



LIBRARY OF CONGRESS

U.S. Copyright Office

37 CFR Part 201

[Docket No. 2017-10]

Exemptions to Permit Circumvention of Access Controls on Copyrighted Works

AGENCY: U.S. Copyright Office, Library of Congress.

ACTION: Notice of proposed rulemaking.

SUMMARY: The United States Copyright Office (“Copyright Office” or “Office”) is conducting the seventh triennial rulemaking proceeding under the Digital Millennium Copyright Act (“DMCA”), concerning possible temporary exemptions to the DMCA’s prohibition against circumvention of technological measures that control access to copyrighted works. In this proceeding, the Copyright Office has established a new, streamlined procedure for the renewal of exemptions that were granted during the sixth triennial rulemaking. It is also considering petitions for new exemptions to engage in activities not currently permitted by existing exemptions. On June 30, 2017, the Office published a Notice of Inquiry requesting petitions to renew existing exemptions and comments in response to those petitions, as well as petitions for new exemptions to engage in activities not currently permitted by existing exemptions. The Office has carefully considered the comments received in response to that Notice. With this Notice of Proposed Rulemaking (“NPRM”), the Office intends to recommend each of the existing exemptions for re Adoption. This NPRM also initiates three rounds of public comment on the newly-proposed exemptions. Interested parties are invited to make full legal and evidentiary submissions in support of or in opposition to the proposed

exemptions, in accordance with the requirements set forth below.

DATES: Initial written comments (including documentary evidence) and multimedia evidence from proponents and other members of the public who support the adoption of a proposed exemption, as well as parties that neither support nor oppose an exemption but seek to share pertinent information about a proposal, are due December 18, 2017. Written response comments (including documentary evidence) and multimedia evidence from those who oppose the adoption of a proposed exemption are due February 12, 2018.

Written reply comments from supporters of particular proposals and parties that neither support nor oppose a proposal are due March 14, 2018. Commenting parties should be aware that rather than reserving time for potential extensions of time to file comments, the Office has already established what it believes to be the most generous possible deadlines consistent with the goal of concluding the triennial proceeding in a timely fashion.

ADDRESSES: The Copyright Office is using the regulations.gov system for the submission and posting of comments in this proceeding. All comments are therefore to be submitted electronically through regulations.gov. The Office is accepting two types of comments. First, commenters who wish briefly to express general support for or opposition to a proposed exemption may submit such comments electronically by typing into the comment field on regulations.gov. Second, commenters who wish to provide a fuller legal and evidentiary basis for their position may upload a Word or PDF document, but such longer submissions must be completed using the long-comment form provided on the Office's Web site at <https://www.copyright.gov/1201/2018>. Specific instructions for submitting comments, including multimedia evidence that cannot be uploaded

through regulations.gov, are also available on that webpage. If a commenter cannot meet a particular submission requirement, please contact the Office using the contact information below for special instructions.

FOR FURTHER INFORMATION CONTACT: Sarang Vijay Damle, General Counsel and Associate Register of Copyrights, by email at sdam@loc.gov, Regan A. Smith, Deputy General Counsel, by email at resm@loc.gov, Anna Chauvet, Assistant General Counsel, by email at achau@loc.gov, or Jason E. Sloan, Attorney-Advisor, by email at jslo@loc.gov. Each can be contacted by telephone by calling (202) 707–8350.

SUPPLEMENTARY INFORMATION:

On June 30, 2017, the Office published a Notice of Inquiry requesting petitions to renew current exemptions, oppositions to the renewal petitions, and petitions for newly proposed exemptions (the “Notice of Inquiry”) in connection with the seventh triennial section 1201 rulemaking.¹ In response, the Office received thirty-nine renewal petitions, five comments regarding the scope of the renewal petitions, and one comment in opposition to renewal of a current exemption.² These comments are discussed further below. In addition, the Office received twenty-three petitions for new exemptions, many of which seek to expand upon a current exemption.

With this NPRM, the Office sets forth the exemptions the Register of Copyrights intends to recommend for readoption without the need for further development of the

¹ 82 FR 29804 (June 30, 2017).

² The comments received in response to the Notice of Inquiry are available online at <https://www.regulations.gov/docketBrowser?rpp=25&so=DESC&sb=commentDueDate&po=0&dct=PS&D=COLC-2017-0007>. References to these comments are by party name (abbreviated where appropriate) followed by either “Renewal Pet.,” “Pet.,” or “Renewal Comment,” as appropriate.

administrative record, and outlines the proposed classes for new exemptions for which the Office initiates three rounds of public comment.

I. Standard for Evaluating Proposed Exemptions

As the Notice of Inquiry explained, for a temporary exemption from the prohibition on circumvention to be granted through the triennial rulemaking, it must be established that “persons who are users of a copyrighted work are, or are likely to be in the succeeding 3-year period, adversely affected by the prohibition . . . in their ability to make noninfringing uses under [title 17] of a particular class of copyrighted works.”³ To devise an appropriate class of copyrighted works, the Office begins with the broad categories of works identified in 17 U.S.C. 102 and then refines them by other criteria, such as the technological protection measures (“TPMs”) used, distribution platforms, and/or types of uses or users.⁴

In evaluating the evidence, the Register must consider the following statutory factors: 1. The availability for use of copyrighted works; 2. the availability for use of works for nonprofit archival, preservation, and educational purposes; 3. the impact that the prohibition on the circumvention of technological measures applied to copyrighted works has on criticism, comment, news reporting, teaching, scholarship, or research; 4. the effect of circumvention of technological measures on the market for or value of copyrighted works; and 5. such other factors as the Librarian considers appropriate.”⁵

³ 17 U.S.C. 1201(a)(1)(C).

⁴ See H.R. Rep. No. 105-551, pt. 2, at 38 (1998) (“Commerce Comm. Report”); Register of Copyrights, Section 1201 Rulemaking: Sixth Triennial Proceeding to Determine Exemptions to the Prohibition on Circumvention, Recommendation of the Register of Copyrights 17–18 (2015) (“2015 Recommendation”); U.S. Copyright Office, *Section 1201 of Title 17*, at 26, 108–10 (2017), <https://www.copyright.gov/policy/1201/section-1201-full-report.pdf> (“1201 Study”).

⁵ 17 U.S.C. 1201(a)(1)(C).

After developing a comprehensive administrative record, the Register makes a recommendation to the Librarian of Congress concerning whether exemptions are warranted based on that record.

The Office has previously articulated the substantive legal and evidentiary standard for the granting of an exemption under section 1201(a)(1) multiple times, including in its recently-issued video and PowerPoint tutorials, the 1201 Study, and in prior recommendations of the Register concerning proposed classes of exemptions, each of which is accessible from the Office’s 1201 rulemaking webpage at <https://www.copyright.gov/1201/>. At bottom, in considering whether to recommend an exemption, the Office must inquire: “*Are users of a copyrighted work adversely affected by the prohibition on circumvention in their ability to make noninfringing uses of a class of copyrighted works, or are users likely to be so adversely affected in the next three years?*”⁶ This inquiry breaks into the following elements:

- The proposed class includes at least some works protected by copyright.
- The uses at issue are noninfringing under title 17.
- Users are adversely affected in their ability to make such noninfringing uses or, alternatively, users are likely to be adversely affected in their ability to make such noninfringing uses during the next three years. This element is analyzed in reference to section 1201(a)(1)(C)’s five statutory factors.
- The statutory prohibition on circumventing access controls is the cause of the adverse effects.⁷

⁶ 1201 Study at 114.

⁷ *Id.* at 115; *see also id.* at 115–27.

The Register will consider the Copyright Act and relevant judicial precedents when analyzing whether a proposed use is likely to be noninfringing.⁸ When considering whether such uses are being adversely impacted by the prohibition on circumvention, the rulemaking focuses on “distinct, verifiable, and measurable impacts” compared to “*de minimis* impacts.”⁹ Taking the administrative record together, the Office will consider whether the preponderance of the evidence in the record shows that the conditions for granting an exemption have been met.¹⁰

II. Review of Petitions to Renew Existing Exemptions

During this rulemaking, the Office initiated a new streamlined process for recommending readoption of previously-adopted exemptions to the Librarian. As the Office explained in its recent 1201 Study, the “Register must apply the same evidentiary standards in recommending the renewal of exemptions as for first-time exemption requests,” and the statute requires that “a determination must be made specifically for

⁸ *Id.* at 115–17. While controlling precedent directly on point is not required to justify an exemption, there is no “rule of doubt” favoring an exemption when it is unclear that a particular use is fair or otherwise noninfringing. *See* 2015 Recommendation at 15.

⁹ Commerce Comm. Report at 37; *see also* Staff of H. Comm. on the Judiciary, 105th Cong., Section-by-Section Analysis of H.R. 2281 as Passed by the United States House of Representatives on August 4th, 1998, at 6 (Comm. Print 1998) (using the equivalent phrase “substantial adverse impact”) (“House Manager’s Report”); *see also, e.g.*, 1201 Study at 119–21 (discussing same and citing application of this standard in five prior rulemakings).

¹⁰ *See* 17 U.S.C. 1201(a)(1)(C) (asking whether users “*are, or are likely to be* in the succeeding 3-year period, adversely affected by the prohibition [on circumvention] in their ability to make noninfringing uses”) (emphasis added); 1201 Study at 111–12; *see also Sea Island Broad. Corp. v. FCC*, 627 F.2d 240, 243 (D.C. Cir. 1980) (noting that “[t]he use of the ‘preponderance of evidence’ standard is the traditional standard in civil and administrative proceedings”); 70 FR 57526, 57528 (Oct. 3, 2005); 2015 Recommendation at 15; Register of Copyrights, Section 1201 Rulemaking: Fifth Triennial Proceeding to Determine Exemptions to the Prohibition on Circumvention, Recommendation of the Register of Copyrights 6 (2012) (“2012 Recommendation”); Register of Copyrights, Section 1201 Rulemaking: Second Triennial Proceeding to Determine Exemptions to the Prohibition on Circumvention, Recommendation of the Register of Copyrights 19–20 (2003) (“2003 Recommendation”).

each triennial period.”¹¹ The Office further determined that “the statutory language appears to be broad enough to permit determinations to be based upon evidence drawn from prior proceedings, but only upon a conclusion that this evidence remains reliable to support granting an exemption in the current proceeding.”¹²

Based on this understanding of the statutory scheme, the Office solicited petitions for the renewal of exemptions as they are currently formulated, without modification. Thus, if a proponent sought to engage in any activities not currently permitted by an existing exemption, a petition for a new exemption had to have been submitted. This is because streamlined renewal is based upon a determination that, due to a lack of legal, marketplace, or technological changes, the factors that led the Register to recommend adoption of the exemption in the prior rulemaking will continue into the forthcoming triennial period.¹³ That is, the same facts and circumstances underlying the previously-adopted regulatory exemption may be relied on to renew the exemption. Accordingly, to the extent that any renewal petition proposed uses beyond the current exemption, the Office disregarded those portions of the petition for purposes of considering the renewal of the exemption, and instead focused on whether it provided sufficient information to warrant readoption of the exemption in its current form.¹⁴

¹¹ 1201 Study at 142, 145.

