case for them.\textsuperscript{171} As a result, the notice and comment

\textsuperscript{169} See sources cited supra note 19.

\textsuperscript{170} In the 2000 Rulemaking, only about 15 out of 235 initial proposals for exemptions submitted to the Copyright Office were made by entities, the rest were from individual users. In the 2010 Rulemaking, the number of petitioners for proposed classes dropped to nineteen, less than a half were individual users. In the 2015 Rulemaking, out of twenty-seven petitioners less than a half were individual users, at least sixteen petitioners were various advocacy groups, educational institutions, and organizations representing copyright holders. See Public Comments, Rulemaking on Exemptions from Prohibition on Circumvention of Technological Measures that Control Access to Copyrighted Works, U.S. COPYRIGHT OFFICE, http://www.copyright.gov/1201/comments/ (last visited Nov. 12, 2015) (providing a record of initial proposals submitted in 1999–2000 during the First Rulemaking); see also Petitions for Proposed Exemptions, Rulemaking on Exemptions from Prohibition on Circumvention of Technological Measures that Control Access to Copyrighted Works, U.S. COPYRIGHT OFFICE, http://www.copyright.gov/1201/2008/index.html (last visited Nov. 12, 2015) (providing a record of initial proposals submitted in 2008 during the Fourth Rulemaking); Petitions for Proposed Exemptions, Rulemaking on Exemptions from Prohibition on Circumvention of Technological Measures that Control Access to Copyrighted Works, U.S. COPYRIGHT OFFICE, http://copyright.gov/1201/2014/petitions (last visited Nov. 12, 2015) (providing a record of initial proposals submitted in 2014 during the Sixth Rulemaking).

process, which was intended to have broad public participation, is now dominated by legal experts. 172

To understand the challenges of the rulemaking process, it is therefore important to examine the established administrative procedure employed by the Copyright Office, as well as its recent modifications. 173 Generally, the rulemaking proceeding has five phases: (i) petition phase (proponents submit proposals for exemptions); (ii) public comment phase (proponents, opponents, and other interested parties submit their comments on proposals); (iii) public hearings phase (parties present their arguments in the round tables held by the Copyright Office); (iv) post-hearing questions phase (parties respond to the Copyright Office’s follow-up questions); (v) recommendation and final rule phase (the Register, upon the input by the National Telecommunications and Information Administration (“NTIA”), provides a recommendation to the Librarian, who then issues a final rule announcing exemptions for a succeeding three-year period). 174 The Copyright Office provides a full administrative record for each rulemaking proceeding, including the Register’s notices, submitted proposals and comments, transcripts of public hearings, post-hearing questions and answers, the Register’s recommendation, and the Librarian’s decision. 175


172 See supra note 171; see also supra note 19 and accompanying text.


174 Notice of Inquiry for the Fifth Rulemaking, supra note 173, at 60,404–05 (emphasis added).

175 Section 1201 Rulemakings, supra note 9 (providing a full administrative record for all rulemakings).
1. Petition Phase

The Copyright Office initiates the rulemaking process by issuing a Notice of Inquiry inviting the public to submit their proposals for exemptions. In the previous rulemakings, the Copyright Office required proponents to present their entire case with complete legal and evidentiary support in their initial submission of proposals. The Copyright Office did not offer specific guidance as to the format and essential elements of such proposals. It did, however, permit untimely submissions of proposals in cases of “exceptional or unforeseen circumstances.”

Under the modified procedure, proponents now only need to submit a brief summary (basic information) of their proposal—submission of a complete legally and factually supported proposal is no longer required in the petition phase. Proponents must, however, concisely describe each of the essential elements of the proposed exemption, such as a class or category of copyrighted works sought to be accessed, basic nature of TPMs applied to these works, specific non-infringing uses of copyrighted works sought to be facilitated by circumvention, current or probable adverse effects on proposed non-infringing uses, etc.

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176 Notice of Inquiry for the Fifth Rulemaking, supra note 173, at 60,398 (initiating the petition phase of the 2012 Rulemaking); Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,687, 55,691 (initiating the petition phase of the 2015 Rulemaking); Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 19.

177 Notice of Inquiry for the Fifth Rulemaking, supra note 173, at 60,403; Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,691 (emphasis added) (citing 76 Fed. Reg. 60,403 (Sept. 29, 2011)); Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 19.

178 Register’s Recommendation for the Sixth Rulemaking, supra note 9, at 19.

179 Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,691 (citing 76 Fed. Reg. 60,404).

180 Id. at 55,692–93; Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 19.

181 Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,692; Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 19–20.

182 Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,692–93; Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 19.
The Copyright Office also provided more guidance on submission of initial proposals, including: (i) recommended format and contents of proposals, as well as essential elements to be included in them, and (ii) supplied template petition forms. Thus, because the modified procedure and Copyright Office’s guidance significantly facilitate initial submissions, the Copyright Office decided to not administer a specific procedure for untimely petitions, although the Office did reserve its right to address unanticipated situations that may arise in the submission process.

The Copyright Office also now requires that petitions address a single proposed exemption. But petitioners may submit multiple proposals. The Copyright Office made this modification because proponents in previous rulemakings sometimes combined their proposals for different classes of works into a single submission. This modification made such submissions both difficult and time-consuming for other participants and the general public to follow, and for the Copyright Office to determine which arguments and evidence supported which proposed exemption. This separation of submissions by a proposed class of works was meant to ensure more focused replies and an overall clearer rulemaking record. It worked quite well for the 2015 Rulemaking.

183 Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,692–93 (explaining specific requirements for format and contents of initial submissions).
184 Id. at 55,692 (providing a link to the templates at http://www.copyright.gov/1201); Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 20.
185 Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,692.
187 Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,692.
188 Id.
189 Id.
190 Id.
191 Id. In the 2015 Rulemaking, the Copyright Office grouped the proposed exemptions into twenty-seven proposed classes of works; overlapping proposals were merged into a single combined proposed class; and individual proposals, which covered multiple proposed uses, got subdivided into multiple classes. See
2. Public Comment Phase

Upon receipt of initial submissions with proposed exemptions, the Copyright Office studies submissions, posts them on its website, and then issues a Notice of Proposed Rulemaking that outlines the proposals and invites interested parties to submit comments.\(^{192}\) In the previous rulemakings, there were two rounds of comments.\(^{193}\) During the first round, all commentators submitted their comments both in support of and in opposition to proposals.\(^{194}\) Then, all commentators submitted their replies both in support of and in opposition to the proposed exemptions.\(^{195}\) This practice made it difficult for commentators to follow the points made by their opponents.\(^{196}\)

According to the revised procedure, the Copyright Office divided the public comment phase into three rounds of comments.\(^{197}\) The first round of comments is now limited to submissions by proponents and supporters of proposed exemptions, plus any neutral parties who simply want to share relevant information on a particular proposal.\(^{198}\) Other than

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\(^{193}\) Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,691.

\(^{194}\) Id. (requesting additional factual information to assist the Office in determining whether proposed classes are warranted for exemption (citing 76 Fed. Reg. 78,866, 78,868 (Dec. 20, 2011)).

\(^{195}\) Id.

\(^{196}\) Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 21.

\(^{197}\) Id.; Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,693.

\(^{198}\) Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 21; Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,693.
responding to their opponents, proponents should submit their entire case (including documentary evidence and multimedia presentations) during this round of public comments. The second round of comments is limited to submissions by opponents of proposed exemptions, who may also include some documentary evidence and multimedia presentations in support of their position. A third round of comments is limited to proponents and supporters of particular proposals and neutral parties. But their comments may only address points raised earlier, i.e., no new issues can be introduced at this point.

Similarly to the petition phase, all commentators must provide separate submissions for each proposed exemption at each round of public comments. Although, as the Copyright Office noted itself, this practice might sometimes be a bit repetitive, creating separate records for each proposal would ensure a better track by a particular class of works, and for the 2015 Rulemaking it did.

Again, the Copyright Office has provided more guidance on submission of comments than it did in the previous rulemakings. Specifically, the Copyright Office: (i) recommended specific areas

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199 Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,693 (noting that proponents may submit multimedia presentations of the proposed non-infringing use, adverse effects, and/or other relevant material to prove their case).

