

in its place the citation “34 CFR 668.23(b)”.

■ b. In the parenthetical OMB control number at the end of the section, removing the words “control number 1840–0688” and adding in their place the words “control number 1845–0039”.

■ c. Removing the parenthetical authority citation at the end of the section

## PART 691 [Removed and Reserved]

■ 18. Under the authority of 20 U.S.C. 1221e–3, part 691 is removed and reserved.

[FR Doc. 2021–23423 Filed 10–27–21; 8:45 am]

BILLING CODE 4000–01–P

## LIBRARY OF CONGRESS

### Copyright Office

#### 37 CFR Part 201

[Docket No. 2020–11]

### Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies

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

**ACTION:** Final rule.

**SUMMARY:** In this final rule, the Librarian of Congress adopts exemptions to the provision of the Digital Millennium Copyright Act (“DMCA”) that prohibits circumvention of technological measures that control access to copyrighted works. As required under the statute, the Register of Copyrights, following a public proceeding, submitted a recommendation concerning proposed exemptions to the Librarian of Congress (“Register’s Recommendation”). After careful consideration, the Librarian adopts final regulations based upon the Register’s Recommendation.

**DATES:** Effective October 28, 2021.

**FOR FURTHER INFORMATION CONTACT:**

Kevin R. Amer, Acting General Counsel and Associate Register of Copyrights, by email at [kamer@copyright.gov](mailto:kamer@copyright.gov), or Mark Gray, Attorney-Advisor, by email at [mgray@copyright.gov](mailto:mgray@copyright.gov). Each can be contacted by telephone by calling (202) 707–8350.

**SUPPLEMENTARY INFORMATION:** The Librarian of Congress, pursuant to section 1201(a)(1) of title 17, United States Code, has determined in this eighth triennial rulemaking proceeding that the prohibition against circumvention of technological

measures that effectively control access to copyrighted works shall not apply for the next three years to persons who engage in certain noninfringing uses of certain classes of such works. This determination is based upon the Register’s Recommendation.

The below discussion summarizes the rulemaking proceeding and the Register’s recommendations, announces the Librarian’s determination, and publishes the regulatory text specifying the exempted classes of works. A more complete discussion of the rulemaking process, the evidentiary record, and the Register’s analysis with respect to each proposed exemption can be found in the Register’s Recommendation, which is posted at [www.copyright.gov/1201/2021/](http://www.copyright.gov/1201/2021/).

### I. Background

#### A. Statutory Requirements

Congress enacted the DMCA in 1998 to implement certain provisions of the WIPO Copyright and WIPO Performances and Phonograms Treaties. Among other things, title I of the DMCA, which added a new chapter 12 to title 17 of the U.S. Code, prohibits circumvention of technological measures employed by or on behalf of copyright owners to protect access to their works. In enacting this aspect of the law, Congress observed that technological protection measures (“TPMs”) can “support new ways of disseminating copyrighted materials to users, and . . . safeguard the availability of legitimate uses of those materials by individuals.”<sup>1</sup>

Section 1201(a)(1) provides in pertinent part that “[n]o person shall circumvent a technological measure that effectively controls access to a work protected under [title 17].” Under the statute, to “circumvent a technological measure” means “to descramble a scrambled work, to decrypt an encrypted work, or otherwise to avoid, bypass, remove, deactivate, or impair a technological measure, without the authority of the copyright owner.”<sup>2</sup> A technological measure that “effectively controls access to a work” is one that “in the ordinary course of its operation, requires the application of information, or a process or a treatment, with the authority of the copyright owner, to gain access to the work.”<sup>3</sup>

Section 1201(a)(1) also includes what Congress characterized as a “fail-safe”

mechanism,<sup>4</sup> which requires the Librarian of Congress, following a rulemaking proceeding, to exempt any class from the prohibition for a three-year period if she has determined that noninfringing uses by persons who are users of copyrighted works in that class are, or are likely to be, adversely affected by the prohibition against circumvention during that period.<sup>5</sup> The Librarian’s determination to grant an exemption is based upon the recommendation of the Register of Copyrights, who conducts the rulemaking proceeding.<sup>6</sup> The Register consults with the Assistant Secretary for Communications and Information of the Department of Commerce, who oversees the National Telecommunications and Information Administration (“NTIA”), in the course of formulating her recommendations.<sup>7</sup>

Exemptions adopted by rule under section 1201(a)(1) apply only to the conduct of circumventing a technological measure that controls access to a copyrighted work. Other parts of section 1201 address the manufacture and provision of—or “trafficking” in—products and services designed for purposes of circumvention. Section 1201(a)(2) bars trafficking in products and services that are used to circumvent technological measures that control access to copyrighted works (for example, a password needed to open a media file),<sup>8</sup> while section 1201(b) bars trafficking in products and services used to circumvent technological measures that protect the exclusive rights of the copyright owner (for example, technology that prevents the work from being reproduced).<sup>9</sup> The Librarian has no authority to adopt exemptions for the anti-trafficking prohibitions contained in section 1201(a)(2) or (b).<sup>10</sup>

The statute contains certain permanent exemptions to permit specified uses. These include section 1201(d), which exempts certain activities of nonprofit libraries, archives, and educational institutions; section 1201(e), which exempts “lawfully authorized investigative, protective, information security, or intelligence activity” of a state or the federal

<sup>4</sup> See H.R. Rep. No. 105–551, pt. 2, at 36 (1998).

<sup>5</sup> See 17 U.S.C. 1201(a)(1).

<sup>6</sup> 17 U.S.C. 1201(a)(1)(C).

<sup>7</sup> *Id.*

<sup>8</sup> 17 U.S.C. 1201(a)(2).

<sup>9</sup> 17 U.S.C. 1201(b).

<sup>10</sup> See 17 U.S.C. 1201(a)(1)(E) (“Neither the exception under subparagraph (B) from the applicability of the prohibition contained in subparagraph (A), nor any determination made in a rulemaking conducted under subparagraph (C), may be used as a defense in any action to enforce any provision of this title other than this paragraph.”).

<sup>1</sup> 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 4, 1998, at 6 (Comm. Print 1998).

<sup>2</sup> 17 U.S.C. 1201(a)(3)(A).

<sup>3</sup> 17 U.S.C. 1201(a)(3)(B).

government; section 1201(f), which exempts certain “reverse engineering” activities to facilitate interoperability; section 1201(g), which exempts certain types of research into encryption technologies; section 1201(h), which exempts certain activities to prevent the “access of minors to material on the internet”; section 1201(i), which exempts certain activities “solely for the purpose of preventing the collection or dissemination of personally identifying information”; and section 1201(j), which exempts certain acts of “security testing” of computers and computer systems.