¹² *Id.* at 143.

¹³ *Id.* at 143–44.

¹⁴ This suffices to address concerns raised that some renewal petitions sought exemptions broader than currently formulated. *See* Entertainment Software Association, the Motion Picture Association of America, Inc. & the Recording Industry of America, Inc. (collectively, “Joint Creators”) Renewal Comment at 2; DVD Copy Control Association (“DVD CCA”) & The Advanced Access Content System Licensing Administrator (“AACCS LA”) AV Noncom. Videos Renewal Comment at 1–2, 4–5; DVD CCA & AACCS LA AV Univ. Renewal Comment at 1–2, 5; Alliance of Automobile Manufacturers (“Auto Alliance”) Renewal Comment at 1–2.

The Office received thirty-nine petitions to renew existing exemptions, including at least one petition to renew each currently-adopted exemption. Each petition to renew an existing exemption included an explanation summarizing the basis for claiming a continuing need and justification for the exemption. In each case, petitioners also signed a declaration stating that, to the best of their personal knowledge, there has not been any material change in the facts, law, or other circumstances set forth in the prior rulemaking record such that renewal of the exemption would not be justified.

The Office also received six comments in response to the renewal petitions; five did not oppose renewal, but offered more general comments, and one was styled as an opposition to renewal. One general comment filed by the Entertainment Software Association, the Motion Picture Association of America, Inc., and the Recording Industry Association of America, Inc. (collectively, “Joint Creators”) raised some overarching issues with the renewal petitions. Specifically, Joint Creators expressed concern that many of the renewal petitions “were based on what the petitioners attest they have been told by others, rather than on their own personal knowledge.”¹⁵ But as the Office explained in its Notice of Inquiry, it expected that “a broad range of individuals have a sufficient level of knowledge and experience” regarding the continued need for an exemption. For instance, the Notice of Inquiry noted that a renewal petition could be filed by a relevant employee or volunteer at an organization—like the American Foundation for the Blind, which advocates for the blind, visually impaired, and print disabled—who is familiar with the needs of the community, and is well-versed specifically in the e-book accessibility issue, to make the declaration with regard to the current e-book assistive

¹⁵ Joint Creators Renewal Comment at 2 n.4.

technology exemption.¹⁶ Consistent with that direction, the Office received petitions from some individuals who may not themselves have engaged in circumvention, but attested to their personal knowledge of others who have a continuing need for an exemption. Those petitions were signed by individuals at associations that had actively participated in the past rulemaking and described specific continued needs for the exemption.¹⁷ Accordingly, the Office finds that these petitions are formally and substantively sufficient for the Office to consider in evaluating whether renewal of the existing exemptions exemption is appropriate.¹⁸

As detailed below, after reviewing the petitions for renewal and comments in response, the Office concludes that it has received a sufficient petition to renew each existing exemption and it does not find any meaningful opposition to renewal.

¹⁶ 82 FR at 29806. The Office did suggest that it would be improper for a member of the general public to petition for renewal if he or she knew nothing more about matters concerning e-book accessibility other than what he or she might have read in a brief newspaper article, or simply opposed the use of digital rights management tools as a matter of general principle—but none of the renewal petitions raise that issue.

¹⁷ *See, e.g.*, The Intellectual Property & Technology Law Clinic of the University of Southern California Gould School of Law (“IPTC USC”) Renewal Pet. at 3 (“We have personally heard from a number of farmers and farm bureaus that farmers need this exemption and anticipate needing to use it in the future.”); Electronic Frontier Foundation (“EFF”) Repair Renewal Pet. at 3 (describing groups of users with continued need to engage in circumvention of motorized land vehicles and conversation with individual who modifies motorized wheelchairs and mobility scooters to tailor to the individual needs of users). The Office notes that parties demonstrated personal knowledge in multiple ways. One particularly helpful example was the petition submitted by Professors Bellovin, Blaze, and Heninger, which described how they rely on the exemption for their own security research and will continue to do so, discussed reliance on the exemption by other security researchers, and provided a recent example illustrating reliance on the exemption by security researchers. Bellovin, Blaze & Heninger Renewal Pet. at 3.

¹⁸ Joint Creators also urged that petitions that “expressly base their justification . . . on a need to provide circumvention assistance that would likely be prohibited by [the anti-trafficking provision of section 1201] should not be considered supportive of actual renewal.” Joint Creators Renewal Comment at 3 (referencing Auto Care Association (“Auto Care”), Consumer Technology Association (“CTA”), iFixit & Owners’ Rights Initiative (“ORI”) Repair Renewal Pet.). The Office agrees that exemptions adopted through the triennial rulemaking cannot extend to the trafficking prohibitions in section 1201, but concludes that the petitions have sufficiently articulated a basis for renewal of the current exemptions under the statutory standard.

Accordingly, the Register intends to recommend re-adoption of all existing exemptions in their current form.¹⁹

A. Literary works distributed electronically (*i.e.*, e-books), for use with assistive technologies for persons who are blind, visually impaired, or have print disabilities.

Multiple organizations petitioned to renew the exemption for literary works distributed electronically (*i.e.*, e-books), for use with assistive technologies for persons who are blind, visually impaired, or have print disabilities (codified at 37 CFR 201.40(b)(2)).²⁰ No oppositions were filed against re-adoption of this exemption. The petitions demonstrated the continuing need and justification for the exemption, stating that individuals who are blind, visually impaired, or print disabled are significantly disadvantaged with respect to obtaining accessible e-book content because TPMs interfere with the use of assistive technologies such as screen readers and refreshable Braille displays.²¹ Indeed, AFB, ACB, Samuelson-Glushko TLPC, and LCA noted that the record underpinning this exemption “has stood and been re-established in the past five triennial reviews, dating back to 2003,” and that the “accessibility of ebooks is frequently cited as a top priority” by its members and the patrons of LCA’s member

¹⁹ Although the Office’s Notice of Inquiry stated that this NPRM would set forth proposed regulatory language for any existing exemptions the Office intends to recommend for re-adoption, because many of the new petitions seek to expand existing exemptions, the Office concludes that proposing regulatory language at this time would be premature; the Register may propose altering current regulatory language to expand the scope of an existing exemption, where the record suggests such a change is appropriate.

²⁰ American Foundation for the Blind (“AFB”), American Council of the Blind (“ACB”), Samuelson-Glushko Technology Law & Policy Clinic at Colorado Law (“Samuelson-Glushko TLPC”) & Library Copyright Alliance (“LCA”) Renewal Pet.; University of Michigan Library Copyright Office (“UMLCO”) eBooks Renewal Pet.

²¹ AFB, ACB, Samuelson-Glushko TLPC & LCA Renewal Pet. at 3; UMLCO eBooks Renewal Pet. at 3.

institutions.²² In addition, the petitioners demonstrated personal knowledge and experience with regard to the assistive technology exemption; they are all organizations that advocate for the blind, visually impaired, and print disabled.

Based on the information provided in the renewal petitions and the lack of opposition, the Register believes that the conditions that led to adoption of this exemption are likely to continue during the next triennial period. Accordingly, the Register intends to recommend renewal of this exemption.

B. Literary works consisting of compilations of data generated by implanted medical devices and corresponding personal monitoring systems, to access personal data.

Hugo Campos, member of the Coalition of Medical Device Patients and Researchers, and represented by the Harvard Law School Cyberlaw Clinic, petitioned to renew the exemption covering access to patient data on networked medical devices (codified at 37 CFR 201.40(b)(10)).²³ No oppositions were filed against the petition to renew this exemption. Mr. Campos's petition demonstrated the continuing need and justification for the exemption, stating that patients continue to need access to data output from their medical devices to manage their health.²⁴ Mr. Campos demonstrated personal knowledge and experience with regard to this exemption, as he is a patient needing access to the data output from his medical device, and is a member of the Coalition of Medical Device Patients and Researchers, a coalition whose members research, comment on, and examine the effectiveness of networked medical devices.

²² AFB, ACB, Samuelson-Glushko TLPC & LCA Renewal Pet. at 3.

²³ Campos Compilations of Data Renewal Pet.

²⁴ *Id.* at 3.

Based on the information provided in the renewal petition and the lack of opposition, the Register believes that the conditions that led to adoption of this exemption are likely to continue during the next triennial period. Accordingly, the Register intends to recommend renewal of this exemption.

C. Computer programs that operate cellphones, tablets, mobile hotspots, or wearable devices (e.g., smartwatches), to allow connection of a used device to an alternative wireless network (“unlocking”).

Multiple organizations petitioned to renew the exemption for computer programs that operate cellphones, tablets, mobile hotspots, or wearable devices (e.g., smartwatches), to allow connection of a used device to an alternative wireless network (“unlocking”) (codified at 37 CFR 201.40(b)(3)).²⁵ No oppositions were filed against the petitions seeking to renew this exemption. The petitions demonstrate the continuing need and justification for the exemption, stating that consumers of the enumerated products continue to need to be able to unlock the devices so they can switch network providers. For example, ISRI stated that its members continue to purchase or acquire donated cell phones and tablets, and try to reuse them, but that wireless carriers still lock devices to prevent them from being used on other carriers.²⁶ In addition, the petitioners demonstrated personal knowledge and experience with regard to this exemption. CCA, ORI, and ISRI represent companies that rely on the ability to unlock cellphones. A number of the petitioners also participated in past 1201 triennial rulemakings relating to unlocking lawfully-acquired wireless devices.

²⁵ Competitive Carriers Association (“CCA”) Renewal Pet.; Consumers Union Renewal Pet.; Institute of Scrap Recycling Industries, Inc. (“ISRI”) Renewal Pet. (represented by Juelsgaard IP and Innovation Clinic, Mills Legal Clinic at Stanford Law School); ORI Unlocking Renewal Pet.

²⁶ ISRI Renewal Pet. at 3.