200 Id. In the 2015 Rulemaking, the Office received nearly 40,000 comments in total. Although the vast majority of them consisted of short statements without substantial legal or evidentiary support, a number of the longer submissions did include supporting evidence, such as multimedia files. See Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 21–22.

201 Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,693; Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 21–22.

202 Id.

203 Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 21 (citing 79 Fed. Reg. 73,856, 73,857).

204 Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,692–93.

205 The 2015 Rulemaking provided a clear and convenient tracking record for all classes of works. See Section 1201 Rulemakings, supra note 9 (providing a full administrative record for the Sixth Rulemaking); see also Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 21 (noting that as the 2015 proceeding progressed, the Copyright Office did in fact find such a refinement to be helpful).
of legal and factual interest concerning each proposed class, types
of evidence to be submitted with comments, format and content for
submissions;\(^{206}\) (ii) supplied short- and long-form comment
templates;\(^{207}\) (iii) grouped similar or overlapping proposed
exemptions by a class of works, so that commentators could refer
to these proposed classes in their submissions;\(^{208}\) (iv) repeatedly
emphasized the importance of supporting evidence to the
process.\(^{209}\)

3. Public Hearings Phase

After the public comment period closes, the Copyright Office
issues a Notice of Public Hearings that provides guidelines for the
hearings and invites the public to submit requests.\(^{210}\) The
Copyright Office then conducts public hearings to further discuss
and explore proposed exemptions.\(^{211}\) Hearings are generally
organized by subject matter and proposed classes of works.\(^{212}\)

\(^{206}\) Register’s Recommendation for the Sixth Rulemaking, supra note 33, at
21 (citing 79 Fed. Reg. 73,856, 73,857); see also Notice of Proposed 2015
Rulemaking, supra note 192, at 73,857 (providing guidance for the public
comment phase of the 2015 rulemaking).

\(^{207}\) Register’s Recommendation for the Sixth Rulemaking, supra note 33, at
20–21 (citing 79 Fed. Reg. 73,856, 73,858); see also Notice of Proposed 2015
Rulemaking, supra note 192, at 73,858 (providing guidance for short- and long
form comments).

\(^{208}\) Notice of Proposed 2015 Rulemaking, supra note 192, at 73,859–72
(grouping proposed exemptions set forth in the forty-four petitions into twenty-
seven proposed classes).

\(^{209}\) Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,693.

\(^{210}\) See Exemption to Prohibition on Circumvention of Copyright Protection
(to be codified at 37 C.F.R. pt. 201) [hereinafter Notice of Public Hearings for
the Fifth Rulemaking] (initiating the public hearings phase and providing
guidance on the process); Exemption to Prohibition on Circumvention of
of Public Hearings for the Sixth Rulemaking] (initiating the public hearings
phase and providing guidance on the process).

\(^{211}\) Id.

\(^{212}\) Notice of Public Hearings for the Fifth Rulemaking, supra note 210, at
15,328.
Parties that are willing to testify at a hearing must submit a request to the Copyright Office. In the 2012 Rulemaking, there was a separate “technology hearing,” where witnesses demonstrated technologies pertinent to specific proposals. The following additional hearings were limited to the testimony of witnesses, including presentations of facts and legal arguments, and responses to the follow-up questions from the Copyright Office’s and NTIA’s staff.

Under the modified procedure, there will be no separate technology hearing. Rather, all hearings will focus on legal and factual issues and demonstrative evidence of technologies pertinent to specific proposals. In addition, anyone desiring to testify on more than one proposed class is required to submit a separate form for each request to testify. Before the hearings, the Copyright Office issues a Hearings Agenda with information about the time and place of the hearings, witnesses to be heard, and classes of works to be discussed.

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213 Id.; Notice of Public Hearings for the Sixth Rulemaking, supra note 210, at 19,255.
214 Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,693 (citing 77 Fed. Reg. 15,328 (Mar. 15, 2012)); see also id. at 55,691 n.13 (noting that it was the first time the Copyright Office held a hearing that specifically focused on technologies pertinent to proposed exemptions).
215 Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,693 (citing 77 Fed. Reg. 15,328).
216 Notice of Public Hearings for the Sixth Rulemaking, supra note 210, at 19,255.
217 Id. at 19,255–56 (stressing that factual information is critical to the process and encouraging witnesses to provide real-world examples in support of their position); see also Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 22 (providing an overview of the public hearing phase in the 2015 Rulemaking, specifically, that the Copyright Office held seven days of hearings in Los Angeles and Washington, D.C., heard testimony from sixty-three witnesses, and received additional multimedia evidence at the hearings).
218 Notice of Public Hearings for the Sixth Rulemaking, supra note 210, at 19,255.
219 See generally Final Agenda for the Sixth Triennial 1201 Rulemaking Hearings, U.S. COPYRIGHT OFFICE (May 7, 2015), http://copyright.gov/1201/2015/Final_1201_hearing_agenda_20150507.pdf (providing information about the time and place of the hearings, their participants and proposed classes for discussion); see also Public Hearings Transcripts on Exemptions to the
4. Post-Hearing Questions Phase

Following the hearings, the Copyright Office sends specific follow-up questions to the witnesses, who respond to these questions with additional comments.220 This phase is designed to help the Copyright Office clarify any unresolved issues concerning proposed exemptions.221 In the 2015 proceeding, the Copyright Office stated that it may rely on this process more than in the previous rulemakings,222 particularly to give proponents and opponents a final opportunity to provide any missing information that might be material to specific exemptions.223 Similar to the public hearings, post-hearing questions and answers are conveniently grouped by proposed classes of works.224 No significant changes were made to this phase of the proceeding.


221 Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,693–94; Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 22.

222 Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,693 (noting that requests for responses to follow-up questions “will be in the form of a letter from the Copyright Office and will be addressed to individual parties involved in the proposal” regarding which the Office seeks additional information).

223 Id.

224 See generally Post-Hearing Questions, supra note 220; Post-Hearing Answers, supra note 220.
5. Recommendation and Final Rule Phase

Finally, the Register reviews the resulting administrative record, consults with the NTIA’s Assistant Secretary, and prepares a recommendation to the Librarian on each proposed class of works to be exempted for a succeeding three-year period. Upon consideration of the Register’s recommendation, the Librarian adopts a final rule and publishes his decision on proposed exemptions in the Federal Register. Note that if there is any delay in the rulemaking process, as happened in the 2010 Rulemaking, the Librarian of Congress may publish an Interim Rule to extend the existing exemptions. The final phase of the rulemaking proceeding is also without change.

6. Summary of Procedural Changes

In sum, the key differences between the former and modified procedure include: (i) petitioners are no longer required to submit their entire case at the initial petition phase, rather a brief summary

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\(^{225}\) In the 2015 Rulemaking, NTIA was represented at the public hearings, provided procedural and substantive input throughout the rulemaking proceedings, and formally communicated its position on each of the proposed exemptions in its letter to the Register. See Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 23; see generally Letter from Lawrence E. Strickling, Assistant Sec’y for Commc’ns & Info., U.S. Department of Commerce, to Maria Pallante, the Register of Copyrights, U.S. Copyright Office, at 1 (Sept. 18, 2015), available at http://copyright.gov/1201/2015/2015_NTIA_Letter.pdf.

\(^{226}\) Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,693 (citing 77 Fed. Reg. 65,260 (Oct. 26, 2012)).

\(^{227}\) Id. at 55,691, 55,693–94 (citing 77 Fed. Reg. 65,260); see also Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 5–7 (providing a summary of Register’s recommendations); 2015 Exemption, supra note 9, at 65,944 (providing the Librarian’s final decision on proposed exemptions).

of their proposal is sufficient at this phase of proceeding; (ii) a more structured public comment process is implemented—instead of two rounds of public comments (where both proponents and opponents submitted their comments) there are now three rounds (the first is limited to proponents’ comments, the second—to opponents’ comments, and the third—to reply comments); (iii) separate petitions and comments must be submitted for each proposed exemption to ensure an easier tracking of proposals by a specific class of works and overall a clearer administrative record; (iv) legal arguments for proposed classes of works and technologies involved in these works must be presented and demonstrated within the same hearing; and (v) the Copyright Office provides more detailed and specific guidance in the petition and public comment phases to help participants better navigate through the process.