### B. Rulemaking Standards

In adopting the DMCA, Congress imposed legal and evidentiary requirements for the section 1201 rulemaking proceeding, as discussed in greater detail in the Register’s Recommendation<sup>11</sup> and the Copyright Office’s 2017 policy study on section 1201.<sup>12</sup> The Register will recommend granting an exemption only “when the preponderance of the evidence in the record shows that the conditions for granting an exemption have been met.”<sup>13</sup> The evidence must show “that it is more likely than not that users of a copyrighted work will, in the succeeding three-year period, be adversely affected by the prohibition on circumvention in their ability to make noninfringing uses of a particular class of copyrighted works.”<sup>14</sup>

The Librarian must assess whether the implementation of access controls impairs the ability of individuals to make noninfringing uses of copyrighted works within the meaning of section 1201(a)(1). To aid in this process, the Register develops a comprehensive administrative record using information submitted by interested members of the

public, and makes recommendations to the Librarian concerning whether exemptions are warranted based on that record.

To establish the need for an exemption, proponents must show, at a minimum, (1) that uses affected by the prohibition on circumvention are or are likely to be noninfringing; and (2) that as a result of a technological measure controlling access to a copyrighted work, the prohibition is causing, or in the next three years is likely to cause, an adverse impact on those uses. In addition, the Librarian must examine the statutory factors listed in section 1201(a)(1): (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.

Finally, section 1201(a)(1) specifies that any exemption adopted as part of this rulemaking must be defined based on “a particular class of works.”<sup>15</sup> Among other things, the determination of the appropriate scope of a “class of works” recommended for exemption may take into account the adverse effects an exemption may have on the market for or value of copyrighted works. Accordingly, “it can be appropriate to refine a class by reference to the use or user in order to remedy the adverse effect of the prohibition and to limit the adverse consequences of an exemption.”<sup>16</sup>

## II. History of the Eighth Triennial Proceeding

The Office initiated the eighth triennial rulemaking proceeding through a Notice of Inquiry (“NOI”) on June 22, 2020.<sup>17</sup> The NOI requested petitions for renewal of exemptions adopted in the 2018 rulemaking, petitions in opposition to renewal, and any petitions for new exemptions, including proposals to expand a current exemption. The Office received twenty-six petitions for new exemptions, including thirteen comments seeking to expand certain current exemptions.

As in the prior rulemaking, the Office employed a streamlined process for

renewing existing exemptions in this proceeding, detailing the renewal process in its public notices.<sup>18</sup> 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 are expected to continue into the forthcoming triennial period.<sup>19</sup> That is, the same material facts and circumstances underlying the previously-adopted regulatory exemption may be relied on to renew the exemption. Because the statute requires that exemptions be adopted upon a new determination concerning the next three-year period, the fact that the Librarian previously adopted an exemption creates no presumption that re-adoption is appropriate.

The Register’s Recommendation provides a detailed description of the process the Office used to create a record for each renewal petition.<sup>20</sup> In brief, the Office first solicited renewal petitions as well as comments from participants opposing the re-adoption of the exemption. The Office received thirty-two renewal petitions and fifteen comments in response to those petitions. Seven comments supported renewal of a current exemption, and eight comments raised discrete concerns with specific petitions, but did not oppose re-adoption of the relevant exemption.<sup>21</sup>

On October 15, 2020, the Office issued its notice of proposed rulemaking (“NPRM”) identifying the existing exemptions for which the Register intended to recommend renewal, and outlined the proposed classes for new exemptions, for which three rounds of public comments were initiated.<sup>22</sup> Those proposals were organized into seventeen classes of works. Six of the seventeen proposed exemptions sought

<sup>11</sup> Register of Copyrights, Section 1201 Rulemaking: Eighth Triennial Proceeding to Determine Exemptions to the Prohibition on Circumvention, Recommendation of the Register of Copyrights (Oct. 2021), [https://cdn.loc.gov/copyright/1201/2021/2021\\_Section\\_1201\\_Registers\\_Recommendation.pdf](https://cdn.loc.gov/copyright/1201/2021/2021_Section_1201_Registers_Recommendation.pdf) (Register’s Recommendation”).

<sup>12</sup> Register’s Recommendation at section II.C; U.S. Copyright Office, Section 1201 of Title 17 111–12 (2017), <https://www.copyright.gov/policy/1201/section-1201-full-report.pdf> (“Section 1201 Report”).

<sup>13</sup> Section 1201 Report at 111–12; *accord* Register of Copyrights, Section 1201 Rulemaking: Seventh Triennial Proceeding to Determine Exemptions to the Prohibition on Circumvention, Recommendation of the Register of Copyrights 12–13 (Oct. 2018). References to the Register’s recommendations in prior rulemakings are cited by the year of publication followed by “Recommendation” (e.g., “2018 Recommendation”). Prior Recommendations are available on the Copyright Office website at <https://www.copyright.gov/1201/>.

<sup>14</sup> Section 1201 Report at 112.

<sup>15</sup> 17 U.S.C. 1201(a)(1)(B).

<sup>16</sup> 2006 Recommendation at 19.

<sup>17</sup> Exemptions to Permit Circumvention of Access Controls on Copyrighted Works, 85 FR 37399 (June 22, 2020).

<sup>18</sup> Exemptions to Permit Circumvention of Access Controls on Copyrighted Works, 85 FR 37399, 37400–02 (June 22, 2020); Exemptions to Permit Circumvention of Access Controls on Copyrighted Works, 85 FR 65293, 65294–95 (Oct. 15, 2020).

<sup>19</sup> Exemptions to Permit Circumvention of Access Controls on Copyrighted Works, 85 FR 37399, 37401–02 (June 22, 2020); Exemptions to Permit Circumvention of Access Controls on Copyrighted Works, 85 FR 65293, 65295 (Oct. 15, 2020).

<sup>20</sup> Register’s Recommendation at III.D & IV.

<sup>21</sup> The submissions received in response to the NOI are available at <https://www.copyright.gov/1201/2021/>. References to these submissions are by party and class name (abbreviated where appropriate) followed by “Renewal Pet.,” “Renewal Comment,” or party name and class number followed by “Pet.,” “Initial,” “Opp’n,” or “Reply” for comments submitted in the first, second, or third round, as applicable.

<sup>22</sup> Exemptions to Permit Circumvention of Access Controls on Copyrighted Works, 85 FR 65293, 65293 (Oct. 15, 2020).

expansions of existing exemptions, seven proposed entirely new exemptions, and four contained a combination of both expansions and new exemptions. The Office then held seven days of public hearings in which it heard testimony from numerous participants. After the hearings, the Office issued written questions to hearing participants regarding certain proposed classes.<sup>23</sup> Finally, the Office held several *ex parte* meetings with participants concerning ten proposed classes.<sup>24</sup>

As required by section 1201(a)(1), the Register consulted with NTIA during this rulemaking. NTIA provided input at various stages and participated in the virtual public hearings. NTIA formally communicated its views on each of the proposed exemptions to the Register on October 1, 2021. The Office addresses NTIA's substantive views on the proposed classes below. NTIA's recommendations can be viewed at [https://cdn.loc.gov/copyright/1201/2021/2021\\_NTIA\\_DMCA\\_Letter.pdf](https://cdn.loc.gov/copyright/1201/2021/2021_NTIA_DMCA_Letter.pdf).