Based on the information provided in the renewal petitions and the lack of opposition, the Register believes that the conditions that led to adoption of this exemption are likely to continue during the next triennial period. Accordingly, the Register intends to recommend renewal of this exemption.

D. Computer programs that operate smartphones, smart TVs, tablets, or other all-purpose mobile computing devices, to allow the device to interoperate with or to remove software applications (“jailbreaking”).

Multiple organizations petitioned to renew the exemptions for computer programs that operate smartphones, smart TVs, tablets, or other all-purpose mobile computing devices, to allow the device to interoperate with or to remove software applications (“jailbreaking”) (codified at 37 CFR 201.40(b)(4)–(5)).²⁷ The petitions demonstrate the continuing need and justification for the exemption, and that petitioners had personal knowledge and experience with regard to this exemption. Specifically, the petitions state that, absent an exemption, TPMs applied to the enumerated products would have an adverse effect on noninfringing uses, such as being able to install third-party applications on a smartphone or download third-party software on a smart TV to enable interoperability.²⁸ For example, EFF’s petition outlined its declarant’s experience searching current mobile computing device markets and technologies, working as a software engineer, and participating in four prior 1201 rulemakings.²⁹ Similarly, the Libiquity petition was submitted by someone who “work[s] with the operating system and many of the system libraries that lie at the core of the firmware systems of a large

²⁷ New Media Rights (“NMR”) Jailbreaking Renewal Pet.; EFF Jailbreaking Renewal Pet.; Libiquity Jailbreaking Renewal Pet.; Software Freedom Conservancy (“SFC”) Renewal Pet.

²⁸ NMR Jailbreaking Renewal Pet. at 1; EFF Jailbreaking Renewal Pet. at 1; Libiquity Jailbreaking Renewal Pet. at 1; SFC Renewal Pet. at 1.

²⁹ EFF Jailbreaking Renewal Pet. at 3.

majority of smartphones, portable all-purpose mobile computing devices, and smart televisions.”³⁰

In a brief two-page comment, BSA | The Software Alliance (“BSA”) opposed the re-adoption of this exemption, stating that “alternatives to circumvention exist,” and that “jailbreaking can undermine the integrity and security of a platform’s operating system in a manner than facilitates copyright infringement and exposes users to heightened risks of privacy violations.”³¹

As the Office explained in the Notice of Inquiry, “[o]pposition to a renewal petition must be meaningful, such that, from the evidence provided, it would be reasonable for the Register to conclude that the prior rulemaking record and any further information provided in the renewal petition are insufficient to support recommending renewal of an exemption.”³² In such a circumstance, the exemption would be considered pursuant to the more comprehensive rulemaking process (*i.e.*, three rounds of written comment, followed by public hearings).

The Office finds that BSA’s comment largely re-articulates a general opposition to a jailbreaking exemption, and notes that the past three rulemakings have adopted some form of an exemption for jailbreaking certain types of mobile computing devices.³³ Indeed, BSA specifically raised the issue of circumvention alternatives to jailbreaking in the 2015 triennial rulemaking,³⁴ and does not now identify any specific alternatives that are available now but were not available during the previous rulemaking. BSA also cites

³⁰ Libquity Jailbreaking Renewal Pet. at 3.

³¹ BSA Jailbreaking Renewal Comment at 1–2.

³² 82 FR at 29807.

³³ 80 FR 65944, 65952–53 (Oct. 28, 2015); 77 FR 65260, 65263–64 (Oct. 26, 2012); 75 FR 43825, 43828–30 (July 27, 2010).

³⁴ 2015 Recommendation at 185–87.

the same article regarding pirated iOS apps considered by the Register during sixth triennial rulemaking.³⁵ Similarly, BSA references Apple’s launch of its App Store in 2008 to evidence how “access controls have increased, rather than decreased, the availability of software applications designed for use on mobile phones.”³⁶ The sixth triennial rulemaking, however, considered the existence of Apple’s App Store and third-party apps.³⁷ Nor does BSA identify changes in case law or new technological developments that might be relevant. Each of the issues raised by BSA in opposition to readoption had been considered and evaluated in granting the exemption previously. BSA provides no new evidence that demonstrates a change in circumstances.

The Office therefore concludes that BSA’s opposition is not sufficiently meaningful to draw the conclusion that the past rulemaking record is no longer reliable, or that the reasoning adopted in the Register’s 2015 Recommendation cannot be relied upon for the next three-year period.

Based on the information provided in the renewal petitions and the lack of meaningful opposition, the Register believes that the conditions that led to adoption of this exemption are likely to continue during the next triennial period. Accordingly, the Register intends to recommend renewal of this exemption.

E. Computer programs that control motorized land vehicles, including farm equipment, for purposes of diagnosis, repair, and modification of the vehicle.

Multiple organizations petitioned to renew the exemption for computer programs that control motorized land vehicles, including farm equipment, for purposes of diagnosis,

³⁵ *Id.* at 187 n.1211.

³⁶ BSA Jailbreaking Renewal Comment at 2.

³⁷ 2015 Recommendation at 181–82.

repair, and modification of the vehicle (codified at 37 CFR 201.40(b)(6)).³⁸ The petitions demonstrated the continuing need and justification for the exemption to prevent owners of motorized land vehicles from being adversely impacted in their ability to diagnose, repair, and modify their vehicles as a result of TPMs that protect the copyrighted computer programs on the electronic control units (“ECUs”) that control the functioning of the vehicles. For example, Auto Care, CTA, iFixit, and ORI stated that “approximately 20 percent of American consumers buy automotive parts and products to maintain and repair their own vehicles.”³⁹ AFBF similarly remarked that many agricultural vehicles are now “equipped with computers that monitor and control vehicle function,” and many agricultural equipment manufacturers have adopted TPMs that restrict access to such computer software.⁴⁰ Indeed, MEMA, which during the sixth triennial rulemaking initially opposed any exemption that would impact the software and TPMs in vehicles, now supports renewal of this exemption because it strikes “an appropriate balance between encouraging marketplace competition and innovation while mitigating the impact on safety, regulatory, and environmental compliance.”⁴¹ The petitioners demonstrated personal knowledge and experience with regard to this exemption; each either represents or gathered information from individuals conducting repairs or businesses that manufacture, distribute, and sell motor vehicle parts, and perform vehicle service and repair.

³⁸ Auto Care, CTA, iFixit & ORI Repair Renewal Pet.; American Farm Bureau Federation (“AFBF”) Renewal Pet.; EFF Repair Renewal Pet.; Motor & Equipment Manufacturers Association (“MEMA”) Repair Renewal Pet.; IPTC USC Renewal Pet.

³⁹ Auto Care, CTA, iFixit & ORI Repair Renewal Pet. at 3.

⁴⁰ AFBF Renewal Pet. at 3.

⁴¹ MEMA Repair Renewal Pet. at 3.

Although not opposing readoption of this exemption, in response to Auto Care, CTA, iFixit, and ORI's renewal petition, the Auto Alliance submitted comments to clarify that the Office "should reject any part of the . . . petition that argues for expanding the current temporary exemption . . . in section 201.40(b)(6), and should only consider the petition to the extent it seeks renewal of the current exemption as it is currently formulated, without modification."⁴² The Office agrees. As noted above, the Office's Notice of Inquiry clearly stated that renewal petitions could only seek readoption of current exemptions as they are currently formulated, without modification, and the Office disregarded sections of renewal petitions to the extent that they proposed uses beyond the current exemptions. To the extent Auto Care, CTA, iFixit, and ORI propose that repair shops should be able to "lawfully assist[] customers in the maintenance, repair, and upgrade of their vehicles" under the existing exemption,⁴³ the Office finds this proposition to be outside the bounds of the procedure for exemption renewal. The Office notes, however, that iFixit petitioned for a new exemption that would expand the existing exemption to permit circumvention of TPMs to allow third-party repair services. The Office discusses iFixit's petition below.

Based on the information provided in the renewal petitions and the lack of opposition to the specific exemption, the Register believes that the conditions that led to adoption of this exemption are likely to continue during the next triennial period. Accordingly, the Register intends to recommend renewal of this exemption.⁴⁴

⁴² Auto Alliance Renewal Comment at 2.

⁴³ Auto Care, CTA, iFixit & ORI Repair Renewal Pet. at 3.

⁴⁴ The Office's recommendation will include removing language relating to a delayed effective date from the existing exemption. As noted in the Office's 1201 Study, during the last triennial rulemaking the Office "implemented a twelve-month delay for certain exemptions relating to

F. Computer programs that operate devices and machines primarily designed for use by individual consumers (including voting machines), motorized land vehicles, or medical devices designed for implantation in patients and corresponding personal monitoring systems, for purposes of good-faith security research.

Multiple organizations and security researchers petitioned to renew the exemption for purposes of good-faith security research (codified at 37 CFR 201.40(b)(7)).⁴⁵

The petitioners demonstrated the continuing need and justification for the exemption, and personal knowledge and experience with regard to this exemption. For example, Professors Bellovin, Blaze, and Heninger stated that they have conducted their own security research in reliance on the existing exemption, and that they “regularly engage” with other security researchers who have similarly relied on the exemption.⁴⁶ They provided an example of a recent computer security conference in which thousands of participants relied on the existing exemption to examine and test electronic voting devices, during which they identified ways the security of the voting devices could be manipulated to affect election outcomes—the results of which were reported to election officials to improve the security of their voting systems.⁴⁷

No oppositions were filed against re-adoption of this exemption. To the contrary, MEMA, which during the sixth triennial rulemaking initially opposed any exemption that

security research and automobile repair to allow other agencies to react to the new rule.” 1201 Study at 124; *see also* 2015 Recommendation at 248, 317–18. But “now that agencies, consumers, and businesses alike have had the opportunity to consider these issues and react to [such] exemptions,” the Office “does not anticipate the Register recommending additional delays for implementation of exemptions unless necessitated by a grave or unusual situation.” 1201 Study at 125–26. Because the time delay for this exemption was intended to be a one-time delay, which has now expired, the Office considers its removal to be a technical change.

⁴⁵ Bellovin, Blaze & Heninger Renewal Pet. (represented by Professor Andrea Matwyshyn); Campos Security Research Renewal Pet.; Center for Democracy & Technology (“CDT”) Renewal Pet.; Felten, Halderman & ORI Renewal Pet. (represented by Samuelson-Glushko TLPC and Jonathan Band of pollicbandwidth); Libiquity Security Research Renewal Pet.

⁴⁶ Bellovin, Blaze & Heninger Renewal Pet. at 3.