As the Copyright Office hoped, the above procedural changes provided an opportunity for all participants of the 2015 Rulemaking to better coordinate their submissions and more effectively participate in the process. The Copyright Office believes that these changes will help to further enhance a better understanding of the rulemaking process, including its legal and evidentiary requirements, by the layman members of the public. Finally, the Copyright Office expects that in the future, these procedural changes will significantly reduce at least some administrative burdens on the participants, as well as the Copyright Office itself.

Although some of these changes have turned out to be a good practice, they are still insufficient to make the rulemaking proceeding effective and comprehensive overall. However, if this revised procedure continues to make the process more comprehensive and easier to follow, it will at least resolve some of the problems with the DMCA rulemaking. What matters is that the very decision to modify the procedure along with the Copyright

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229 Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,691–92.
230 Id.
231 Id. at 55,692.
232 See supra notes 197, 206-08 and accompanying text.
233 See supra notes 19–20, 170–72 and accompanying text.
Office’s expressed expectations are indicative of the Register’s awareness and concern over efficiency of the rulemaking proceeding.\footnote{\textit{See Rachael Stelly, The Copyright Office Preps For a New Section 1201 Rulemaking, DISRUPTIVE COMPETITION PROJECT} (Dec. 8, 2014), http://www.project-disco.org/intellectual-property/120814-copyright-office-preps-new-section-1201-rulemaking (noting that the Copyright Office seems “to be cognizant of the process’s issues and, this year, has made changes to the administrative procedures”).}

### III. Prior Rulemakings

If the past seventeen years have shown anything, it is that the DMCA rulemaking mechanism plays an important role in the U.S. copyright system.\footnote{\textit{See Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 2.}} As was emphasized in Part I, this mechanism is unique; only one other country in the world has such a flexible scheme\footnote{\textit{See supra note 54 and accompanying text.}} that allows a government agency (the Library of Congress) to adjust the law as technology and the marketplace evolve and dictate a different outcome for the DMCA provisions.\footnote{\textit{See supra note 56 and accompanying text.}} One might say that other countries did not implement a similar mechanism because they originally provided more exemptions than the U.S.,\footnote{\textit{See supra note 58, at 15 (discussing narrow anti-circumvention provisions enacted in the EU countries); see also Copyright and Related Rights Regulations 2003, S.I. 2003/2498/EC, sec. 296ZF(3) (UK), http://www.legislation.gov.uk/uksi/2003/2498/regulation/24/made (enacting anti-circumvention provisions that do not cover instances where TPMs are used}} or adopted narrower anti-circumvention provisions.\footnote{\textit{See supra note 54 and accompanying text.}} Whether or not this is the case, it does...
not change the fact that new technologies evolve and marketplace realities change faster than ever before. This necessitates a flexible scheme—one which allows the law to catch-up with such changes.

A. Positive Trends

Past rulemakings have demonstrated that although the DMCA mechanism has certain drawbacks, it is not without advances towards balancing between copyright and digital technologies.\textsuperscript{240} If not for the DMCA rulemaking mechanism, one wonders what the consumer and market landscape would look like today.\textsuperscript{241} Had it not been for this mechanism, we would not even have the small number of exemptions that the public has enjoyed since 1998. Users would not be permitted to unlock their cellphones, computer tablets, and smartwatches to switch wireless carriers,\textsuperscript{242} or to

\begin{itemize}
\item \textsuperscript{240} See additionally Act No. LXXVI of 1999 on Copyright (consolidated text as of January 1, 2007), art. 95(1) (Hung.), http://www.wipo.int/wipolex/en/details.jsp?id=11840 (enacting anti-circumvention provisions, which prescribe that “the legal consequences of the infringement of copyright” apply to the circumvention of TPMs “designed to provide protection for copyright;” thus, limiting application of these provisions to the acts of circumvention that infringe the copyright and to TPMs that are designed to prevent such infringements). But see sources cited supra note 65 and accompanying text.
\item \textsuperscript{241} Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 1 (emphasizing the key role of the triennial rulemaking in the DMCA scheme in achieving a healthy balance between the copyrights and digital technologies).
\item \textsuperscript{242} Kravets, supra note 43 (concluding that despite certain problems and drawbacks in the DMCA scheme, it is “impossible to gauge what the internet landscape would look like today had it not been for the DMCA”).
\end{itemize}

\textsuperscript{240} The cellphone unlocking exemption was originally granted in 2006; renewed and expanded in 2010; partially renewed (for ninety days) in 2012; fully renewed in the 2010 version in 2014; and again granted in 2015 (also covering computer tablets, smartwatches and fitness devices). See 2006 Exemption, supra note 13, at 68,480; 2010 Exemption, supra note 13, at 43,839; 2012 Exemption, supra note 13, at 65,278 (granting a limited unlocking exemption that covered only cellphones acquired within the ninety days after the Librarian’s decision was issued, \textit{i.e.}, before January 24, 2013); Unlocking Consumer Choice & Wireless Competition Act, supra note 23 (substituting the broader version of the 2010 cellphone unlocking exemption for the limited 2012 version); 2015 Exemption, supra note 9, at 65,962–63.
jailbreak their phones, tablets, and smart TVs to remove original software apps and install apps from sources of their choice. Nor would they be permitted to use alternative feedstock in 3D printers protected by TPMs, or to inspect and modify protected software in their cars and other vehicles. But more importantly, users are allowed to circumvent TPMs to have a security testing of their motor vehicles and medical devices (e.g., body implants). Likewise, if not for the e-book exemption granted by the Librarian, the e-book library for millions of blind, visually impaired, and print-disabled readers would still be limited to a small number of books that have text-to-speech (“TTS”)

243 The cellphone jailbreaking exemption was originally granted in 2010; renewed in 2012; and again renewed in 2015 (also covering computer tablets and smart TVs). See 2010 Exemption, supra note 13, at 43,839; 2012 Exemption, supra note 13, at 65,278–79; 2015 Exemption, supra note 9, at 65,963.

244 2015 Exemption, supra note 9, at 65,963 (granting for the first time a “3D printer” exemption that permits the use alternative feedstock in 3D printers, which employ microchip-reliant TPMs to limit the use of feedstock).

245 Id. (granting for the first time a “car tinkering” exemption that permits users to circumvent TPMs in personal cars, commercial vehicles and agricultural machinery for purposes of diagnosis, repair and modification of these vehicles and equipment; although delaying its implementation for one year); see also EFF Wins Petition to Inspect and Modify Car Software, supra note 47 (discussing the importance of this exemption).

246 2015 Exemption, supra note 9, at 65,963 (granting for the first time an exemption that permits users to circumvent TPMs in voting machines, motorized land vehicles, and medical devices designed for implantation in patients or a corresponding personal monitoring systems; although delaying its implementation for one year).

247 The e-book exemption was originally granted in 2003; renewed in 2006; renewed again in 2010 despite the Register’s recommendation to the opposite; and renewed again in 2012 and 2015. See 2003 Exemption, supra note 13, at 62,018; 2006 Exemption, supra note 13, at 68,480; 2010 Exemption, supra note 13, at 43,839; 2012 Exemption, supra note 13, at 65,278; 2015 Exemption, supra note 9, at 65,962.

capabilities, depriving them of an opportunity to enjoy an endless number of e-books available to readers without visual impairments.