### III. Summary of Register's Recommendation

#### A. Renewal Recommendations

As set forth in the NPRM, the Register received petitions to renew each of the exemptions adopted pursuant to the seventh triennial rulemaking. Eight comments in response to renewal petitions raised discrete concerns with specific petitions, but none opposed the verbatim re-adoption of an existing regulatory exemption or disputed the reliability of the previously analyzed administrative record.<sup>25</sup> The Register recommends renewal of these exemptions based on the information provided in the renewal petitions and the lack of meaningful opposition, finding that the conditions that led to adoption of the exemptions are likely to continue during the next triennial period. The existing exemptions, and the bases for the recommendation to re-adopt each exemption in accordance with the streamlined renewal process, are discussed in detail in the Recommendation and summarized briefly below. Where noted, these

<sup>23</sup> Participants' post-hearing letter responses are available at <https://www.copyright.gov/1201/2021/post-hearing/>.

<sup>24</sup> All *ex parte* letters in the eighth triennial rulemaking can be found at <https://www.copyright.gov/1201/2021/ex-parte-communications.html>.

<sup>25</sup> Exemptions to Permit Circumvention of Access Controls on Copyrighted Works, 85 FR 65293, 65295 (Oct. 15, 2020); see also Exemptions to Permit Circumvention of Access Controls on Copyrighted Works, 85 FR 37399, 37402 (June 22, 2020) (describing "meaningful opposition" standard).

exemptions serve as a baseline in considering requests for expansion.

#### 1. Audiovisual Works—Educational and Derivative Uses

Multiple individuals and organizations petitioned to renew the exemption covering the use of short portions of motion pictures for various educational and derivative uses.<sup>26</sup> The Office did not receive meaningful opposition to re-adoption of these exemptions. Petitions to renew the various subparts of the exemption are discussed below. The existing exemption and its various subparts collectively serve as the baseline in assessing whether to recommend any expansions in Class 1.

##### a. Audiovisual Works—Criticism and Comment, Teaching, or Scholarship—Universities and K–12 Educational Institutions.<sup>27</sup>

Multiple individuals and organizations petitioned to renew the exemption for motion pictures for educational purposes by college and university or K–12 faculty and students. The Office did not receive substantive opposition to re-adoption of this exemption. The petitions demonstrated that educators and students continue to rely on excerpts from digital media for class presentations and coursework. For example, a collective of individuals and organizations provided several examples of professors using DVD clips in the classroom. A group of individual educators and educational organizations<sup>28</sup> broadly suggested that the "entire field" of video essays or multimedia criticism "could not have existed in the United States without fair use and the 1201 educational exemption."<sup>29</sup> Petitioners demonstrated personal knowledge and experience with regard to this exemption based on their representation of thousands of digital and literacy educators and/or members supporting educators and students, combined with past participation in the section 1201 triennial rulemaking. The Register finds that petitioners demonstrated a

<sup>26</sup> See 37 CFR 201.40(b)(1). In the 2018 rulemaking, this recommended regulatory language was the result of consideration of one proposed class of works that grouped together five petitions. See 2018 Recommendation at 31–34.

<sup>27</sup> The Register's analysis and conclusions for this subpart, including citations to the record and relevant legal authority, can be found in the Register's Recommendation at IV.A.1.

<sup>28</sup> The individuals and organizations include Peter Decherney, Katherine Sender, John L. Jackson, Int'l Comm'n Ass'n, Soc'y for Cinema and Media Studies, Console-ing Passions, Library Copyright All., and Am. Ass'n of Univ. Professors.

<sup>29</sup> Joint Educators AV Educ. Renewal Pet. at 3.

continuing need and justification for the exemption.

##### b. Audiovisual Works—Criticism and Comment—Massive Open Online Courses ("MOOCs").<sup>30</sup>

A collective of individuals and organizations and Brigham Young University ("BYU") petitioned to renew the exemption for educational uses of motion pictures in MOOCs. The Office did not receive meaningful opposition to re-adoption of this exemption. The petitions 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 to increase the number of (and therefore access to) MOOCs in the field of film and media studies.

##### c. Audiovisual Works—Criticism and Comment—Digital and Media Literacy Programs<sup>31</sup>

Library Copyright Alliance ("LCA") and Renee Hobbs petitioned to renew the exemption for motion pictures for educational uses in nonprofit digital and media literacy programs offered by libraries, museums, and other organizations. No oppositions were filed against re-adoption of this exemption. The petition stated that librarians across the country have relied on the current exemption and will continue to do so for their digital and media literacy programs, thereby demonstrating the continuing need and justification for the exemption.

##### d. Audiovisual Works—Criticism and Comment—Multimedia E-books<sup>32</sup>

Multiple petitioners jointly sought to renew the exemption for the use of motion picture excerpts in nonfiction multimedia e-books. The Office did not receive meaningful opposition to re-adoption of this exemption. The petition demonstrated the continuing need and justification for the exemption. In addition, the petitioners demonstrated personal knowledge through Bobette Buster's continued work on an e-book series based on her lecture series, "Deconstructing Master Filmmakers: The Uses of Cinematic Enchantment," which "relies on the

<sup>30</sup> The Register's analysis and conclusions for this subpart, including citations to the record and relevant legal authority, can be found in the Register's Recommendation at IV.A.2.

<sup>31</sup> The Register's analysis and conclusions for this subpart, including citations to the record and relevant legal authority, can be found in the Register's Recommendation at IV.A.3.

<sup>32</sup> The Register's analysis and conclusions for this subpart, including citations to the record and relevant legal authority, can be found in the Register's Recommendation at IV.A.4.

availability of high-resolution video not available without circumvention of TPMs.”<sup>33</sup>

#### e. Audiovisual Works—Criticism and Comment—Filmmaking<sup>34</sup>

Multiple organizations petitioned to renew the exemption for motion pictures for uses in documentary films or other films where the use is a parody or based on the work’s biographical or historically significant nature. The Office did not receive meaningful opposition to readoption of this exemption. Petitioners stated that they personally know many filmmakers who have found it necessary to rely on this exemption and will continue to do so. The petitions summarized the continuing need and justification for the exemption.

#### f. Audiovisual Works—Criticism and Comment—Noncommercial Videos<sup>35</sup>

Two organizations petitioned to renew the exemption for motion pictures for uses in noncommercial videos. The Office did not receive meaningful opposition to readoption of this exemption. Petitioners stated that they had personal knowledge that video creators have relied on this exemption and anticipate needing to continue to use the exemption in the future. The Organization for Transformative Works (“OTW”) included an account from an academic who stated that footage ripped from DVDs and Blu-ray is preferred for “vidders” (noncommercial remix artists) because “it is high quality enough to bear up under the transformations that vidders make to it.”<sup>36</sup> The petitions therefore demonstrated the continuing need and justification for the exemption.