⁴⁷ *Id.*

would impact the software and TPMs in vehicles, now supports renewal of this exemption because it strikes “an appropriate balance between encouraging marketplace competition and innovation while mitigating the impact on safety, regulatory, and environmental compliance.”⁴⁸ In addition, BSA submitted comments in support of renewal of this exemption, noting that because the circumvention must be “carried out in a controlled environment” and conducted primarily to “promote safety and security,” the exemption “provides important clarity to good-faith security researchers while maintaining important safeguards that protect the safety, privacy and property interests of rights holders and the public.”⁴⁹

Based on the information provided in the renewal petitions and the lack of opposition, the Register believes that the conditions that led to adoption of this exemption are likely to continue during the next triennial period. Accordingly, the Register intends to recommend renewal of this exemption.⁵⁰

G. Computer programs that operate 3D printers, to allow use of alternative feedstock.

Michael Weinberg and ORI jointly petitioned to renew the exemption for computer programs that operate 3D printers to allow use of alternative feedstock (codified at 37 CFR 201.40(b)(9)).⁵¹ No oppositions were filed against re-adoption of this exemption. The petition demonstrated the continuing need and justification for the exemption, and the petitioner demonstrated personal knowledge and experience.

⁴⁸ MEMA Security Research Renewal Pet. at 3.

⁴⁹ BSA Security Research Renewal Comment at 2.

⁵⁰ The Office’s recommendation will include removing language relating to a delayed effective date from the existing exemption. As noted above regarding the existing exemption for repair, because the time delay for this exemption was intended to be a one-time delay, which has now expired, the Office considers its removal to be a technical change.

⁵¹ Weinberg & ORI Renewal Pet.

Specifically, Mr. Weinberg petitioned for the existing exemption, and “continued to participate in the review of that exemption . . . in his personal capacity.”⁵² In addition, the petition states that printers continue to restrict the use of third-party feedstock, thereby requiring renewal of the exemption.

Based on the information provided in the renewal petition and the lack of opposition, the Register believes that the conditions that led to adoption of this exemption are likely to continue during the next triennial period. Accordingly, the Register intends to recommend renewal of this exemption.

H. Video games for which outside server support has been discontinued, to allow individual play by gamers and preservation of games by libraries, archives, and museums (as well as necessary jailbreaking of console computer code for preservation uses only).

Multiple organizations petitioned to renew the exemption for video games for which outside server support has been discontinued (codified at 37 CFR 201.40(b)(8)).⁵³ The petitions state that libraries and museums continue to need the exemption to preserve and curate video games in playable form. For example, UMCLCO stated that “[m]any games still depend on connection to an external server for gameplay,” suggesting that without a renewal of this exemption the ability of gamers to play them would be diminished.⁵⁴ In addition, the petitioners demonstrated personal knowledge and experience with regard to this exemption through past participation in the 1201 triennial rulemaking relating to access controls on video games and consoles, and/or representing

⁵² *Id.* at 1.

⁵³ EFF Video Game Renewal Pet.; LCA Video Game Renewal Pet.; UMLCO Video Game Renewal Pet.

⁵⁴ UMCLCO Video Game Renewal Pet. at 3.

major library associations with members that have relied on this exemption. Readoption of this exemption was unopposed.⁵⁵

Based on the information provided in the renewal petitions and the lack of opposition, the Register believes that the conditions that led to adoption of this exemption are likely to continue during the next triennial period. Accordingly, the Register intends to recommend renewal of this exemption.

I. Motion Pictures (including television programs and videos): For educational uses by college and university instructors and students.

Multiple individuals and organizations petitioned to renew the exemption for motion pictures for educational uses by college and university instructors and students (codified at 37 CFR 201.40(b)(1)(iv)).⁵⁶ No oppositions were filed against readoption of this exemption. The petitions demonstrated the continuing need and justification for the exemption, and personal knowledge and experience with regard to this exemption. For example, Joint Educators, AAUP, DCSUM, and LCA stated that courses on video essays (or multimedia or videographer criticism), now taught at many universities, would not be able to exist without relying on this exemption.⁵⁷ Without this exemption, Joint Educators, AAUP, DCSUM, and LCA assert that educators would be “unable to provide an

⁵⁵ Joint Creators questioned whether the petitions sufficiently requested renewal of the portion of the exemption applicable to personal gameplay. Joint Creators Renewal Comment at 2, n.2. The Office notes that the declarations signed by the petitioners support readoption of the exemption in full. EFF Video Game Renewal Pet.; LCA Video Game Renewal Pet.; UMLCO Video Game Renewal Pet. Joint Creators themselves acknowledged that “the petitions appear to implicitly request renewal of the current exemption in its entirety” and did not oppose such renewal. Joint Creators Renewal Comment at 2, n.2.

⁵⁶ Decherney, Sender & Carpini (collectively, “Joint Educators”), American Association of University Professors (“AAUP”), the International Communication Association (“ICA”), Department of Communication Studies at the University of Michigan (“DCSUM”), the Society for Cinema and Media Studies (“SCMS”) & LCA AV Univ. Renewal Pet.; Hobbs & National Association for Media Literary Education (“NAMLE”) AV Univ. Renewal Pet.; UMLCO AV Univ. Renewal Pet.

⁵⁷ Joint Educators, AAUP, ICA, DCSUM, SCMS & LCA AV Univ. Renewal Pet. at 1.

enriching and accurate description and analysis of cinematic or other audiovisual works when prevented from accessing such works due to TPM[s]”⁵⁸—and their declarant, Professor Decherney, has personally relied upon this exemption to teach a course on multimedia criticism.⁵⁹ Similarly, Professor Hobbs, who represents more than 17,000 digital and media literacy educators, and NAMLE, an organization devoted to media literacy with more than 3,500 members, stated that “sometimes teachers must circumvent a DVD protected by the Content Scramble System when screen-capture software or other non-circumventing alternatives are unable to produce the required level of high-quality content.”⁶⁰

The DVD Copy Control Association (“DVD CCA”) and The Advanced Access Content System Licensing Administrator (“AACCS LA”) submitted comments regarding readoption of this exemption. Although DVD CCA and AACCS LA did not oppose readoption, they stated that the exemption is “predicated on the need for close analysis of the film in uses that constitute criticism or comment,” and suggested that Joint Educators, AAUP, ICA, DCSUM, SCMS, and LCA did “not focus on the need for close analysis of the film” in their renewal petition.⁶¹ DVD CCA and AACCS LA asked for clarification that “renewal of this exemption is limited to those uses where close analysis is necessary in the particular circumstance.”⁶²

As noted above, the Office’s Notice of Inquiry stated that renewal petitions are to seek readoption of current exemptions as they are currently formulated, without

⁵⁸ *Id.*

⁵⁹ *Id.*

⁶⁰ Hobbs & NAMLE AV Univ. Renewal Pet. at 1.

⁶¹ DVD CCA & AACCS LA AV Univ. Renewal Comment at 1–2.

⁶² *Id.* at 4–5.

modification. Therefore, the Office focused on whether the renewal petition provided sufficient information to warrant readoption of the exemption in its current form. In this case, Joint Educators, AAUP, ICA, DCSUM, SCMS, and LCA did state that “*close analysis* of digital media is being increasingly recognized across many disciplines as a fundamental tool for pedagogy,” followed by examples of such uses.⁶³ Accordingly, the Office concludes that Joint Educators, AAUP, ICA, DCSUM, SCMS, and LCA provided sufficient information to support renewal of the existing exemption.

Based on the information provided in the renewal petitions and the lack of opposition, the Register believes that the conditions that led to adoption of this exemption are likely to continue during the next triennial period. Accordingly, the Register intends to recommend renewal of this exemption.

To the extent petitioners seek a broader exemption, the Office notes that petitions for new exemptions were filed seeking modification of the existing exemptions for educational uses of motion pictures. This NPRM initiates public comment on such modification through Proposed Class 1 described below, which combines multiple petitions for modified exemptions, including one by Joint Educators.

J. Motion Pictures (including television programs and videos): For educational uses by K-12 instructors and students.

Multiple organizations petitioned to renew the exemption for motion pictures for educational uses by K-12 instructors and students (codified at 37 CFR 201.40(b)(1)(vi)).⁶⁴ No oppositions were filed against readoption of this exemption. The petitions demonstrated the continuing need and justification for the exemption, stating

⁶³ Joint Educators, AAUP, ICA, DCSUM, SCMS & LCA AV Univ. Renewal Pet. at 3 (emphasis added).

⁶⁴ LCA K-12 Renewal Pet.; Hobbs & NAMLE K-12 Renewal Pet.

that K-12 instructors and students continue to rely on excerpts from digital media for class presentations and coursework, and must sometimes use screen-capture technology. In addition, the petitioners demonstrated personal knowledge and experience with regard to this exemption through representation of thousands of digital and literacy educators and/or members supporting K-12 instructors and students, combined with past participation in the 1201 triennial rulemaking.

Based on the information provided in the renewal petitions and the lack of opposition, the Register believes that the conditions that led to adoption of this exemption are likely to continue during the next triennial period. Accordingly, the Register intends to recommend renewal of this exemption.

K. Motion Pictures (including television programs and videos): For educational uses in massive open online courses (“MOOCs”).

Joint Educators, ICA, DCSUM, SCMS, and LCA petitioned to renew the exemption for motion pictures for educational uses in massive open online courses (“MOOCs”) (codified at 37 CFR 201.40(b)(1)(v)).⁶⁵ No oppositions were filed against readoption of this exemption. The petition demonstrated the continuing need and justification for the exemption, stating that instructors continue to rely on the exemption to develop, provide, and improve MOOCs, as well as increase the number of (and therefore access to) MOOCs in the field of film and media studies. In addition, the declarant, Professor Decherney, demonstrated personal knowledge by describing his reliance on the exemption to teach MOOCs on film and media studies, as well as his past participation in the 1201 triennial rulemaking, along with Professor Carpini, ICA, SCMS, and LCA.

⁶⁵ Joint Educators, ICA, DCSUM, SCMS & LCA MOOCs Renewal Pet.

Based on the information provided in the renewal petition and the lack of opposition, the Register believes that the conditions that led to adoption of this exemption are likely to continue during the next triennial period. Accordingly, the Register intends to recommend renewal of this exemption.

L. Motion Pictures (including television programs and videos): For educational uses in digital and literacy programs offered by libraries, museums, and other nonprofits.