Congress believes that, despite all the criticism, the DMCA and the triennial rulemaking have proven to be a success for a number of reasons. First, not only has the rulemaking proceeding resulted in dozens of exemptions in addition to the statutory ones provided, but it has also afforded flexibility to the DMCA scheme as was intended by Congress in 1998. Second, the Copyright Office has become more flexible in its interpretations of the legal and evidentiary standards. Not only has the Copyright Office started to apply fair use analysis when considering proposed exemptions, but it has also broadened its interpretations to include function- and user-based approaches in defining a class of works. Third, the overall process has become more structured: both the legal and evidentiary standards, as well as the administrative procedure, have become considerably certain and consistent, and with the recent procedural changes, the process may become more user-friendly. Furthermore, because the

249 Text-to-speech capability is also called a read-aloud function.

250 Section 1201 Hearing, supra note 13, at 4 (statement of Rep. John Conyers Jr., Ranking Member, Comm. on Judiciary) (“Chapter 12 maintains the necessary balance between strong copyright protection measures and a consumer driven marketplace for legitimate uses of copyrighted works.”); see also id. at 3–4 (statement of Rep. Jerrold Nadler, Ranking Member, Subcomm. on Courts, Intellectual Property, and the Internet) (“[E]nactment of the DMCA has led to a long period of innovation and benefits for consumers.”).

251 17 U.S.C. § 1201(d)–(j) (2000); Section 1201 Hearing, supra note 13, at 4 (statement of Rep. John Conyers Jr., Ranking Member, Comm. on Judiciary); see also id. at 2–3 (statement of Rep. Jerrold Nadler, Ranking Member, Subcomm. on Courts, Intellectual Property, and the Internet) (acknowledging flexibility of the DMCA mechanism and its crucial role for innovation); see also sources cited supra note 13 and accompanying text.

252 See sources cited supra notes 6–7, 83, 85 and accompanying text.

253 See supra note 105 and accompanying text.

254 See supra notes 105, 158 and accompanying text; see also Gray, supra note 15, at 792; see additionally Jackson, supra note 21, at 541–42 (discussing the 2009 exemption that permitted “audiovisual works used for the purpose of university learning, documentary filmmaking, and noncommercial video production” considering “both the user and that user’s intention with the work,” which allowed exemptions to begin “to truly protect fair uses for the first time”).
triennial rulemaking has such broad and important real-world implications on people’s daily lives, the public awareness of the rulemaking has significantly grown within the last five years (in most part, due to the cellphone unlocking debate). Finally, despite the premise that the Register’s recommendations are generally crucial for the final outcome of the rulemaking, the Librarian has demonstrated a positive trend of his own—specifically, by exercising discretion and deviating from the Register’s recommendations where an exemption is socially beneficial.

B. Areas for Improvement

While the DMCA has enjoyed some success, several fundamental problems have also surfaced. Congress has partially addressed some of them (e.g., cellphone unlocking issue), but other problems continue to exist and affect the rulemaking mechanism. The major problem is the standard of review for renewals of existing exemptions.

1. Standard of Review for Renewals

As was discussed in Part II, the de novo standard of review compels proponents seeking renewals to prove anew that continuation of an exemption is still justified. Such a showing is required despite that the need for non-infringing uses of exempted classes of works has not significantly changed over time and there is no meaningful opposition to renewal. This has been the case

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255 See sources cited supra notes 36–40 and accompanying text.
256 See infra pp. 269–70 and notes 305–07; see also Section 1201 Hearing, supra note 13, at 43 (testimony of McSherry, Intell. Prop. Dir., EFF) (“Americans got a sense of the problem when they discovered, to their surprise, that merely unlocking their phones to go to a different carrier might be illegal.”).
257 See sources cited supra note 137 and accompanying text.
259 See supra notes 140–42 and accompanying text.
260 Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 4 (noting that de novo standard requires proponents for renewals of existing exemptions to submit evidence every three years anew, though proponents have
with a number of exemptions, including but not limited to: cellphone unlocking and jailbreaking, e-books, film studies, and video remixes exemptions.

Because of the *de novo* standard, prior rulemakings do not have precedential effect on future exemptions. Thus, proponents for renewal cannot simply rely on their previous submissions, but rather must support their case with new evidence in each proceeding. For instance, in the 2010 Rulemaking, the Register recommended not to renew the e-book exemption because petitioners based their proposal for renewal on their previous submissions in the 2003 and 2006 Rulemakings, although the situation with e-books had not significantly changed since 2002. Moreover, the e-book exemption is an example of how unfairly the *de novo* standard burdens proponents seeking renewals of previously granted exemptions. Thus, even though the e-book exemption has been repeatedly granted by the Librarian since the 2003 Rulemaking, and there has been no substantial opposition to its renewal, visually impaired people must continue to fight

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261 See sources cited supra notes 242–43, 247 and accompanying text.


263 The “video remixes” exemption was originally granted in 2010, renewed and expanded in 2012, and again in 2015 merging with the film studies exemption. See 2010 Exemption, supra note 13, at 43,839; 2012 Exemption, supra note 13, at 65,279; 2015 Exemption, supra note 9, at 65,962.

264 Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 4.

265 *Id.*


267 Section 1201 Hearing, supra note 13, at 4–6 (testimony of Mark Richert, Dir. of Pub. Policy, Am. Found. for the Blind) (summarizing the rulemaking experience with e-book exemption).

268 See sources cited supra note 247.

269 Register’s Recommendation for the Fourth Rulemaking, supra note 108,
for their right to access e-books in every single rulemaking.\(^{270}\) And this is despite the fact that statutory and established case law treats uses covered by the e-book exemption as fair use,\(^{271}\) and international obligations of the United States require facilitation of accessibility to published works for persons who are blind, visually impaired, or otherwise print disabled.\(^{272}\) Similarly, the new

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\(^{270}\) See supra notes 260–61; see also It’s Time to Fix the DMCA, supra note 20 (arguing that “there is something fundamentally wrong with a process that makes people who are blind or visually impaired have to, over and over again, beg for protection from potentially significant civil and criminal penalties just for finding a way to access books they have a right to read” (citing Mark Richert, Dir. of Pub. Policy, Am. Found. for the Blind)).

\(^{271}\) See 17 U.S.C. § 107 (1992); 17 U.S.C. § 121 (1997) (“the Chafee Amendment”) (providing that “it is not an infringement of copyright for an authorized entity to reproduce or to distribute copies . . . of a previously published, nondramatic literary work if such copies . . . are reproduced or distributed in specialized formats exclusively for use by blind or other persons with disabilities.”); see also Authors Guild, Inc. v. HathiTrust, 755 F.3d 87, 103 (2d Cir. 2014) (holding that “fair use allows the Libraries to provide full digital access to copyrighted works to their print-disabled patrons”); Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 133 (acknowledging that the legislative history of the 1976 Copyright Act, the Chafee Amendment, and the HathiTrust decision support the proponent’s “claim that converting e-books into accessible formats is a non-infringing fair use”). However, currently neither the Chafee Amendment, nor the fair use provisions can protect visually impaired people against the DMCA liability if they circumvent TPMs that prevent access to the copyrighted material, which they are authorized to copy.

\(^{272}\) On October 2, 2013, the U.S. signed the Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired or Otherwise Print Disabled, but has not ratified it yet, because there is still some uncertainty whether the U.S. copyright laws comply with the treaty’s provisions. The treaty promises to amend the copyright law to provide...
evidence requirement caused troubles in the 2012 Rulemaking. The Register recommended not renewing the broad 2010 cellphone unlocking exemption because proponents failed to make their case, relying on the 2010 Rulemaking rather than supplying new evidence.  

Furthermore, the standard of proof is the same for all petitions, either seeking new exemptions or renewals of the existing ones. This creates certain challenges in proving actual, let alone substantial, harm in case of renewals. This issue surfaced in the 2010 Rulemaking with the e-book exemption and in 2012 with the cellphone exemption. Thus, one of the reasons the Register recommended not renewing the e-book exemption in 2010 was petitioners’ failure to provide evidence of actual substantial harm. Specifically, the access control prohibition adversely

limitations/exceptions that allow: (i) reproduction of works, by an authorized entity, for the purpose of converting them into accessible format copies exclusively for the use of beneficiary persons; (ii) distribution of accessible format copies exclusively to beneficiary persons; (iii) export of accessible format copies of works, in order to make them available to a beneficiary person in another country; and (iv) import of accessible format copies of works produced in another country, in order to make them available domestically. See Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired or Otherwise Print Disabled, art. 4, June 27, 2013, WORLD INTELLECTUAL PROP. ORG., available at http://www.wipo.int/treaties/en/text.jsp?file_id=301016; see also Ratification of the Marrakesh Treaty Legislative Imperative, AM. COUNCIL OF THE BLIND, http://acb.org/LIMarrakesh (last visited Apr. 30, 2015); The Register’s Perspective On Copyright Review, supra note 30, at 20–21 (stating that the Copyright Office fully supports swift ratification of the Marrakesh Treaty, which would permit American people with visual impairments to enjoy accessible format copies of works from around the world); Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 136 (acknowledging that the e-book exemption is consistent with the U.S. obligations under the Marrakesh Treaty).