#### 2. Audiovisual Works—Accessibility<sup>37</sup>

Multiple organizations petitioned to renew the exemption for motion pictures for the provision of captioning and/or audio description by disability services offices or similar units at educational institutions for students with disabilities. No oppositions were filed in connection with readoption of

this exemption. The petitions demonstrated the continuing need and justification for the exemption, and the petitioners demonstrated personal knowledge and experience as to the exemption. For example, BYU asserted that its disability services offices “sometimes need to create accessible versions of motion pictures” to accommodate its students with disabilities.<sup>38</sup> The petitions stated that there is a need for the exemption going forward; indeed, one group of petitioners stated that “the need is likely to increase significantly in light of the ongoing COVID-19 pandemic as many educational institutions shift to online learning and the use of digital multimedia by faculty increases.”<sup>39</sup> This existing exemption serves as the baseline in assessing whether to recommend any expansions in Class 3.

#### 3. Literary Works Distributed Electronically—Accessibility<sup>40</sup>

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. No oppositions were filed against readoption 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 have difficulty obtaining accessible e-book content because TPMs interfere with the use of assistive technologies. Petitioners noted that their members frequently cite accessibility of e-books as a top priority. Finally, petitioners demonstrated personal knowledge and experience with regard to the assistive technology exemption because they are all organizations that advocate for the blind, visually impaired, and print disabled. This existing exemption serves as the baseline in assessing whether to recommend any expansions in Class 8.

#### 4. Literary Works—Medical Device Data<sup>41</sup>

Hugo Campos petitioned to renew the exemption covering access to patient data on networked medical devices. No oppositions were filed against

readoption of this exemption, and Consumer Reports submitted a comment in support of the renewal petition. 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. 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 a member of a coalition whose members research the effectiveness of networked medical devices. This existing exemption serves as the baseline in assessing whether to recommend any expansions in Class 9.

#### 5. Computer Programs—Unlocking<sup>42</sup>

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 new or used device to an alternative wireless network (“unlocking”).<sup>43</sup> No oppositions were filed against readoption of this exemption, and Consumer Reports submitted a comment in support of the renewal petition. The petitions demonstrated 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, the Institute of Scrap Recycling Industries, Inc. (“ISRI”) stated that its members continue to purchase or acquire donated cell phones, tablets, and other wireless devices and try to reuse them, but that wireless carriers lock devices to prevent them from being used on other carriers.<sup>44</sup> In addition, petitioners demonstrated personal knowledge and experience with regard to this exemption. This existing exemption serves as the baseline in assessing whether to recommend any expansions in Class 10.

#### 6. Computer Programs—Jailbreaking<sup>45</sup>

Multiple organizations petitioned to renew the exemptions for computer programs that operate smartphones,

<sup>33</sup> Bobette Buster, Authors All. & Am. Ass’n of Univ. Professors Nonfiction Multimedia E-Books Renewal Pet. at 3.

<sup>34</sup> The Register’s analysis and conclusions for this subpart, including citations to the record and relevant legal authority, can be found in the Register’s Recommendation at IV.A.5.

<sup>35</sup> The Register’s analysis and conclusions for this subpart, including citations to the record and relevant legal authority, can be found in the Register’s Recommendation at IV.A.6.

<sup>36</sup> OTW Noncommercial Videos Renewal Pet. at 3.

<sup>37</sup> The Register’s analysis and conclusions for this class, including citations to the record and relevant legal authority, can be found in the Register’s Recommendation at IV.B.

<sup>38</sup> BYU Captioning Renewal Pet. at 3.

<sup>39</sup> Accessibility Petitioners Captioning Renewal Pet. at 3.

<sup>40</sup> The Register’s analysis and conclusions for this class, including citations to the record and relevant legal authority, can be found in the Register’s Recommendation at IV.C.

<sup>41</sup> The Register’s analysis and conclusions for this class, including citations to the record and relevant legal authority, can be found in the Register’s Recommendation at IV.D.

<sup>42</sup> The Register’s analysis and conclusions for this class, including citations to the record and relevant legal authority, can be found in the Register’s Recommendation at IV.E.

<sup>43</sup> Competitive Carriers Ass’n Unlocking Renewal Pet.; Inst. of Scrap Recycling Indus., Inc. Unlocking Renewal Pet.

<sup>44</sup> ISRI Unlocking Renewal Pet. at 3.

<sup>45</sup> The Register’s analysis and conclusions for this class, including citations to the record and relevant legal authority, can be found in the Register’s Recommendation at IV.F.

tablets and other portable all-purpose mobile computing devices, smart TVs, or voice assistant devices to allow the device to interoperate with or to remove software applications (“jailbreaking”). No oppositions were filed against re-adoption of this exemption, and Consumer Reports submitted a comment in support of the renewal petition. The petitions demonstrated the continuing need and justification for the exemption, and that petitioners have personal knowledge and experience with regard to this exemption. For example, regarding smart TVs specifically, the Software Freedom Conservancy (“SFC”) asserted that it has “reviewed the policies and product offerings of major Smart TV manufacturers (Sony, LG, Samsung, etc.) and they are substantially the same as those examined during the earlier rulemaking process.”<sup>46</sup> The petitions stated 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. This existing exemption serves as the baseline in assessing whether to recommend any expansions in Class 11.

#### 7. Computer Programs—Repair of Motorized Land Vehicles<sup>47</sup>

Multiple organizations petitioned to renew the exemption for computer programs that control motorized land vehicles, including farm equipment, for purposes of diagnosis, repair, or modification of a vehicle function. The Office did not receive meaningful opposition to re-adoption of this exemption, and Consumer Reports submitted a comment in support of the renewal petition. The petitions demonstrated the continuing need and justification for the exemption. For example, the Motor & Equipment Manufacturers Association (“MEMA”) stated that over the past three years, its membership “has seen firsthand that the exemption is helping protect consumer choice and a competitive market, while mitigating risks to intellectual property and vehicle safety.”<sup>48</sup> Similarly, the Auto Care Association (“ACA”) stated that “[u]nless this exemption is renewed, the software measures manufacturers deploy for the purpose of controlling access to vehicle software

will prevent Auto Care members from lawfully assisting consumers in the maintenance, repair, and upgrade of their vehicles.”<sup>49</sup> The petitioners demonstrated personal knowledge and experience with regard to this exemption; each either represents or gathered information from individuals or businesses that perform vehicle service and repair. This existing exemption, as well as the existing exemption pertaining to repair of smartphones, home appliances, and home systems, serve as the baseline in assessing whether to recommend any expansions in Class 12.