Multiple organizations petitioned to renew the exemption for motion pictures for educational uses in digital and literacy programs offered by libraries, museums, and other nonprofits (codified at 37 CFR 201.40(b)(1)(viii)).⁶⁶ No oppositions were filed against re-adoption of this exemption. The petitions demonstrated the continuing need and justification for the exemption, and demonstrated personal knowledge and experience with regard to this exemption. For example, LCA stated that librarians across the country have relied on the current exemption and will continue to do so for their digital and literacy programs.⁶⁷ In addition, Professor Hobbs and NAMLE stated that librarians will continue to rely on this exemption for their digital and literacy programs, and to advance the digital media knowledge of their patrons.⁶⁸

Based on the information provided in the renewal petitions and the lack of opposition, the Register believes that the conditions that led to adoption of this exemption are likely to continue during the next triennial period. Accordingly, the Register intends to recommend renewal of this exemption.

M. Motion Pictures (including television programs and videos): For multimedia e-books offering film analysis.

⁶⁶ LCA AV Nonprofit Renewal Pet.; Hobbs & NAMLE AV Nonprofit Renewal Pet.

⁶⁷ LCA AV Nonprofit Renewal Pet. at 1.

⁶⁸ Hobbs & NAMLE AV Nonprofit Renewal Pet. at 3.

A professor and two organizations collectively petitioned to renew the exemption for motion pictures for multimedia e-books offering film analysis (codified at 37 CFR 201.40(b)(1)(iii)).⁶⁹ No oppositions were filed against readoption of this exemption. The petition demonstrated the continuing need and justification for the exemption, stating that the availability of video necessary for authors to undertake film analysis in e-books continues to be “limited to formats encumbered by technological protection measures”⁷⁰ In addition, the petitioners demonstrated personal knowledge through Professor Buster’s continued work on an e-book series based on her lecture series, “Deconstructing Master Filmmakers: The Uses of Cinematic Enchantment,” and Authors Alliance’s feedback that its members continue to desire authoring e-books that incorporate film for the purpose of analysis.⁷¹

Based on the information provided in the renewal petition and the lack of opposition, the Register believes that the conditions that led to adoption of this exemption are likely to continue during the next triennial period. Accordingly, the Register intends to recommend renewal of this exemption.

N. Motion Pictures (including television programs and videos): For uses in documentary films.

Multiple organizations petitioned to renew the exemption for motion pictures for uses in documentary films (codified at 37 CFR 201.40(b)(1)(i)).⁷² No oppositions were

⁶⁹ Buster, Authors Alliance & AAUP Renewal Pet. (represented by Samuelson-Glushko TLPC).

⁷⁰ *Id.* at 3.

⁷¹ *See id.*

⁷² Film Independent, International Documentary Association, Kartemquin Educational Films, Inc. (collectively, “Joint Filmmakers”), Center For Independent Documentary (“CID”) & Women in Film and Video (“WIFV”) Renewal Pet. (represented by Donaldson + Callif, LLP and UCI Intellectual Property Arts and Technology Clinic at University of California, Irvine (“UCI”)); NMR AV Documentary Renewal Pet.

filed against readoption of this exemption. The petitions summarized the continuing need and justification for the exemption, and the petitioners demonstrated personal knowledge and experience with regard to this exemption. For example, Joint Filmmakers, CID, and WIFV—which represent thousands of independent filmmakers across the nation—stated that TPMs such as encryption continue to prevent filmmakers from accessing needed material, and that this is “especially true for the kind of high definition motion picture material filmmakers need to satisfy both distributors and viewers.”⁷³ In addition, Joint Filmmakers have participated in multiple triennial rulemakings. Petitioners state that they personally know many filmmakers who have found it necessary to rely on this exemption, and will continue to do so.⁷⁴

Based on the information provided in the renewal petitions and the lack of opposition, the Register believes that the conditions that led to adoption of this exemption are likely to continue during the next triennial period. Accordingly, the Register intends to recommend renewal of this exemption.

O. Motion Pictures (including television programs and videos): For uses in noncommercial videos.

Two organizations petitioned to renew the exemption for motion pictures for uses in noncommercial videos (codified at 37 CFR 201.40(b)(1)(ii)).⁷⁵ No oppositions were filed against readoption of this exemption. The petitions demonstrated the continuing need and justification for the exemption, and the petitioners demonstrated personal knowledge and experience with regard to this exemption. For example, OTW has

⁷³ Joint Filmmakers, CID & WIFV Renewal Pet. at 3.

⁷⁴ *Id.*; NMR AV Documentary Renewal Pet. at 3.

⁷⁵ NMR Noncom. Videos Renewal Pet.; Organization for Transformative Works (“OTW”) Renewal Pet.

advocated for the noncommercial video exemption in past triennial rulemakings, and has heard from “a number of noncommercial remix artists” who have used the exemption and anticipate needing to use it in the future.⁷⁶ These discussions included a report from an academic that video quality was important in facilitating classroom understanding and discussion.⁷⁷ Similarly, NMR stated that it has spoken to a number of noncommercial video creators who have relied on this exemption, and intend to do so in the future.⁷⁸

Although no oppositions were filed against re adoption of the exemption as it currently exists, Joint Creators submitted comments expressing concern that OTW’s renewal petition proposed using language from the triennial rulemaking initiated in 2008 instead of re adopting the exemption without modification.⁷⁹ DVD CCA and AACCS LA made a similar observation.⁸⁰

As noted above, the Office’s Notice of Inquiry stated that renewal petitions are to seek re adoption of current exemptions as they are currently formulated, without modification. As a result, the Office did not consider, as part of the renewal process, sections of renewal petitions to the extent that they proposed uses beyond the current exemptions. The Office concludes, however, that OTW’s submission, fairly read, did sufficiently petition for renewal of the exemption as it currently exists, providing detailed information supporting the continued need for an exemption for noncommercial videos.⁸¹

Based on the information provided in the renewal petitions and the lack of opposition, the Register believes that the conditions that led to adoption of this exemption

⁷⁶ OTW Renewal Pet. at 3.

⁷⁷ *Id.*

⁷⁸ NMR Noncom. Videos Renewal Pet. at 3.

⁷⁹ Joint Creators Renewal Comment at 2 n.1.

⁸⁰ DVD CCA & AACCS LA AV Noncom. Videos Renewal Comment at 4.

⁸¹ OTW Renewal Pet. at 3–4.

are likely to continue during the next triennial period. Accordingly, the Register intends to recommend renewal of this exemption.

To the extent OTW seeks modification of the existing noncommercial video exemption, the Office notes that a petition for a new exemption was filed seeking such modification. This NPRM initiates public comment on that modification through the proposed class described below.

III. Analysis and Classification of Proposed New Exemptions

Having addressed the petitions to renew existing exemptions, the Office now turns to the petitions for new or expanded exemptions. The Office received twenty-three petitions, which it has organized into twelve classes, as described below. Before turning to a description of those classes, the Office first explains the process and standards for submission of written comments.

A. Submission of Written Comments

Persons wishing to address proposed exemptions in written comments should familiarize themselves with the substantive legal and evidentiary standards for the granting of an exemption under section 1201(a)(1), which are also described in more detail on the Office's form for submissions of longer comments, available on its Web site. In addressing factual matters, commenters (both proponents and opponents) should be aware that the Office favors specific, "real-world" examples supported by evidence over speculative, hypothetical observations. In cases where the technology at issue is not apparent from the requested exemption, it can be helpful for commenters to describe the TPM(s) that control access to the work and method of circumvention.

Commenters' legal analysis should explain why the proposal meets or fails to meet the criteria for an exemption under section 1201(a)(1), including, without limitation, why the uses sought are or are not noninfringing as a matter of law. The legal analysis should also discuss statutory or other legal provisions that could impact the necessity for or scope of the proposed exemption (for example, the Unlocking Consumer Choice and Wireless Competition Act ("Unlocking Act"), or 17 U.S.C. 117). Legal assertions should be supported by statutory citations, relevant case law, and other pertinent authority. In cases where a class proposes to expand an existing exemption, commenters should focus their comments on the legal and evidentiary bases for modifying the exemption, rather than the underlying exemption; as discussed above, the Register intends to recommend each current temporary exemption for renewal.

To ensure a clear and definite record for each of the proposals, commenters are required to provide a separate submission for each proposed class during each stage of the public comment period. Although a single comment may not address more than one proposed class, the same party may submit multiple written comments on different proposals. The Office acknowledges that the requirement of separate submissions may require commenters to repeat certain information across multiple submissions, but the Office believes that the administrative benefits of creating a self-contained, separate record for each proposal will be worth the modest amount of added effort.

The first round of public comment is limited to submissions from proponents (*i.e.*, those parties who proposed new exemptions during the petition phase) and other members of the public who support the adoption of a proposed exemption, as well as any

members of the public who neither support nor oppose an exemption but seek only to share pertinent information about a specific proposal.

Proponents of exemptions should present their complete affirmative case for an exemption during the initial round of public comment, including all legal and evidentiary support for the proposal. Members of the public who oppose an exemption should present the full legal and evidentiary basis for their opposition in the second round of public comment. The third round of public comment will be limited to supporters of particular proposals and those who neither support nor oppose a proposal, who, in either case, seek to reply to points made in the earlier rounds of comments. Reply comments should not raise new issues, but should instead be limited to addressing arguments and evidence presented by others.

B. The Proposed Classes

As noted above, the Office has reviewed and classified the proposed exemptions set forth in the twenty-three petitions received in response to its Notice of Inquiry. Any exemptions adopted as part of this rulemaking must be based on “a particular class of works”⁸²; and the legislative history explains that each class is intended to “be a narrow and focused subset of the broad categories of works . . . identified in Section 102 of the Copyright Act”⁸³ As explained in the Notice of Inquiry, the Office consolidates or groups related and/or overlapping proposed exemptions where possible to simplify the rulemaking process and encourage joint participation among parties with common

⁸² 17 U.S.C. 1201(a)(1)(B).

⁸³ Commerce Comm. Report at 38; *see also* 1201 Study at 109–10 (noting that while “in some cases, [the Office] can make a greater effort to group similar classes together, and will do so going forward,” “in other cases, the Office’s ability to narrowly define the class is what enabled it to recommend the exemption at all, and so the Office will continue to refine classes when merited by the record”).

interests (though collaboration is not required). Accordingly, the Office has categorized the petitions into twelve proposed classes of works.