275 Gray, supra note 15, at 777 (noting that de novo requirement makes it more difficult to produce evidence of present or future harm for proponents who seek renewals, than those who seek new exemptions).

276 2010 Exemption, supra note 13, at 43,838; Gray, supra note 15, at 780.
affected the ability of blind and visually impaired readers to engage in non-infringing uses of e-books.277 The Register made such a recommendation despite the fact that this class of works was exempted for at least seven years.278 The recurring exemption itself considerably reduced adverse effects from such a prohibition, and thus, made it virtually impossible to show an actual harm.279

Similarly, in the 2012 Rulemaking the Register recommended not renewing the broad 2010 cellphone unlocking exemption, because the harm to consumers was a mere inconvenience not sufficient to justify continuation of the exemption for a full three-year period.280 Instead, the Register advised limiting the existing exemption to phones purchased within ninety days after the rule were to take effect.281 The Register’s argument referred to the fact that the market provided “ample alternatives” to consumers as more phones were being sold unlocked.282 But such a conclusion disregarded the fact that the availability of alternatives was attributable in part to the cellphone unlocking exemption granted in 2010.283

2. Third Party Assistance

Under current law, the Librarian has no authority to permit third party assistance, such as manufacturing and trafficking in tools to circumvent TPMs, to help users benefit from the exemptions granted by the Librarian.284 This issue was raised in the cellphone unlocking debate and Congress has fixed it for

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277 Id.
279 Id. But fortunately, the Librarian overruled the Register’s recommendation and granted the renewal. See supra notes 137, 247.
281 Id.
282 Id.
283 Gray, supra note 15, at 771 n.71, 778–79. Unfortunately, this time the Librarian affirmed the Register’s recommendation. See infra p. 269 and notes 299–301.
284 See supra note 92 and accompanying text.
cellphones and other wireless devices.\textsuperscript{285} Congress, however, has not addressed this problem for other software-containing devices or products.\textsuperscript{286}

More recently, the issue has resurfaced in the 2015 Rulemaking.\textsuperscript{287} Specifically, with respect to helping circumvent TPMs to facilitate repairs of motor vehicles or to access medical data in medical implants.\textsuperscript{288} In this regard, the Register herself noted that Congress should consider amending Section 1201 to facilitate such assistance.\textsuperscript{289} For example, by entrusting the Librarian to grant exemptions that permit third party assistance to exempted users in accessing exempted classes of works, when the case so requires.\textsuperscript{290}

3. Enforcement of Exemptions

Presently, no mechanism exists to ensure that copyright holders allow users to take advantage of the DMCA exemptions, either statutory or adopted by the Librarian. Despite the e-book exemption, beneficiaries of this exemption still cannot access many e-books and other electronically distributed textual works, because major e-book platform providers either use TPMs to limit works’ accessibility (e.g., Amazon, Apple, Barnes & Noble), or simply lock their devices to certain services (e.g., Amazon Kindle).\textsuperscript{291} A mechanism that would require copyright holders to facilitate access to exempted works by eligible users (\textit{i.e.},

\begin{itemize}
\item \textsuperscript{285} See infra pp. 270–71 and note 312.
\item \textsuperscript{286} Id.
\item \textsuperscript{287} Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 5.
\item \textsuperscript{288} \textit{Id.; see also It’s Time to Fix the DMCA, supra note 20} (noting that, unlike the cellphone exemption, the “medical devices” exemption does not include “the explicit ability for patients to get help from others in accessing their data” (citing Sherwin Siy, Vice President for Legal Affairs, Pub. Knowledge)).
\item \textsuperscript{289} Register’s Recommendation for the Sixth Rulemaking, supra note 33, at 5.
\item \textsuperscript{290} Id.
\item \textsuperscript{291} Id. at 129, 131 (citing the AFB’s Petition for Exemption E-book Accessibility for People who are Blind, Visually Impaired, or Print Disabled, at 5, 17–18).
\end{itemize}
beneficiaries of the DMCA exemptions) could potentially resolve this issue.\footnote{292}{See infra pp. 276–78.} As will be discussed in Part IV of this Article, some European countries, such as the U.K., already employ such a mechanism.\footnote{293}{See infra pp. 277–79 and notes 346–48, 357.}

The issues reviewed above are only the tip of the iceberg and the \textit{de novo} requirement and standard of harm are on the very top of it.\footnote{294}{It’s Time to Fix the DMCA, \textit{supra} note 20 (noting that “a review every three years . . . places burdens on users who have to repeatedly ask permission for the same activity” (citing Sen. Ron Wyden)).} Because the cellphone unlocking debate is one of the best examples of the issues that proponents of recurring exemptions face in the rulemaking proceeding, it will be discussed in more detail below.

\textbf{C. Lessons to Learn: The Unlocking Consumer Choice and Wireless Competition Act of 2014}

After Congress passed the DMCA and imposed broad prohibitions on circumvention of TPMs applied to copyrighted works, many cellphone manufacturers and wireless carriers used this opportunity to include TPMs in their wares.\footnote{295}{See Greg Kumparak, \textit{Unlocking Your Cell Phone Is Still Illegal, But Probably Not For Long}, \textit{Tech Crunch} (July 25, 2014), http://techcrunch.com/2014/07/25/unlocking-your-cell-phone-is-still-illegal-but-probably-not-for-long; \textit{see also} Higgins, \textit{supra} note 49.} This allowed them to lock cellphones they distributed so to preclude users from switching to another carrier and to some extent discourage competition among manufacturers and service providers.\footnote{296}{Id.} Thus, despite Congress’ intentions, TPMs were employed not to fight piracy or other types of copyright infringement, but primarily to control the market of software-containing devices. This was the case for most cellphone manufacturers and wireless carriers, until 2006 when the situation changed dramatically.\footnote{297}{2006 Exemption, \textit{supra} note 13, at 68,476.} For the first time in the rulemaking history, the Register recommended, and the
As a result, the 2006 unlocking exemption allowed cellphone owners to circumvent software locks on their phones and to connect to a wireless carrier of their choosing. In 2010, the Register expanded this exemption to cover both firmware and software, though adding the caveat that access must be “authorized by the operator of the network.” Also, the Register added a new exemption—the jailbreaking exemption—that permitted cellphone owners to circumvent access control TPMs applied to their phones in order to install third party applications. Despite the Register recommending the 2006 and 2010 unlocking exemptions, she nevertheless did not recommend a renewal of the 2010 cellphone unlocking exemption in 2012. Rather, she suggested a limited, both in scope and time, exemption. Thus, the Register recommended to permit unlocking only for the phones acquired within ninety days after the rule became effective. The Librarian accepted the Register’s recommendation and cellphone unlocking became illegal again on January 26, 2013. This caused an immense public outcry that called for an overturning of the Librarian’s decision to make unlocking permanently legal. The Obama Administration not only supported the people’s outcry, but also recommended an exemption to cover computer tablets.

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298 Id.
299 Id.; Singh, supra note 12, at 551 (citing 71 Fed. Reg. 68,472, 68,476 (Nov. 27, 2006)).
301 Id.
302 Register’s Recommendation for the Fifth Rulemaking, supra note 269, at 99–100.
303 Id.; see also Notice of Inquiry for the Sixth Rulemaking, supra note 9, at 55,689 (citing 77 Fed. Reg. 65,263, 65,264–66 (Oct. 26, 2012)).
304 2012 Exemption, supra note 13, at 65,278.
305 Make Unlocking Cell Phones Legal, supra note 22.
The Register and the Librarian were widely criticized for this controversial decision and some even went as far as to claim that the rulemaking mechanism was inefficient altogether.\textsuperscript{308} But the Register and the Librarian cannot be blamed for the pitfalls of the mechanism that they were instructed to follow and enforce. It was Congress who created a mechanism without providing clear and precise instructions to the Register and the Librarian on how to implement it.\textsuperscript{309} Given the insufficient congressional guidance on this matter, the Register and Librarian did the best they could under the circumstances.