#### 8. Computer Programs—Repair of Smartphones, Home Appliances, and Home Systems<sup>50</sup>

Multiple organizations petitioned to renew the exemption for computer programs that control smartphones, home appliances, or home systems, for diagnosis, maintenance, or repair of the device or system. The Office did not receive meaningful opposition to re-adoption of this exemption, and Consumer Reports submitted a comment in support of the renewal petition. The petitions demonstrated the continuing need and justification for the exemption. For example, the Electronic Frontier Foundation (“EFF”), the Repair Association, and iFixit asserted that “[m]anufacturers of these devices continue to implement [TPMs] that inhibit lawful repairs, maintenance, and diagnostics, and they show no sign of changing course.”<sup>51</sup> This existing exemption, as well as the existing exemption pertaining to repair of motorized land vehicles, serve as the baseline in assessing whether to recommend any expansions in Class 12.

#### 9. Computer Programs—Security Research<sup>52</sup>

Multiple organizations and security researchers petitioned to renew the exemption permitting circumvention for purposes of good-faith security research. No oppositions were filed against re-adoption of this exemption, and Consumer Reports submitted a comment in support of the renewal petition. The petitioners demonstrated the continuing need and justification for the

exemption, as well as personal knowledge and experience with regard to this exemption. For example, J. Alex Halderman, the Center for Democracy and Technology (“CDT”), and the U.S. Technology Policy Committee of the Association for Computing Machinery (“ACM”) highlighted the need to find and detect vulnerabilities in voting machines and other election systems in response to increasing aggressiveness on the part of threat actors, including other nation states.<sup>53</sup> MEMA stated that its membership “experienced firsthand that the exemption is helping encourage innovation in the automotive industry while mitigating risks to intellectual property and vehicle safety,” and opined that the current exemption strikes an “appropriate balance.”<sup>54</sup> This existing exemption serves as the baseline in assessing whether to recommend any expansions in Class 13.

#### 10. Computer Programs—Software Preservation<sup>55</sup>

The Software Preservation Network (“SPN”) and LCA petitioned to renew the exemption for computer programs, other than video games, for the preservation of computer programs and computer program-dependent materials by libraries, archives, and museums. No oppositions were filed against re-adoption of this exemption. The petition stated that libraries, archives, and museums continue to need the exemption to preserve and curate software and materials dependent on software. For example, the petition explained that researchers at the University of Virginia designed a project in order to access a collection of drawings and plans from a local Charlottesville architecture firm, and that without the exemption, the outdated Computer Aided Design software used to create many of the designs “may have remained inaccessible to researchers, rendering the designs themselves inaccessible, too.”<sup>56</sup> In addition, petitioners demonstrated personal knowledge and experience with regard to this exemption through past participation in the section 1201 triennial rulemaking relating to access controls on software, and/or representing major library associations with members who have relied on this exemption. This existing

<sup>46</sup> SFC Jailbreaking Renewal Pet. at 3.

<sup>47</sup> The Register’s analysis and conclusions for this class, including citations to the record and relevant legal authority, can be found in the Register’s Recommendation at IV.G.

<sup>48</sup> MEMA Vehicle Repair Renewal Pet. at 3.

<sup>49</sup> ACA Vehicle Repair Renewal Pet. at 3.

<sup>50</sup> The Register’s analysis and conclusions for this class, including citations to the record and relevant legal authority, can be found in the Register’s Recommendation at IV.H.

<sup>51</sup> EFF Device Repair Renewal Pet. at 3; EFF, Repair Ass’n & iFixit Device Repair Renewal Pet. at 3.

<sup>52</sup> The Register’s analysis and conclusions for this class, including citations to the record and relevant legal authority, can be found in the Register’s Recommendation at IV.I.

<sup>53</sup> J. Alex Halderman, CDT & ACM Security Research Renewal Pet. at 4.

<sup>54</sup> MEMA Security Research Renewal Pet. at 3.

<sup>55</sup> The Register’s analysis and conclusions for this class, including citations to the record and relevant legal authority, can be found in the Register’s Recommendation at IV.J.

<sup>56</sup> SPN & LCA Software Preservation Renewal Pet. at 3.

exemption, as well as the exemption pertaining to video game preservation, serve as the baseline in assessing whether to recommend any expansions in Class 14.

#### 11. Computer Programs—Video Game Preservation<sup>57</sup>

SPN and LCA petitioned to renew the exemption for preservation of video games for which outside server support has been discontinued. No oppositions were filed against re-adoption of this exemption, and Consumer Reports submitted a comment in support of the renewal petition. The petition stated that libraries, archives, and museums continue to need the exemption to preserve and curate video games in playable form. For example, the petition highlighted Georgia Tech University Library's Computing Lab, retroTECH, which has made a significant collection of recovered video game consoles accessible for research and teaching uses pursuant to the exemption.<sup>58</sup> Petitioners demonstrated personal knowledge and experience with regard to this exemption through past participation in the section 1201 triennial rulemaking, and/or through their representation of members who have relied on this exemption. This existing exemption, as well as the above exemption pertaining to software preservation, serve as the baseline in assessing whether to recommend any expansions in Class 14.

#### 12. Computer Programs—3D Printers<sup>59</sup>

Michael Weinberg petitioned to renew the exemption for computer programs that operate 3D printers to allow use of alternative feedstock. No oppositions were filed against re-adoption of this exemption. The petition demonstrated the continuing need and justification for the exemption, and petitioner demonstrated personal knowledge and experience regarding the exemption. Specifically, Mr. Weinberg declared that he is a member of the 3D printing community and previously participated in the section 1201 triennial rulemaking. In addition, the petition stated that manufacturers of 3D printers continue to limit the types of materials that may be used with the devices. This existing exemption serves as the

baseline in assessing whether to recommend any expansions in Class 15.

#### B. New or Expanded Designations of Classes

Based upon the record in this proceeding regarding proposed expansions to existing exemptions or newly proposed exemptions, the Register recommends that the Librarian determine that the following classes of works be exempt from the prohibition against circumvention of technological measures set forth in section 1201(a)(1):

##### 1. Proposed Class 1: Audiovisual Works—Criticism and Comment<sup>60</sup>

Proposed Class 1 sought to expand the existing exemption that permits circumvention of access controls protecting excerpts of motion pictures on DVDs, Blu-ray discs, and digitally transmitted video for the purposes of criticism and comment, including for educational purposes by certain users. Three different petitions were filed in this class. OTW's proposed exemption sought to eliminate multiple limitations, including the requirement that a user consider whether screen capture technology is a viable alternative before circumvention. BYU's proposed exemption would permit circumvention by college or university employees or students or by K–12 educators or students acting under the direct supervision of an educator, and would significantly alter the language of the current exemption regarding the purpose of the circumvention. A group of individual educators and educational organizations ("Joint Educators") proposed an exemption that would permit circumvention by "educators and preparers of online learning materials" to be used on online learning platforms. All three proposals sought to remove the reference to screen capture from the existing exemption. OTW and Joint Educators' proposals sought to use short portions of motion pictures; the BYU proposal sought use of full-length works. The proposals addressed several uses of motion pictures that proponents contended are noninfringing and that they argued are adversely affected by TPMs. NTIA supported the proposed exemption, but proposed some amendments to the text.