Each proposed class is briefly described below; additional information can be found in the underlying petitions posted on regulations.gov. As explained in the Notice of Inquiry, the proposed classes “represent only a starting point for further consideration in the rulemaking proceeding, and will be subject to further refinement based on the record.”⁸⁴ The Office further notes that it has not put forward precise regulatory language for the proposed classes, because any specific language for exemptions that the Register ultimately recommends to the Librarian will depend on the full record developed during this rulemaking. Indeed, in the case of proposed modifications to existing exemptions, as stated above, the Register may propose altering current regulatory language to expand the scope of an exemption, where the record suggests such a change is appropriate.

In addition, after examining the petitions, the Office has preliminarily identified some initial legal and factual areas of interest with respect to certain proposed classes. The Office stresses, however, that these areas are not exhaustive, and *commenters should consider and offer all legal argument and evidence they believe necessary to create a complete record*. These early observations are offered without prejudice to the Office’s ability to raise other questions or concerns at later stages of the proceeding. Finally, “where an exemption request resurrects legal or factual arguments that have been previously rejected, the Office will continue to rely on past reasoning to dismiss such arguments in the absence of new information.”⁸⁵

Proposed Class 1: Audiovisual Works—Criticism and Comment

⁸⁴ 82 FR at 29808.

⁸⁵ 1201 Study at 147; *see also* 79 FR 55687, 55690 (Sept. 17, 2014).

Several petitions seek expansion of existing exemptions for circumvention of access controls protecting excerpts of motion pictures on DVDs, Blu-Ray discs, and digitally transmitted video for purposes of criticism and comment by various users, including creators of noncommercial videos, college and university faculty and students, faculty of massive open online courses (“MOOCs”), documentary filmmakers, and for multimedia e-books offering film analysis.

Because the new proposals raise some shared concerns, including the impact of TPMs on the alleged noninfringing uses of motion pictures and whether alternative methods of accessing the content could alleviate potential adverse impacts, the Office has grouped these petitions into one class. This grouping is without prejudice to further refinement of this class, including whether it should be parsed back into subclasses based on specific uses, following the approach of past rulemakings. This approach also accounts for a joint petition by EFF, NMR, and OTW, which seeks to collapse (essentially) the existing exemptions for excerpts of motion pictures to eliminate limitations on the types of user or use, instead allowing circumvention so long as the purpose is for criticism and comment.⁸⁶ Specifically, EFF, NMR, and OTW seek to retain the vast majority of existing introductory text of section 201.40(b)(1), but then eliminate the various categories of specific users such that the exemption becomes:

Motion Pictures (including television shows and videos), as defined in 17 U.S.C. 101, where circumvention is undertaken solely in order to make use of short portions of the works for the purpose of criticism or comment, where the motion picture is lawfully made and acquired on a DVD protected by the Content Scrambling System, on a BluRay disc protected by the Advanced Access Control System, via a digital transmission protected by a technological measure, or a similar technological protection measure intended to control access to a work, where the person engaging

⁸⁶ EFF, NMR & OTW Class 1 Pet. at 2.

in circumvention reasonably believes that non-circumventing alternatives are unable to produce the required level of high-quality source material.⁸⁷

The Office notes that in the past, the Register has at times found it necessary to define a class by a use or user in order to recommend an exemption,⁸⁸ but also recognizes that for these audiovisual exemptions in particular, participants expressed concern that the current exemptions are overly complicated and confusing.⁸⁹ The Office invites comment on each aspect of these proposals, including whether this grouping is preferable, or whether the existing exemptions should be consolidated in some other manner, such as grouping just the permitted educational uses together.⁹⁰ For commenters who may be concerned that a single exemption is too broad, could an exemption be refined by specifically *excluding* types of uses or users, as opposed to enumerating permitted users in multiple exemptions?

Beyond EFF, NMR, and OTW's proposal, the other petitions seek to expand upon existing exemptions for purposes of criticism and comment, but in a more limited way. Specifically, Professor Buster, Authors Alliance, and OTW propose expanding the exemption for multimedia e-books offering film analysis (codified at 37 CFR 201.40(b)(1)(iii)) by removing the "nonfiction" and "offering film analysis" limitations, and removing references to screen-capture technology.⁹¹ Similarly, Joint Filmmakers seek removal of the "documentary" limitation in the current exemption for uses in

⁸⁷ *Id.*

⁸⁸ 1201 Study at 109–10.

⁸⁹ *Id.* at 151; *see, e.g.*, EFF, NMR & OTW Class 1 Pet. at 2–3.

⁹⁰ *See* 1201 Study at 109 (“[I]n the upcoming seventh rulemaking, the Office will consider consolidating some of the separate classes related to motion pictures into broader categories, such as one related to educational uses.”); *see also* OTW Renewal Pet. at 4 (requesting adoption of an exemption for noncommercial videos based on regulatory language adopted in the 2008 rulemaking).

⁹¹ Buster, Authors Alliance & OTW Class 1 Pet. at 3.

documentary films (codified at 37 CFR 201.40(b)(1)(i)).⁹² The Office notes that many of these issues were previously considered by the Register during the 2015 triennial rulemaking, and encourages proponents to provide new factual or legal support for these proposed modifications.⁹³

The two remaining petitions seek to expand the current exemptions for educational uses. Brigham Young University (“BYU”) and BYU – Idaho, Intellectual Property Office (“BYU IPO”) seek expansion of the exemption for educational uses by college and university students and instructors to more broadly cover “uses where circumvention is undertaken to facilitate performance of motion pictures in the course of face-to-face teaching activities, as set forth in 17 U.S.C. 110(1)”; “use of more than short portions of motion picture excerpts”; and “uses beyond film studies or other courses requiring close analysis of film and media excerpts.”⁹⁴ The Office notes that in the 2012 and 2015 triennial rulemakings, the Register found the “short portions” limitation was “critical” in deciding to recommend exemptions for the use of motion picture excerpts.⁹⁵

Joint Educators seek to expand the exemption for motion pictures for educational uses in MOOCs; specifically, they propose removing the “accredited non-profit educational institutions” and “massive open online courses” limitations, and extending the exemption to “*all* online educational institutions” and “for use by instructors of *all* online educational courses”⁹⁶ The petition also proposes to have the exempted use

⁹² Joint Filmmakers Class 1 Pet. at 3.

⁹³ 2015 Recommendation at 103.

⁹⁴ BYU & BYU IPO Class 1 Pet. at 2.

⁹⁵ 2015 Recommendation at 99; 2012 Recommendation at 138–39 (also declining to recommend that the exemption apply to “students across all disciplines of study”).

⁹⁶ Joint Educators Class 1 Pet. at 2.

“no longer be limited” by the TEACH Act (codified at 17 U.S.C. 110).⁹⁷ The Office notes that some of these considerations were previously addressed during the 2015 triennial rulemaking, and invites comment on changing legal or factual circumstances with respect to these provisions.⁹⁸

In addition, two petitioners seek clarification that “the use of screen-capture technology does not constitute circumvention,” which presumably might result in the removal of current regulatory exemptions for screen capture technology, as they would be unnecessary.⁹⁹ Again the Office notes that in 2015, the Register noted that the then-existing record did not “include any examples of screen-capture technology that holds itself out as non-circumventing.”¹⁰⁰ The Office invites comment on whether users are relying upon the various screen capture exemptions for uses of motion picture excerpts and whether there is common understanding that screen-capture technology is non-circumventing.

Proposed Class 2: Audiovisual Works—Accessibility

This proposed class would permit circumvention of TPMs for motion pictures by “disability services offices, organizations that support people with disabilities, libraries, and other units at educational institutions that are responsible for fulfilling those

⁹⁷ *Id.*

⁹⁸ 2015 Recommendation at 102.

⁹⁹ *BYU & BYU IPO Class 1 Pet. at 2; Joint Filmmakers Class 1 Pet. at 3; see 37 CFR 201.40(b)(1)(i)* (“For use in documentary filmmaking . . . [w]here the circumvention is undertaken using screen-capture technology that appears to be offered to the public as enabling the reproduction of motion pictures after content has been lawfully acquired and decrypted . . .”); *37 CFR 201.40(b)(1)(iv)* (“By college and university faculty and students, for educational purposes . . . [w]here the circumvention is undertaken using screen-capture technology that appears to be offered to the public as enabling the reproduction of motion pictures after content has been lawfully acquired and decrypted . . .”).

¹⁰⁰ 2015 Recommendation at 99.

institutions’ legal and ethical obligations to make works accessible to people with disabilities,” “where circumvention is undertaken for the purpose of making a motion picture accessible to people with disabilities, including through the provision of closed and open captions and audio description.”¹⁰¹ Specifically, the petition seeks to circumvent works stored on “optical media, video cassettes with access control measures, and streaming services”¹⁰²

The Office seeks comment on whether this proposed exemption should be adopted, including any proposed regulatory language.

Proposed Class 3: Audiovisual Works—Space-shifting

This proposed class would allow circumvention of access controls on lawfully made and acquired audiovisual works for the purpose of noncommercial space-shifting or format-shifting. The Office received two petitions seeking an exemption permitting circumvention of TPMs on DVDs and Blu-ray discs for space-shifting or format-shifting for personal use.¹⁰³ The Office notes that in the 2006, 2012, and 2015 triennial rulemakings, the Librarian rejected proposed exemptions for space-shifting or format-shifting, finding that the proponents had failed to establish under applicable law that space-shifting is a noninfringing use.¹⁰⁴ The Office seeks comment on all aspects of this proposed exemption, including whether, in the past three years, there has been a change

¹⁰¹ Association of Transcribers and Speech-to-text Providers (“ATSP”), Association of Research Libraries (“ARL”), American Library Association (“ALA”) & Association of College and Research Libraries (“ACRL”) Class 2 Pet. at 3.

¹⁰² *Id.* at 3.

¹⁰³ OmniQ Class 3 Pet. at 2–3; De Pretis Class 3 Pet. at 2.

¹⁰⁴ *See* 80 FR at 65960; 77 FR at 65276–77; 71 FR 68472, 68478 (Nov. 27, 2006). The Librarian also previously declined to adopt an exemption to allow motion pictures on DVDs to be played on the Linux operating system. *See* 68 FR 62011, 62017 (Oct. 31, 2003). For previous discussion of OmniQ’s technology, see 2015 Recommendation at 113.

in the legal or factual landscapes regarding whether space-shifting and format-shifting are noninfringing fair uses.