The situation that developed around the cellphone unlocking exemption required a congressional response. Thus, pressured by the public and the President, Congress enacted the Unlocking Consumer Choice and Wireless Competition Act of 2014.\textsuperscript{310} The Act made several important changes. First, the Act substituted a broader version of the 2010 cellphone unlocking exemption for the 2012 version, but allowed the Register to consider any future proposals for a cellphone unlocking exemption.\textsuperscript{311} Second, the Act permitted specified third parties to circumvent TPMs at the direction of a cellphone or other mobile device owner to connect to a different wireless carrier, but only with respect to the reinstated 2010 cellphone unlocking exemption and any other future

\begin{footnotes}
\item[308] Section 1201 Hearing, \textit{supra} note 13, at 43 (testimony of McSherry, Intell. Prop. Dir., EFF) (suggesting that Congress overturn Section 1201).
\item[309] 17 U.S.C. § 1201(a)(1)(C)–(B) (2000); \textit{see supra} notes 95–98 and accompanying text; \textit{see also} Notice of Inquiry for the Sixth Rulemaking, \textit{supra} note 9, at 55,689.
\item[310] Unlocking Consumer Choice & Wireless Competition Act, \textit{supra} note 23; \textit{Make Unlocking Cell Phones Legal, supra} note 22; \textit{see also} Notice of Inquiry for the Sixth Rulemaking, \textit{supra} note 9, at 55,689 (discussing situation that developed around the cellphone unlocking issue); \textit{see additionally Statement from the President on Unlocking Consumer Choice and Wireless Competition Act} (July 25, 2014), available at https://www.whitehouse.gov/the-press-office/2014/07/25/statement-president-unlocking-consumer-choice-and-wireless-competition-a.
\item[311] Unlocking Consumer Choice & Wireless Competition Act, \textit{supra} note 23; Register’s Recommendation for the Sixth Rulemaking, \textit{supra} note 33, at 12 (summarizing the provisions of the Unlocking Consumer Choice & Wireless Competition Act).
\end{footnotes}
rulemaking exemptions to cover mobile devices.\textsuperscript{312} Third, the Act directed the Librarian to determine as a part of the rulemaking proceeding whether to extend the cellphone unlocking exemption to include any other wireless devices in addition to cellphones, such as computer tablets and other mobile devices.\textsuperscript{313}

Despite certain benefits that the Act provided, several issues were nevertheless left unresolved. For instance, Congress passed the issues of unlocking other mobile devices, as well as jailbreaking of cellphones and other mobile devices, to the Register and the Librarian for consideration within the triennial rulemaking proceedings.\textsuperscript{314} And in the most recent rulemaking, the Librarian granted permission to unlock phones, computer tablets, smartwatches, and fitness devices,\textsuperscript{315} as well as to jailbreak phones, tablets, and even smart TVs.\textsuperscript{316} But in three years, consumers will still need to fight for these rights \textit{de novo}.\textsuperscript{317} Thus, the Unlocking Consumer Choice and Wireless Competition Act provided only a very limited solution to a bigger problem with the DMCA mechanism.

However, the cellphone unlocking debate has shown that, without the congressional intervention, there is only so much the Register and the Librarian can do, as their hands are tied by the rigid DMCA provisions. Many, including those in Congress, are suggesting it is time for Congress to step in and exercise its legislative power and wisdom to amend the DMCA mechanism.\textsuperscript{318}

\textsuperscript{312} Id.

\textsuperscript{313} Unlocking Consumer Choice & Wireless Competition Act, \textit{supra} note 23; Register’s Recommendation for the Sixth Rulemaking, \textit{supra} note 33, at 13.

\textsuperscript{314} Unlocking Consumer Choice & Wireless Competition Act, \textit{supra} note 23; \textit{Make Unlocking Cell Phones Legal}, \textit{supra} note 22; see also Notice of Inquiry for the Sixth Rulemaking, \textit{supra} note 9, at 55,689; Higgins, \textit{supra} note 49.

\textsuperscript{315} 2015 Exemption, \textit{supra} note 9, at 65,962–63.

\textsuperscript{316} \textit{Id.} at 65,963.

\textsuperscript{317} See \textit{supra} notes 260–61, 265, 267 and accompanying text; see also Higgins, \textit{supra} note 49 (stressing that due to “the frustrating way DMCA exemptions are considered, groups like EFF have to return to the Copyright Office and Librarian of Congress every three years and argue the case anew”); Register’s Recommendation for the Sixth Rulemaking, \textit{supra} note 33, at 12–13.

\textsuperscript{318} See \textit{supra} notes 25, 28–31; see also \textit{It’s Time to Fix the DMCA}, \textit{supra} note 20 (noting that “the fact remains that no matter how many exemptions are
IV. SOLUTIONS FOR IMPROVEMENT

The past seventeen years under the DMCA have demonstrated that the rulemaking mechanism has its ups and downs, but we must keep it for better or for worse. Even those who have voiced against this mechanism have at some point acknowledged its legacy and importance. No regulatory mechanism is perfect and there is always room for improvement. And the DMCA mechanism is not an exception. But it does not mean that the mechanism should be abandoned altogether as some consumer advocacy groups have repeatedly suggested. Rather, it needs some improvement, a second life.

Recent developments indicate that Congress, the Copyright Office, and the public have finally ripened to make such improvements. Although the number of opportunities is endless, it is important to only focus on workable solutions that will be welcomed, or at least tolerated, by both sides—the copyright holders and the public at large (represented by consumer advocacy groups, educational, scientific research and similar institutions).

A. Call for Improvement: The Breaking Down Barriers to Innovation Act of 2015

Some representatives of Congress have already presented possible solutions to the problems with the rulemaking mechanism.

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319 For instance, while being overall critical of the DMCA rulemaking, EFF did nevertheless recommend back in 2006 a similar periodic review and exemption-granting procedure to be established within the U.K. anti-circumvention law system. See Hinze, supra note 49, at 13–14.

320 See, e.g., It’s Time to Fix the DMCA, supra note 20 (arguing that “[t]he triennial 1201 rulemaking is a statutory ‘Rube Goldberg’ contraption for which there should never have been a need in the first place” (citing Adam Eisgrau, Managing Dir., Am. Library Ass’n)); see also supra note 308 and accompanying text; see additionally Corynne McSherry, EFF Asks Librarian of Congress to Help Correct DMCA Gotcha, ELEC. FRONTIER FOUND. (Nov. 5, 2014), https://www.eff.org/deeplinks/2014/11/eff-asks-librarian-congress-help-correct-dmca-gotcha.
The Breaking Down Barriers to Innovation Act of 2015 was introduced on April 26, 2015, by Senator Ron Wyden (Oregon) and Representative Jared Polis (Colorado).\footnote{Wyden, supra note 28 (providing a summary of the bill and its full text).} The bill’s stated goal is to improve the rulemaking process and to ease restrictions on the use of certain statutory exemptions to the DMCA.\footnote{Breaking Down Barriers to Innovation Act, supra note 28.}

The bill proposes a number of important improvements, including: (i) automatic renewal of previously granted exemptions, unless the changed circumstances dictate otherwise; (ii) enabling the Librarian to consider requests for exemptions outside the triennial proceeding; (iii) adding two more statutory factors to be considered by the Librarian when analyzing proposals for exemptions (specifically, the accessibility of works and technologies for persons with disabilities, and the furtherance of security research); (iv) easing the burden of proof by changing it from “the preponderance-of-evidence” to the “totality-of-the-evidence,” or the “totality-of-the-circumstances;” (v) shifting the burden of proof away from proponents of exemptions; and (vi) establishing a presumption for persons with disabilities of being likely to be adversely affected, if a TPM applied to a copyrighted work that improves accessibility of works and/or technologies to such persons hinders non-infringing uses of such a work.\footnote{Id.}