Opponents argued that the proposed changes were unwarranted or unnecessary. The Motion Picture Association, the Alliance for Recorded Music, and the Entertainment Software Association (collectively, "Joint

Creators") and the DVD Copy Control Association ("DVD CCA") and the Advanced Access Content System Licensing Administrator, LLC ("AACSLA") argued that screen capture technology has improved and remains an adequate alternative in some circumstances. Joint Creators also argued that the Joint Educators' proposal to expand the exemption to "educators and preparers of online learning materials" could permit circumvention by businesses and threaten the market for licensed clips. DVD CCA and AACSLA contended that expanding the exemption to cover employees of a qualifying MOOC was unnecessary for online educators to prepare materials.

For the reasons detailed in the Register's Recommendation, the Register recommended expanding the exemption to permit employees of colleges and universities to circumvent at the direction of a faculty member for the purpose of teaching a course, and also to cover similar uses by both faculty and employees acting at the direction of faculty members of accredited nonprofit educational institutions for the purposes of offering MOOCs. The Register further recommended retaining the screen capture provision in the exemption to anticipate the possibility that screen capture technology could be found to involve circumvention. The Register concluded that the exemption should not be expanded or amended to cover copying for the purpose of performing full-length motion pictures for educational purposes; to replace the phrase "short portions" with "reasonable and limited portions"; to enable circumvention by for-profit and/or unaccredited educational companies and organizations; or to cover the broadly defined "educators and preparers of online learning materials" of "online learning platforms."

##### 2. Proposed Class 3: Audiovisual Works—Accessibility<sup>61</sup>

Class 3 proponents sought to expand several provisions of the current exemption for adding captions or audio description to motion pictures for the benefit of students with disabilities. Proponents requested expanding the exemption to include faculty and staff with disabilities at educational institutions as beneficiaries, explicitly permitting reuse of previously remediated materials, allowing for proactive remediation in advance of a

<sup>57</sup> The Register's analysis and conclusions for this class, including citations to the record and relevant legal authority, can be found in the Register's Recommendation at IV.K.

<sup>58</sup> SPN & LCA Abandoned Video Game Renewal Pet. at 3.

<sup>59</sup> The Register's analysis and conclusions for this class, including citations to the record and relevant legal authority, can be found in the Register's Recommendation at IV.L.

<sup>60</sup> The Register's analysis and conclusions for these classes, including citations to the record and relevant legal authority, can be found in the Register's Recommendation at V.A.

<sup>61</sup> The Register's analysis and conclusions for this class, including citations to the record and relevant legal authority, can be found in the Register's Recommendation at V.C.

specific request for accessible material, and clarifying the market-check requirement to encompass only works on the market that are of “sufficient quality.” Joint Creators and DVD CCA & AACS LA filed oppositions. NTIA supported the proposed exemption.

For the reasons discussed in the Register’s Recommendation, the Register concluded that expanding the exemption to faculty and staff with disabilities, allowing reuse of previously remediated material, and permitting proactive remediation are likely fair uses because they are directed towards adding captions or audio descriptions in compliance with disability law, the same purpose found fair in the Register’s 2018 Recommendation. Additionally, the Register concluded that proponents had provided sufficient evidence that they would be adversely affected if the exemption were not expanded.

### 3. Proposed Class 5: Audiovisual Works—Preservation and Replacement<sup>62</sup>

Class 5 proponents sought to permit circumvention of TPMs on motion pictures (including television shows and videos) stored on DVDs or Blu-ray discs that are no longer reasonably available in the marketplace to enable libraries, archives, and museums to make preservation and replacement copies of those works. The proposed exemption would permit qualifying institutions to make copies of discs that are damaged or deteriorating, as well as discs that have not yet begun to deteriorate; to make physical or digital copies of the motion pictures; and to make any digital copies available outside the premises of the institution. NTIA supported the proposed exemption.

Joint Creators and DVD CCA and AACS LA opposed the exemption, arguing that it would enable institutions to space-shift<sup>63</sup> their film collections and launch online streaming services. Opponents contended that, should an exemption be granted, it should apply only to damaged or deteriorating discs; it should prohibit off-premises access to the copied works; and the market check should include a requirement that institutions determine if the motion

picture is available for streaming through a licensed source.

For the reasons detailed in the Register’s Recommendation, the Register concluded that it was likely to be a fair use for qualifying institutions to copy motion pictures from discs that are damaged or deteriorating if the motion pictures on those discs are not reasonably available in the marketplace for purchase or streaming. The Register concluded that proponents had not demonstrated that providing off-premises access to the replacement copies of motion pictures is likely to be noninfringing. The Register concluded that proponents had provided substantial evidence that granting the exemption would benefit preservation, education, and scholarship by making available motion pictures that might otherwise be lost to history and that the exemption is unlikely to adversely affect the market for or value of the motion pictures.

### 4. Proposed Classes 7(a): Motion Pictures and 7(b): Literary Works—Text and Data Mining<sup>64</sup>

Authors Alliance, the American Association of University Professors, and LCA jointly filed a petition proposing Classes 7(a) and 7(b), seeking to permit circumvention of TPMs on motion pictures and literary works stored on DVDs or Blu-ray discs or made available for digital download to enable researchers to perform text and data mining (“TDM”) techniques for the purpose of scholarly research and teaching. Proponents argued that copying literary works and motion pictures to create large collections on which to perform TDM research is a fair use, and that requirements to use security measures to protect the corpora from public access or further distribution should afford qualifying institutions flexibility to tailor the measures to the size and content of the corpus. NTIA supported the proposed exemptions.

Joint Creators and DVD CCA and AACS LA opposed the proposed exemption for class 7(a), and the American Association of Publishers (“AAP”) and the Software and Information Industry Association opposed the proposed exemption for class 7(b). They argued that TDM research would interfere with the licensing market for collections of literary works and motion pictures and that researchers’ ability to view the

entirety of the works in a corpus would create a risk of substitutional use. They also argued that any exemption must require specific, robust security measures.

As discussed in greater detail in the Register’s Recommendation, the Register found that the prohibition on circumvention adversely affects researchers’ ability to conduct TDM research projects, which are likely to be noninfringing with the addition of several limitations. Most importantly, the Register recommended requiring the institution of higher education storing or hosting a corpus of copyrighted works to implement either security measures that have been agreed upon by copyright owners and institutions of higher education, or, in the absence of such measures, those measures that the institution uses to keep its own highly confidential information secure. The Register also recommended adding a limitation that the person undertaking the circumvention view or listen to the contents of the copyrighted works in the corpus solely for the purpose of verification of the research findings, not for the works’ expressive purposes. The Register concluded that existing alternatives to circumvention do not meet researchers’ needs.