Proposed Class 4: Audiovisual Works—HDCP/HDMI

This proposed class would allow circumvention of TPMs “to make noninfringing uses of audiovisual works that are subject to High-bandwidth Digital Content Protection (“HDCP”),” which restricts access to audiovisual works passing over High-Definition Multimedia Interface (“HDMI”) connections, such as through an HDMI cable.¹⁰⁵ Andrew “bunnie” Huang has proposed an exemption to circumvent “devices that play video discs and video game software” using HDCP encoding to “captur[e] the output for subsequent noninfringing uses, such as fair use or automated analysis of noncopyrightable elements of the content.”¹⁰⁶ The Office notes that in an ongoing judicial proceeding, Huang alleged that he seeks to market a device called “NeTVCR,” which would circumvent HDCP technology to, among other things, allow people “to save content for later viewing, move content to a viewing device of the user’s choice, or convert content to a more useful format.”¹⁰⁷ He further alleged that NeTVCR “would allow customers to engage in new forms of protected and noninfringing expression using HDMI signals.”¹⁰⁸

The Office seeks comment on whether this proposed exemption should be adopted, including any proposed regulatory language. The Office encourages commenters, in the course of detailing whether the proposed exemption meets the requirements of section 1201(a)(1), to address the specific types of audiovisual works

¹⁰⁵ Huang Class 4 Pet.

¹⁰⁶ *Id.* at 2.

¹⁰⁷ Complaint for Declaratory & Injunctive Relief ¶¶ 90–93, *Green v. U.S. Dep’t of Justice*, No. 16-cv-1492 (D.D.C. July 21, 2016).

¹⁰⁸ *Id.* ¶¶ 100, 101.

that would be accessed by this exemption, to provide examples of the types of noninfringing uses implicated, to address whether viable alternatives to circumvention exist, and to detail the effect circumvention might have on the market for or value of copyrighted works.

Proposed Class 5: Computer Programs—Unlocking

The proposed class would permit the circumvention of TPMs for computer programs that operate new and used “wireless devices” to allow connection to an alternative wireless network (a process commonly known as “unlocking”).¹⁰⁹ Specifically, ISRI proposes expanding the exemption codified at 37 CFR 201.40(b)(3) by eliminating the current enumerated categories of devices on which circumvention may occur (*i.e.*, to allow the unlocking of any wireless device that connects to a wireless telecommunications network), as well as extending the exemption to new devices (*i.e.*, removing the requirement that the devices must be “used”). The Office notes that these issues were to some extent considered in the last rulemaking.¹¹⁰

The Office seeks comment on whether this proposed exemption should be adopted, including specific examples demonstrating adverse effects stemming from a consumer’s inability to choose the mobile wireless communications provider for a new wireless device.

Proposed Class 6: Computer Programs—Jailbreaking

¹⁰⁹ ISRI Class 5 Pet. #1 at 2; ISRI Class 5 Pet. #2 at 2.

¹¹⁰ 79 FR at 55689 (“The evaluation of whether an exemption would be appropriate under section 1201(a)(1)(C) is likely to be different for different types of wireless devices, requiring distinct legal and evidentiary showings. Thus, a petition proposing a general exemption for ‘all wireless devices’ . . . could be quite difficult to support, in contrast to a petition that focuses on specific categories of devices . . .”); 80 FR at 65952 (limiting final rule to “used” devices).

The proposed class would allow circumvention of TPMs protecting “general-purpose portable computing devices” to allow the devices to interoperate with or to remove software applications (“jailbreaking”).¹¹¹ Specifically, EFF proposes to replace the “portable all-purpose mobile computing devices” limitation in the existing jailbreaking exemption (37 CFR 201.40(b)(4)) with the term “general-purpose portable computing devices,” and extend the exemption to such devices “carried” or “used in a home,” as well as the enabling and disabling of hardware features on such devices.¹¹²

The Office notes that during the 2015 rulemaking, the Register recommended the adoption of the current exemption for “portable all-purpose mobile computing devices,” in part, because the record “meaningfully defined” such devices.¹¹³

The Office seeks comment on whether this proposed exemption should be adopted, including on the definitions of “portable,” “carried,” and “used in the home” that would govern the proposed exemption. The Office welcomes examples of specific types of devices that would be encompassed by the exemption other than those enumerated in the existing exemption codified at 37 CFR 201.40(b)(4).

Proposed Class 7: Computer Programs—Repair

¹¹¹ EFF Class 6 Pet. at 2–3.

¹¹² *Id.* EFF’s Class 6 petition proposes the following language for the exemption: Computer programs that enable smartphones and general-purpose portable computing devices to execute lawfully obtained software applications, where circumvention is accomplished solely for one or more of the following purposes: to enable interoperability of such applications with computer programs on the smartphone or device, to enable or disable hardware features of the smartphone or device, or to permit removal of software from the smartphone or device. For purposes of this exemption, a “general-purpose portable computing device” is a portable device that is primarily designed or primarily used to run a wide variety of programs rather than for consumption of a particular type of media content, is equipped with an operating system primarily designed for use in a general purpose computing device, and is primarily designed to be carried or worn by an individual or used in a home.

Id. at 2.

¹¹³ 2015 Recommendation at 189.

Multiple organizations petitioned for exemptions relating to diagnosis, repair, and modification.¹¹⁴ As noted above, the current exemption (codified at 37 CFR 201.40(b)(6)) is limited to the diagnosis, repair or lawful modification of motorized land vehicles, except for computer programs primarily designed for the control of telematics or entertainment systems.¹¹⁵ Multiple petitions seek to expand upon this language. Specifically, EFF proposes to eliminate the limitation to motorized land vehicles, that is, to allow circumvention of TPMs applied to a broader range of devices including the “Internet of Things,” appliances, computer peripherals, computers, storage devices, and playback devices, toys, vehicles, and environment automation systems.¹¹⁶ EFF asserts that its proposed exemption “overlaps significantly” with the Office’s recommendation concerning a permanent exemption for repair in its recently concluded 1201 Study.¹¹⁷ The Auto Care and CTA petition proposes keeping the limitation for motorized land vehicles, but removing the “telematics or entertainment systems” limitation, asserting that “telematics systems increasingly are being designed by vehicle manufacturers as the means to access the embedded software that controls the parts and operation of the

¹¹⁴ iFixit Class 7 Pet. at 2; EFF Class 7 Pet. at 2–3; IPTC USC, AFBF, National Corn Growers Association (“NCGA”) & National Farmers Union (“NFU”) Class 7 Pet. at 2; Auto Care & CTA Class 7 Pet. at 2–4.

¹¹⁵ 37 CFR 201.40(b)(6).

¹¹⁶ EFF Class 7 Pet. at 2–3 (proposing the exemption “enable circumvention of access controls applied to software and compilations of data, where circumvention is for the purpose of noninfringing repair, diagnosis, or modification of a software-enabled device.”). The Office notes that during its study of software-enabled products, the consensus of stakeholders revealed that drawing a legislative distinction for “software-enabled devices” would be unworkable in practice. U.S. Copyright Office, *Software-Enabled Consumer Products* at 10 (2016), <https://www.copyright.gov/policy/software/software-full-report.pdf>.

¹¹⁷ EFF Class 7 Pet. at 2; *see also* 1201 Study at 88–97 (discussing issues relating to obsolescence, repair and modification and recommending legislative consideration of a “properly-tailored exemption for repair activities,” but concluding that modification is appropriately addressed through the rulemaking process).

vehicle.”¹¹⁸ The Office notes that during the 2015 triennial rulemaking, the Register concluded that the record did not support extending the exemption to ECUs primarily designed for the control of telematics or entertainment systems.¹¹⁹

Three petitions seek to expand the existing exemption to allow third parties to provide services on behalf of owners of motorized land vehicles, an issue that also raises potential issues with respect to the anti-trafficking prohibitions under section 1201(a)(2) and (b).¹²⁰ As noted above, the statute only empowers the triennial rulemaking to adopt temporary exemptions to section 1201(a)(1)’s prohibition on circumvention of access controls. The Office has addressed the interplay of these provisions as part of the Register’s recommendation during the 2015 triennial rulemaking, as well as its recent policy study on section 1201.¹²¹

Similarly, two petitions raise the question of potential interaction with anti-trafficking rules under section 1201(a)(2) and (b) by proposing to expand the exemption to allow the “development and sale of repair tools,”¹²² and to “permit companies with expertise in software development to develop and make circumvention and repair solutions available to servicers and customers.”¹²³ As the Office noted in its recent 1201 Study, “there are strong reasons to conclude that Congress did not intend to apply the

¹¹⁸ Auto Care & CTA Class 7 Pet. at 4.

¹¹⁹ 2015 Recommendation at 246.

¹²⁰ iFixit Class 7 Pet. at 2; IPTC USC, AFBF, NCGA & NFU Class 7 Pet. at 2; Auto Care & CTA Class 7 Pet. at 3.

¹²¹ 80 FR at 65954; 2015 Recommendation at 246–48 (excluded circumvention “on behalf of” vehicle owners, noting this phrase “may implicate the anti-trafficking provisions set forth in section 1201(a)(2) and (b)”); 1201 Study at 61–62 (discussing third party assistance generally, stating although “it cannot affirmatively recommend exemption language that is likely to be read to authorize unlawful trafficking activity,” where appropriate, the Office will avoid recommending “unduly narrow definitions of exemption beneficiaries” in the context of 1201 rulemaking).

¹²² iFixit Class 7 Pet. at 2.

¹²³ Auto Care & CTA Class 7 Pet. at 3.

manufacturing bar to exemption beneficiaries from producing their own circumvention tools for personal use,” as “such a reading would render the rulemaking process effectively meaningless for many users.”¹²⁴ The Office did not recommend, however, that Congress “take the additional step of allowing the *distribution* of necessary tools to exemption beneficiaries,” noting that permitting the distribution of tools “could significantly erode” the ability of the anti-trafficking provisions to prevent the development of mainstream business models based around the production and sale of circumvention tools.¹²⁵

The Office seeks comment on whether an expanded exemption to cover additional repair and related activities should be adopted, including any proposed regulatory language.

Proposed Class 8: Computer Programs—Video game preservation

The proposed class would expand upon the current exemption (codified at 37 CFR 201.40(b)(8)) permitting circumvention “by an eligible library, archives, or museum,” of TPMs protecting video games, for which outside server support has been discontinued. Specifically, The Museum of Art and Digital Entertainment (“MADE”) proposes expanding the existing exemption “to further include multiplayer online games, video games with online multiplayer features, and massively multiplayer online games (MMOs), whether stored physically or in downloadable formats, and [to] add preservationists affiliated with archival institutions as users.”¹²⁶ The Office notes that during the 2015 triennial rulemaking, the Register found that excluding uses that require

¹²⁴ 1201 Study at 54.

¹²⁵ *Id.* at 53–56.