Additionally, the bill directs the Librarian of Congress (in consultation with the Register of Copyrights and the NTIA’s Assistant Secretary) to conduct a study on (i) ways to further ease the burden on persons requesting exemptions; (ii) how the exemption process can be used to foster security research; and (iii) how the exemption process can be expanded to circumvent tools.\footnote{See sources cited supra note 29 and accompanying text; see also The Register’s Perspective On Copyright Review, supra note 30, at 21.}

Being welcomed by major public interest advocacy organizations, by representatives of the copyright holders and the Register herself, a version of this bill has a chance of being passed by Congress.\footnote{See supra note 28 and accompanying text.} If enacted, this bill could resolve major problems
with the DMCA rulemaking, especially with respect to recurring exemptions. Thus, the bill could ease the burdens of proponents for renewing exemptions and allow greater certainty and security for those who depend on them (educators, researchers, the visually impaired, etc.).326

B. Considering Additional Solutions for Improvement

While the Breaking Down Barriers to Innovation Act is undoubtedly a step forward, it does not, unfortunately, fix all the problems with the DMCA rulemaking. Although the Librarian would be entrusted to review the exemptions outside the triennial proceedings, the prohibition on trafficking in tools to circumvent TPMs (both access controls and copy controls) is still outside the scope of the rulemaking.327 Even if exemptions automatically renew, most users would still not be able to access exempted works unless someone creates and distributes the technology to circumvent TPMs applied to these works.328 Likewise, a presumption of harm to persons with disabilities when TPMs apply to a class of works intended to improve accessibility of technologies to such persons will not completely resolve the issue. As people with disabilities must still build their case before the Register and bear their burden, e.g., in defining a class of such works, showing that TPM still hinders non-infringing uses of such works.329

Finally, until Congress reconsiders the definition of the acts of circumvention of TPMs to only cover the acts that actually infringe the copyrights, and not any and all acts unauthorized by copyright holders,330 the DMCA scheme, including the DMCA rulemaking

326 Breaking Down Barriers to Innovation Act, supra note 28 (summary of the bill).
327 See supra notes 91–92 and accompanying text.
328 See supra notes 74–75 and accompanying text.
329 See supra note 271 and accompanying text.
330 17 U.S.C. § 1201 (a)(3)(A) (2000) (“[T]o “circumvent a technological measure” means to descramble a scrambled work, to decrypt an encrypted work, or otherwise to avoid, bypass, remove, deactivate, or impair a technological measure, without the authority of the copyright owner.”) (emphasis added); see also supra note 65 and accompanying text.
proceeding, will continue to govern the areas that go well beyond the scope of the copyright protection—such as consumer protection, public safety, privacy, competition, etc.\textsuperscript{331} Following this logic, Congress might need to consider amending the definition of TPMs itself to only include measures that protect against copyright infringement, and not against every action unauthorized by copyright owners.\textsuperscript{332} Maybe even to inquire about practices in other countries, for instance, by asking the Copyright Office to produce a pertinent study.\textsuperscript{333}

Therefore, without a significant congressional intervention to address the above issues, the DMCA mechanism will continue to frustrate legitimate uses of copyrighted works and software-containing devices.

1. Congressional Intervention

In addition to the solutions presented by the Breaking Down Barriers to Innovation Act, there are other possible opportunities for improvement that Congress should consider. For instance, additional or alternative solutions may include: (i) adding Sections 1201(a)(2) and 1201(b)(1) to the scope of the triennial rulemaking to allow trafficking in tools to circumvent TPMs for the classes of works exempted by the rulemaking, so that all consumers (not just the most sophisticated ones) could benefit from such exemptions;\textsuperscript{334} (ii) including the statutory exemptions within the scope of rulemaking to allow the Librarian considering petitions

\textsuperscript{331} See sources cited supra notes 48–50, 67 and accompanying text; see also Letter from Sen. Grassley and Sen. Leahy, supra note 32, at 1.

\textsuperscript{332} 17 U.S.C. § 1201 (a)(3)(B) (2000) (“[A] technological measure “effectively controls access to a work” if the measure, in the ordinary course of its operation, requires the application of information, or a process or a treatment, with the authority of the copyright owner, to gain access to the work.”) (emphasis added); see also supra notes 65–66 and accompanying text.

\textsuperscript{333} For instance, some European countries, which adopted the EUCD provisions that are similar to the DMCA provisions, have nevertheless limited their protection of TMPs only to the acts that infringe copyrights. See supra note 239.

\textsuperscript{334} Singh, supra note 12, at 568; see also supra notes 284, 289–90, 328 and accompanying text.
that seek expansion or modification of current statutory exemptions; (iii) creating presumptions for recurring exemptions (for instance, if the same class of works is exempted for two consecutive proceedings, such a class should be presumed exempted for future proceedings unless rebutted by opponents; but if exempted for three consecutive proceedings and unopposed, then this class becomes permanently exempted); (iv) adding permanent statutory exemption for blind and visually impaired e-book readers; (v) differentiating burdens and standards of proof for petitions that request new exemptions, renewal of existing exemptions, and expansion of (or modifications to) existing exemptions; (vi) creating a separate simplified proceeding for re-adoption of existing exemptions, which would lessen the administrative burdens on the proponents and the Copyright Office; (vii) allowing proponents of recurring exemptions whose petitions for renewal were denied to take their case to court as means of recourse to the Librarian’s decisions; (viii) adding a mediation process to the rulemaking mechanism as an additional oversight of statutory and rulemaking exemptions (the U.K. model, which is discussed below); and (ix) creating a separate division within the Copyright Office to handle the DMCA matters, such as rulemaking proceeding, pertinent copyright studies, mediation process (if implemented), etc.

335 Singh, supra note 12, at 569.
336 Jackson, supra note 21, at 546.
337 Id.
338 This would resolve the problems with the Chafee Amendment and help to comply with the Marrakesh Treaty. See 17 U.S.C. § 121 (1997); see also supra note 272 and accompanying text.
339 The procedure could be similar to the right of appeal in case of refusal to register copyright, which affords copyright registration applicants the opportunity to appeal the refusal by initiating a judicial action against the Register of Copyrights in federal district court. See 5 U.S.C. § 500 (1999); see also Compendium of U.S. Copyright Office Practices, ch. 1700, sec. 1706 (3d ed. 2014), available at http://copyright.gov/comp3/chap1700/ch1700-administrative-appeals.pdf.
340 See infra pp. 277–79.
341 See infra pp. 280–81 and note 360.
2. The TPM Complaint Process in the U.K.

In several European countries, when copyright holders do not take voluntary steps to afford uses of exemptions adopted by the national laws, several procedures are in place to help users to nevertheless benefit from these exemptions.\textsuperscript{342} Thus, in Denmark, users may apply directly to a special Copyright License Tribunal, and when copyright holders do not comply with the Tribunal’s order within four weeks, users may legally circumvent TPMs, so long as these users have gained legal access to the work at issue.\textsuperscript{343} In Ireland, users may apply to the High Court.\textsuperscript{344} In other European countries, such as Greece, users may seek resolution in mediation, and if mediation fails—before the Court of Appeal.\textsuperscript{345}

The U.K. and Australia have also adopted certain procedures, similar to those mentioned above, to entitle government agencies with an authority to address the interests of the public at large in accessing copyrighted works protected by TPMs.\textsuperscript{346} Both common law countries share similar concerns regarding TPMs as those expressed in the United States, namely, that TPMs often prevent lawful activities permitted by copyright exceptions.\textsuperscript{347} Because the U.S. legal system has close roots to the U.K. legal system, the procedure employed by the U.K. is of most interest and will be further discussed below.