### 5. Proposed Class 8: Literary Works—Accessibility<sup>65</sup>

Class 8 proponents sought to modify the current exemption for e-book accessibility to align with recent changes to the Copyright Act as a result of the Marrakesh Treaty Implementation Act. Proponents requested expanding the class of beneficiaries to “eligible persons” as defined in section 121 of the Copyright Act, expanding the exemption to cover previously published musical works, and replacing references to a “mainstream copy” in the remuneration requirement with the term “inaccessible copy.” Proponents also sought guidance on whether import and export activity under section 121A was implicated by the prohibition on circumvention. Joint Creators stated that they did not oppose the exemption to the extent it is consistent with sections 121 and 121A. AAP filed a reply comment in support of this class, and NTIA supported the proposed exemption.

For the reasons discussed in the Register’s Recommendation, the Register concluded that without the proposed modifications, print-disabled

<sup>62</sup> The Register’s analysis and conclusions for this class, including citations to the record and relevant legal authority, can be found in the Register’s Recommendation at V.E.

<sup>63</sup> Space-shifting occurs when a work is transferred from one storage medium to another, such as from a DVD to a computer hard drive. See 2015 Recommendation at 107.

<sup>64</sup> The Register’s analysis and conclusions for this class, including citations to the record and relevant legal authority, can be found in the Register’s Recommendation at V.G.

<sup>65</sup> The Register’s analysis and conclusions for these classes, including citations to the record and relevant legal authority, can be found in the Register’s Recommendation at V.H.

individuals would be adversely affected in their ability to engage in the proposed noninfringing uses. The Register also determined that replacement of the reference to a “mainstream copy” with an “inaccessible copy” is a non-substantive change. Finally, the Register declined to recommend language regarding import and export of accessible works because the record did not indicate that such activity implicates the prohibition on circumvention. Proponents and Joint Creators filed a joint post-hearing submission proposing regulatory language that excludes sound recordings of performances of musical works from the exemption, which the Register recommended including.

#### 6. Proposed Class 9: Literary Works—Medical Device Data<sup>66</sup>

Class 9 proponents sought to expand several provisions of the current exemption that permits the circumvention of TPMs on medical devices to access their data outputs. Proponents filed a petition seeking to eliminate the current limitation of the exemption to “wholly or partially implanted” devices; permit authorized third parties to perform the circumvention on behalf of a patient; extend the exemption to non-passive monitoring; and remove the condition that circumvention not violate other applicable laws. ACT|The App Association opposed the proposed exemption. NTIA supported adopting the proposed exemption, with some modification.

For the reasons detailed in the Register’s Recommendation, the Register concluded that accessing medical data outputs likely qualifies as a fair use and that expanding the exemption to include non-implanted medical devices and non-passive monitoring would not alter the fair use analysis. Additionally, the Register concluded that proponents set forth sufficient evidence that the “wholly or partially implanted” language and the passive monitoring limitation are causing, or are likely to cause, adverse effects on these noninfringing uses. The Register also recommended expanding the exemption to permit circumvention “by or on behalf of a patient.” After consultation with the U.S. Food and Drug Administration, the Register recommended removing the language requiring compliance with other laws, and replacing it with a statement that

<sup>66</sup> The Register’s analysis and conclusions for these classes, including citations to the record and relevant legal authority, can be found in the Register’s Recommendation at V.I.

eligibility for the exemption does not preclude liability from other applicable laws.

#### 7. Proposed Class 10: Computer Programs—Unlocking<sup>67</sup>

ISRI petitioned to expand the existing exemption for unlocking to either (1) add a new device category for laptop computers or (2) remove enumerated device categories from the current exemption and permit unlocking of all wireless devices. It argued that the proposed uses are noninfringing based on the Register’s previous findings that unlocking of certain types of devices is a fair use, contending that the legal analysis does not differ depending on the type of device that is unlocked. The only opposition comment was filed by MEMA, which opposed expanding the exemption to permit unlocking cellular-enabled vehicles. NTIA supported expanding the exemption to permit unlocking all lawfully-acquired devices.

For the reasons discussed in the Register’s Recommendation, the Register concluded that proponents established that unlocking is likely to be a fair use regardless of the type of device involved. Proponents offered un rebutted evidence that many different types of wireless devices share the same wireless modem. Because the Register concluded that unlocking those modems is likely a fair use, she determined that users of these devices experience the same adverse effects from the prohibition on circumvention.

#### 8. Proposed Class 11: Computer Programs—Jailbreaking<sup>68</sup>

Two petitions were filed for new or expanded exemptions relating to the circumvention of computer programs for jailbreaking purposes. EFF filed a petition seeking to clarify and expand the current exemption pertaining to jailbreaking smart TVs to include video streaming devices. SFC filed a petition for a new exemption to allow jailbreaking of routers and other networking devices to enable the installation of alternative firmware. ACT|The App Association, DVD CCA and AACSLA, and Joint Creators opposed this proposed class. NTIA supported adopting both proposed exemptions.

In supporting comments, EFF clarified that its proposed exemption

<sup>67</sup> The Register’s analysis and conclusions for this class, including citations to the record and relevant legal authority, can be found in the Register’s Recommendation at V.J.

<sup>68</sup> The Register’s analysis and conclusions for this class, including citations to the record and relevant legal authority, can be found in the Register’s Recommendation at V.K.

would cover devices whose primary purpose is to run applications that stream video from the internet for display on a screen, and would not extend to DVD or Blu-ray players or video game consoles. The Register concluded that jailbreaking video streaming devices likely constitutes a fair use. Additionally, the Register concluded that the prohibition on circumvention is likely to adversely affect proponents’ ability to engage in such activities. She recommended that the regulatory language contain certain limitations to address opponents’ concerns over potential market harm.

With respect to SFC’s petition, the Register concluded that jailbreaking routers and other networking devices is likely to qualify as a fair use. Additionally, the Register concluded that the prohibition on circumvention is likely to prevent users from installing free and open source software (“FOSS”) on routers and other networking devices and that there are no viable alternatives to circumvention to accomplish that purpose.

#### 9. Proposed Class 12: Computer Programs—Repair<sup>69</sup>

Several organizations submitted petitions for new or expanded exemptions relating to the diagnosis, maintenance, repair, and modification of software-enabled devices. EFF and, jointly, iFixit and the Repair Association filed petitions seeking to merge and expand the two existing exemptions to cover all devices and vehicles and permit “modification” of all devices. Opponents objected that the proposed expansion to cover all devices was overbroad and that proponents failed to develop a record demonstrating sufficient commonalities among the various types of software-enabled devices. In addition, they argued that specific types of devices for which circumvention of TPMs raises piracy and safety concerns should be excluded from the proposed class. Opponents also contended that the term “modification” is so broad that it could implicate infringing activities, including violating copyright owners’ exclusive right to prepare derivative works.

Separately, Public Knowledge and iFixit jointly petitioned for an exemption to repair optical drives in video game consoles and to replace damaged hardware in such devices. They asserted that authorized repair services are inadequate, particularly for

<sup>69</sup> The Register’s analysis and conclusions for this class, including citations to the record and relevant legal authority, can be found in the Register’s Recommendation at V.L.

certain legacy consoles that manufacturers no longer support. Opponents argued that the proposed exemption would create a risk of market harm for these devices and that adequate alternatives to circumvention exist.