¹²⁶ MADE Class 8 Pet. at 2.

access to or copying of copyrightable content stored or previously stored on developer game servers “to be an important limitation.”¹²⁷ In addition, the Register concluded that the then-existing record did not support extension of the exemption to online multiplayer play.¹²⁸

The Office seeks comment on whether this proposed expanded exemption for abandoned video games should be adopted, including any proposed regulatory language. Specifically, the Office welcomes discussion of how the existing exemption excludes “preservationists affiliated with archival institutions,” and evidence concerning whether an expanded exemption would impact the market for video games 1. by allowing users of unlawfully acquired video games to similarly bypass server checks, 2. by contributing to the circumvention of client-server protocols for nonabandoned video games, or 3. by impairing the market for older video games or for licensed services or products facilitating the backward compatibility of video games.

Proposed Class 9: Computer Programs—Software preservation

The proposed class would allow circumvention of TPMs “on lawfully acquired software” by “libraries, archives, museums, and other cultural heritage institutions” “for the purposes of preserving software and software-dependent materials.”¹²⁹

Unlike many of the other classes, this proposal represents an entirely new exemption. The Office seeks comment on whether this proposed exemption should be adopted, including specific examples of the types of noninfringing uses that are, or in the next three years, likely to be adversely affected by the prohibition on circumvention,

¹²⁷ 2015 Recommendation at 350.

¹²⁸ *Id.* at 351.

¹²⁹ The Software Preservation Network (“SPN”) & LCA Class 9 Pet. at 2.

whether viable alternatives to circumvention exist, discussion of the types of works sought to be accessed, and the specific TPMs implicated by the proposed exemption. The Office specifically seeks comment as to whether or how the exception in section 108 for libraries and archives is relevant to this exemption.¹³⁰ The Office further welcomes any suggested regulatory language, including eligibility requirements,¹³¹ a definition of the proposed term “software-dependent materials,” and whether the exemption should be limited to preserving works that are intended for an institution’s public collections (*e.g.*, compared to back-office licensed software).

Proposed Class 10: Computer Programs—Security research

The Office received three petitions to expand the exemption for good-faith security research of computer programs that operate devices and machines primarily designed for use by individual consumers (including voting machines), motorized land vehicles, or medical devices designed for implantation in patients and corresponding personal monitoring systems (codified at 37 CFR 201.40(b)(7)).¹³²

Two petitions propose removing the specific security research categories listed under section 201.40(b)(7)(i)(A)–(C), as well as the following limitations: 1. The “lawfully acquired device or machine” limitation; 2. the “solely” limitation (*i.e.*, “solely for the purpose of good-faith security research”); 3. the “not violate any applicable law, including without limitation the Computer Fraud and Abuse Act of 1986” limitation; 4. the “carried out in a controlled environment designed to avoid any harm to individuals or

¹³⁰ *See, e.g.*, 17 U.S.C. 108 (c), (h).

¹³¹ *See, e.g.*, U.S. Copyright Office, *Section 108 of Title 17* at 17–22 (2016), <https://www.copyright.gov/policy/section108/discussion-document.pdf>; 37 CFR 201.40(b)(8)(iii)(D).

¹³² Felten & Halderman Class 10 Pet. at 2–3; Green Class 10 Pet. at 2–3; CDT Class 10 Pet. at 2–3.

the public” limitation; and 5. the requirement that “information derived from the activity . . . is not used or maintained in a manner that facilitates copyright infringement.”¹³³ Another petition by Professor Matthew Green proposes adoption of the regulatory language recommended by NTIA in the last rulemaking, with the further clarification that the existence of an “End User License Agreement” or similar terms does not defeat person’s status as owner of copy of computer program.¹³⁴

The Office notes that during the 2015 triennial rulemaking, the Register determined that the then-existing record did not support adopting an exemption that encompassed all computer programs on all systems and devices, and her recommendation discusses the rationale for the other current limitations.¹³⁵ For example, the Register noted that there appeared to be “universal agreement” among proponents that testing in “live” conditions was “wholly inappropriate,” and so recommended that the exemption require that the security research be conducted in a controlled setting to avoid harm to the public.¹³⁶

¹³³ Felten & Halderman Class 10 Pet.; CDT Class 10 Pet. The same petitioners also recommend removing the delay in the effective date of the exemption adopted in 2015; however, as addressed above, the Office notes that it has already concluded that removal of a delayed effective date would be appropriate as part of the request to renew this petition.

¹³⁴ Green Class 10 Pet. at 2. Specifically, NTIA recommended the following language: “Computer programs, in the form of firmware or software, regardless of the device on which they are run, when circumvention is initiated by the owner of the copy of the computer program or with the permission of the owner of the copy of the computer program, in order to conduct good faith security research. This exemption does not obviate the need to comply with other applicable laws and regulations.” Letter from Lawrence E. Strickling, Assistant Sec’y for Commc’ns & Info., Nat’l Telecomms. & Info. Admin., U.S. Dep’t of Commerce, to Maria A. Pallante, Register of Copyrights and Dir., U.S. Copyright Office, at 89 (Sept. 18, 2015), http://www.copyright.gov/1201/2015/2015_NTIA_Letter.pdf.

¹³⁵ 2015 Recommendation at 317–18.

¹³⁶ *Id.* at 318.

The Office seeks comment on whether an expanded exemption for security research should be adopted, including discussion of the proposed regulatory language, contrasted with the current temporary and permanent exemptions for this activity.

Proposed Class 11: Computer Programs—Avionics

This proposed class would allow circumvention of TPMs to access data output by electronic systems used on aircraft, artificial satellites, and spacecraft; such systems are referred to as “avionics.” Specifically, Air Informatics LLC (“AI”) proposed an exemption to circumvent computer programs protecting “access to aircraft flight, operations, maintenance and security data captured by computer programs or firmware.”¹³⁷ AI asserts that access to such data currently protected by TPMs would facilitate safety, security, and compliance with Federal Aviation Administration regulations.¹³⁸

The Office seeks comment on whether this exemption should be adopted, including 1. specific examples of the types of noninfringing uses that are, or in the next three years, likely to be adversely affected by a prohibition on circumvention; 2. a description of the specific TPMs sought to be circumvented; 3. the methods for circumvention; 4. the environment in which the circumvention would be accomplished; and 5. whether the proposed exemption could have negative repercussions with respect to safety or security with respect to the works at issue, or otherwise in a manner relevant to section 1201(a)(1)’s statutory factors (for example, by making it easier for wrongdoers to access sensitive data or databases).

Proposed Class 12: Computer Programs—3D Printing

¹³⁷ AI Class 11 Pet. at 2.

¹³⁸ *Id.* at 2–3.

This proposed class would expand the current exemption for computer programs that operate 3D printers (codified at 37 CFR 201.40(b)(9)) to allow use of non-manufacturer-approved feedstock in the printers, regardless of whether the 3D printers produce goods or materials for use in commerce the physical production of which is subject to legal or regulatory oversight, or where the circumvention is otherwise unlawful. Specifically, the petition proposes eliminating the following limitation in the current exemption: “that the exemption shall not extend to any computer program on a 3D printer that produces goods or materials for use in commerce the physical production of which is subject to legal or regulatory oversight or a related certification process, or where the circumvention is otherwise unlawful.”¹³⁹

The Office seeks comment on whether this expanded exemption for 3D printing should be adopted.

IV. Future Phases of the Seventh Triennial Rulemaking

As in prior rulemakings, after receipt of written comments, the Office will continue to solicit public engagement to create a comprehensive record. Described below are the future phases of the administrative process that will be employed for this rulemaking, so that parties may use this information in their planning.

A. Public Hearings

The Copyright Office intends to hold public hearings following the last round of written comments. The hearings will be conducted in Washington D.C. during the week of April 9, 2018 and in California with a date and location to be determined. A separate notice providing details about the hearings and how to participate will be published in the

¹³⁹ Weinberg Class 12 Pet. at 2. *Compare* 2015 Recommendation at 376–77.

Federal Register at a later date. The Office will identify specific items of inquiry to be addressed during the hearings. The hearings in Washington will be live streamed online, and the Office hopes to be able to offer the same for the California hearings.

B. Post-Hearing Questions

As with previous rulemakings, following the hearings, the Copyright Office may request additional information with respect to particular classes from rulemaking participants. The Office may rely on this process in cases where it would be useful for participants to supply missing information for the record or otherwise resolve issues that the Office believes are material to particular exemptions. Such requests for information will take the form of a letter from the Copyright Office and will be addressed to individual parties involved in the proposal as to which more information is sought. While responding to such a request will be voluntary, any response will need to be supplied by a specified deadline. After the receipt of all responses, the Office will post the questions and responses on the Office's Web site as part of the public record.

C. Ex-parte Communication

In its 1201 Study, the Office noted that, in response to stakeholder requests, it would consider in this rulemaking whether to utilize informal meetings to discuss proposed regulatory language or address discrete issues prior to issuing a recommendation, including by establishing guidelines for *ex parte* communications.¹⁴⁰ In the past, the Office's communications with participants about the ongoing triennial rulemakings have not included discussions about the substance of the proceeding apart from the noticed phases of written comments and public hearings (although the Office

¹⁴⁰ 1201 Study at 150–51.

has provided procedural guidance to participants, and has held discussions with other federal agencies, such as NTIA, to discuss matters within their subject matter expertise). The Office has determined that further informal communications with non-governmental participants might be beneficial in limited circumstances where the Office seeks specific information or follow-up regarding the public record, such as to discuss nuances of proposed regulatory language. However, any such communication will be limited to the post-hearing phase of the rulemaking. The primary means to communicate views in the course of the rulemaking will continue to be through the submission of written comments or participation in the public roundtables. In other words, this communication will supplement, not substitute for, the pre-existing record. While exact guidelines governing *ex parte* communications with the Office regarding the triennial rulemaking will be issued at a later date, they will be similar to those followed by other agencies such as the Consumer Financial Protection Bureau or Federal Communications Commission.¹⁴¹ For example, the participating party or parties will be responsible for submitting a list of attendees and written summary of any oral communication to the Office, which will be made publicly available on the Office's Web site or regulations.gov. In sum, while the Office is establishing the option of informal meetings in response to stakeholder demand, it will require that all such communications be on the record to ensure the greatest possible transparency.

¹⁴¹ The Office expects to continue to hold informal intra-governmental communications, which would not be included in such guidelines.

Dated: October 19, 2017.

Sarang V. Damle,

General Counsel and

Associate Register of Copyrights.

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