\textsuperscript{342} Ray, supra note 51.
\textsuperscript{343} Id.
\textsuperscript{344} Id.
\textsuperscript{345} Id.
\textsuperscript{346} For instance, under Section 249 of the Australian Copyright Act of 1968 (amended by the Copyright Amendment Act of 2006), the Governor-General has a regulation-making power (similar to the Librarian’s authority in issuing final rule) to prescribe new exceptions upon a recommendation of the Minister, namely, Attorney-General for Australia (similar to the Register’s recommendation to the Librarian), made upon review of submissions by interested parties (similar to notice-comment process in the DMCA rulemaking). The Minister must make a decision whether to recommend the exception as soon as practicable, but not later than within four years of receiving the submission. However, since 2006 there has been only one such proceeding, which was held in 2012–2013. See supra note 54.
\textsuperscript{347} Guidance on the U.K. Complaint Process, supra note 238, at 1, 4; Australian Review of TPMs Exceptions, supra note 44, at 12.
Similar to U.S. law, U.K. law ensures the right of copyright owners to use TPMs to protect their copyrighted works (by prohibiting circumvention of such TPMs) and the right of the public in accessing such works (by providing certain enumerated exceptions to the above prohibitions).\textsuperscript{348} To ensure that TPMs do not unreasonably prevent people from benefiting from exceptions, U.K. law also provides for a complaint process.\textsuperscript{349} This process allows users to submit a complaint against a copyright holder to the Secretary of State for Business, Innovation and Skills, where the copyright holder prevents users’ activities that are permitted by any exception under one of the listed categories.\textsuperscript{350}

The procedure resembles a mediation process. Before complaining to the Secretary, the user must make a \textit{bona fide} attempt to resolve the issue with the copyright holder directly.\textsuperscript{351} If no solution achieved, only then may the user make a complaint to the Secretary, using a provided online form.\textsuperscript{352} Once the user’s complaint is accepted for consideration (subject to eligibility conditions),\textsuperscript{353} the Secretary will make another attempt to find a
mutually satisfactory voluntary solution. If no solution is found on this stage, the Secretary proceeds further. The complaint is published on its website to allow all interested parties to submit comments within a thirty-day period. Then, the Secretary reviews the record and considers all relevant factors, including the availability of alternatives in the market, the user’s ability to benefit from the exceptions (these two are similar to the factors considered within the DMCA rulemaking), the burdens on the copyrights holders, etc. Subsequently, the Secretary makes a final decision and publishes it.

The ultimate goal of this complaint process is to ensure that copyright holders, who apply TPMs to their works, do not unreasonably or unfairly prevent legitimate activities permitted by copyright exceptions to anti-circumvention provisions. If such a mediation process is adopted within the DMCA scheme, it would ensure that copyright holders conform to the limitations imposed by statutory and rulemaking exemptions, and intended users are not unduly prevented from the benefits of such exemptions.

3. Expansion of the Copyright Office’s Role

The Copyright Office could be entrusted with the mediation function discussed above. Additionally, where copyright holders combine access controls and copy controls into one TPM applied to a copyrighted work that is not exempted by the statute or the conditions apply: (i) the work the user complains about must be a work that is protected by copyright (but is not a computer program); (ii) the user must have lawful access to the work (e.g., by having bought it or been given it as a gift); (iii) to rely on the personal copying exception, the user must have lawful access to the work on a permanent basis (thus, this does not cover works that are borrowed, rented, accessed from on-demand streaming services or broadcasts); and (iv) the TPM must be preventing the user from benefitting from one of the eligible exceptions. Id. at 2–4.

See supra notes 349–50.
rulemaking, the mediation procedure could afford users an opportunity to complain to the Copyright Office and ask for a temporary permission to access such a work, when necessary for lawful copying or another non-infringing use of the work.

Such agency expansion could be also beneficial in the broader context of copyright law. The Copyright Office already performs important law and policy functions, such as delivering copyright studies to Congress and to the public, providing legal assistance to federal agencies, as well as conducting rulemakings and prescribing regulations that relate to the administration of its statutory duties. Therefore, it is a natural course of action to entrust the Copyright Office with broad mediation function. By being engaged in the triennial rulemaking and conducting all the proceedings, the Copyright Office is in the best position to accommodate the mediation process between the copyright holders and consumers. To ensure such broad engagement of the Copyright Office in the DMCA scheme, a new division within the Copyright Office that will exclusively deal with the various DMCA matters might be something Congress considers within the discussion of

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360 The Copyright Office’s role in shaping copyright law and respective public policies can hardly be underestimated. As rightly noted by the Register herself, “[t]he Office plays an integral role in the overall functioning of the copyright system.” See Oversight of the U.S. Copyright Office, supra note 93, at 1 (statement of Maria A. Pallante, Register of Copyrights, U.S. Copyright Office); see also Singh, supra note 12, at 529 (suggesting to expand “the Copyright Office's role in copyright law, due to the tension between regulatory copyright legislation and rapid technological advances as well as the Register's performance in the DMCA rulemaking process.”); see also supra note 93.

the Copyright Office modernization.\textsuperscript{362}

\textbf{CONCLUSION}

In sum, as seen from the previous rulemakings, there is a positive trend for the industry—rulemaking exemptions are becoming broader both in number and scope.\textsuperscript{363} If such an expansion continues, modified rules of administrative procedure prove to be more comprehensive and less burdensome, more authority is vested in the Copyright Office, and the precedential effect is given to recurring exemptions, the DMCA rulemaking mechanism has a good chance for survival and evolvement.\textsuperscript{364} Not only will such changes make the DMCA scheme more up-to-date with the currently emerging technological advances, but will also ensure a greater flexibility and adaptability of copyright law in the future.\textsuperscript{365}

Given the problems highlighted in this Article, it is time for Congress to finally do something about the DMCA rulemaking. Despite Congress’ intentions, the DMCA provisions continue to tip the balance in favor of the interests of copyright holders, while adversely affecting the interests of the public at large. Not only does it happen because of the broad DMCA prohibitions and drawbacks of the rulemaking proceeding, but also because over the last several decades the copyright holders have grown to be a powerful and influential community with strong and successful lobbying.\textsuperscript{366} Meanwhile, the interests of the public still remain poorly represented, unless some consumer advocacy and public

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\textsuperscript{362} See generally The Register’s Perspective On Copyright Review, supra note 30, at 6–10; see also Strategic Plan 2016–2020, supra note 93, at 11–13 (suggesting ways to modernize the Office).
\textsuperscript{363} See sources cited supra note 13 and accompanying text.
\textsuperscript{364} Jackson, supra note 21, at 544–46.
\textsuperscript{365} Singh, supra note 12, at 527–28.
\textsuperscript{366} See, e.g., It’s Time to Fix the DMCA, supra note 20 (noting that petitions for exemptions on behalf of consumers “have to be written and argued, at great expense, by donation-supported public-interest groups, while the companies that profit by locking you out of the lawful enjoyment of your property get to divert some of those gains to fighting the public interest groups” (citing Cory Doctorow, Co-Editor, the Boing Boing blog)).
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interest group such as Public Knowledge, Center for Democracy & Technology, or Electronic Frontier Foundation\textsuperscript{367} fights for consumers’ rights. Until the cellphone unlocking issue emerged, the public was not sufficiently involved in the process. Fortunately, this situation has changed, and the increase in public awareness and engagement will be forthcoming.

It is time for Congress to take action and amend the existing DMCA fail-safe mechanism that is becoming more “fail” than “safe.” The Unlocking Consumer Choice and Wireless Competition Act of 2014 and the Breaking Down Barriers to Innovation Act of 2015 set it on the right track. But Congress must consider other possible solutions for improvement and fix the DMCA rulemaking to ensure a healthy balance between the copyright holders’ rights in protecting their works from piracy and the rights of the public in accessing such works for education, scholarship, journalism, scientific research, and other socially beneficial activities. After all, advancement and dissemination of knowledge is “the only guardian of true liberty”\textsuperscript{368} and progress.

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{367} See About Us, PUB. KNOWLEDGE https://www.publicknowledge.org/about-us (last visited Apr. 30, 2015); About CDT, CTR. FOR DEMOCRACY & TECH., https://cdt.org/about (last visited Sept. 30, 2015); About EFF, ELEC. FRONTIER FOUND. https://www.eff.org/about (last visited Apr. 30, 2015).
\item \textsuperscript{368} Madison, \textit{supra} note 1.
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