NTIA recommended expanding the current exemptions by merging them into a single exemption that would permit circumvention for the diagnosis, maintenance, and repair of all software-enabled devices, machines, and systems. In addition, NTIA recommended allowing “lawful modification that is necessary for a repair or maintenance” and software modifications relating to device functionality.

For the reasons discussed in the Register’s Recommendation, the Register recommended expanding the existing exemption for diagnosis, maintenance, and repair of certain categories of devices to cover any software-enabled device that is primarily designed for use by consumers. For video game consoles, the Register concluded that an exemption is warranted solely for the repair of optical drives.

The proposals to merge the two existing repair exemptions would also effectively broaden the existing vehicle exemption by: (1) No longer limiting the class to “motorized land vehicles”; and (2) removing other limitations in the exemption, including that users comply with other laws. Opponents did not object to including marine vessels in the vehicle exemption, but opposed removing language requiring compliance with other laws. For the reasons discussed in the Register’s Recommendation, the Register recommended that the exemption for land vehicles be expanded to cover marine vessels and to remove the condition requiring compliance with other laws.

Finally, Summit Imaging, Inc. and Transtate Equipment Co., Inc. petitioned to exempt circumvention of TPMs on software-enabled medical devices and systems for purposes of diagnosis, maintenance, and repair. Petitioners also sought access to related data files stored on medical devices and systems, including manuals and servicing materials. Opponents argued that this exemption is unnecessary because adequate authorized repair services are available. They also contended that the proposed uses are commercial in nature, would harm the market for medical devices and systems, may undermine patient safety and create cybersecurity risks, and would interfere with manufacturers’ regulatory compliance obligations. For the reasons discussed in

the Register’s Recommendation, the Register recommended a new exemption allowing circumvention of TPMs restricting access to firmware and related data files on medical devices and systems for the purposes of diagnosis, maintenance, and repair.

#### 10. Proposed Class 13: Computer Programs—Security Research<sup>70</sup>

Two petitions sought to expand the current exemption that permits circumvention of TPMs on computer programs for good-faith security research. Together, the petitions sought to eliminate several limitations within the exemption and to explicitly extend the exemption to privacy research. Proponents generally argued that the limitations have chilled valuable security research, primarily by creating uncertainty about whether conducting or reporting security research could result in liability under section 1201. Six parties opposed class 13 at least in part; they argued that the existing exemption has sufficiently enabled good-faith security research and that the record did not justify removing the limitations. NTIA supported the elimination of several limitations, but did not recommend modifying the existing exemption to address privacy-related research activities explicitly.

For the reasons discussed in the Register’s Recommendation, the Register concluded that because the exemption is broadly defined and is not limited to specific issues or subjects relating to security flaws or vulnerabilities, expanding it to expressly cover privacy research is unnecessary. Regarding the specific limitations, the Register recommended removing the condition that circumvention not violate “other laws” and instead clarifying that the exemption does not provide a safe harbor from liability under other laws. The Department of Justice submitted comments supporting this change. The Register declined to recommend removal of limitations pertaining to access to and use of computer programs, finding a lack of specific evidence establishing adverse effects resulting from those provisions. The Register also did not recommend removal of the requirement that devices be lawfully acquired.

<sup>70</sup> The Register’s analysis and conclusions for this class, including citations to the record and relevant legal authority, can be found in the Register’s Recommendation at V.M.

#### 11. Proposed Class 14(a): Computer Programs and 14(b) Video Games—Preservation<sup>71</sup>

Proposed Classes 14(a) and 14(b) seek to amend the existing exemptions permitting libraries, archives, and museums to circumvent TPMs on computer programs and video games, respectively, for the purpose of preservation activities. Specifically, proponents seek to remove the requirement that the preserved computer program or video game must not be distributed or made available outside of the physical premises of the institution. Proposed Class 14(b) would also incorporate the current eligibility requirements for the software preservation exemption into the video game preservation exemption.

Proponents argued that enabling remote access to the works is likely to be a fair use, based in part on a general federal policy favoring remote access to preservation materials, as reflected in various provisions of the Copyright Act. They also argued that the proposed uses would not affect the potential market for or value of the copyrighted works because only works that are no longer reasonably available in the commercial marketplace would be subject to the exemption. NTIA supported the removal of the premises limitation in both exemptions.

Joint Creators and the Entertainment Software Association opposed removing the premises limitation, with most arguments directed to the video game class. They expressed concern that, because the proposed exemption did not limit beneficiaries of the exemption to authenticated educators or researchers, if preserved video games were made available outside the premises of an institution, they would become accessible to the general public, thereby adversely affecting the existing market for older video games.

For the reasons discussed in the Register’s Recommendation, the Register concluded that off-premises access to software as described in the proposal is likely to be noninfringing, with the limitation that the work be accessible to only one user at a time and for a limited time. With respect to video games, the Register concluded that proponents failed to carry their burden to show that the uses are likely noninfringing, and noted the greater risk of market harm in this context given the market for legacy video games. The Register therefore recommends that the Librarian amend

<sup>71</sup> The Register’s analysis and conclusions for this class, including citations to the record and relevant legal authority, can be found in the Register’s Recommendation at V.N.

the exemption for Class 14(a) to address the eligibility requirements for libraries, archives, and museums, but not to remove the premises limitation. The Register recommends removing the premises limitation in the exemption for Class 14(a).

#### 12. Proposed Class 15: Computer Programs—3D Printing<sup>72</sup>

Class 15 seeks to expand two provisions of the current exemption that permits the circumvention of access controls on computer programs in 3D printers to enable the use of non-manufacturer approved feedstock. Michael Weinberg filed a petition to replace the term “feedstock” with the term “material,” stating that the latter is more commonly used within the industry and that the two terms are interchangeable. Additionally, Mr. Weinberg sought to eliminate the phrase “microchip-reliant” from the exemption, arguing that 3D printers may use technology other than microchips to verify 3D printing materials. Mr. Weinberg provided evidence that manufacturers are increasingly moving beyond microchip-based verification techniques, such as using optical scanners. No parties opposed proposed class 15. NTIA supported the proposed exemption.

For the reasons discussed in greater detail in the Register’s Recommendation, the Register concluded that changing the word “feedstock” to “material” is not a substantive change, and found that the removal of the term “microchip-reliant” does not alter the fair use analysis because the expansion is directed at the same uses the Office previously concluded were fair.

#### 13. Proposed Class 16: Computer Programs—Copyright License Investigation<sup>73</sup>

SFC petitioned for a new exemption that would permit investigating whether a particular computer program includes FOSS, and if so, whether the use of the program complies with applicable license terms. SFC, supported by the Free Software Foundation, subsequently agreed to add limitations to require that the circumvention be undertaken on a lawfully acquired device or machine; that it be solely for the purpose of investigating potential copyright

infringement; that it be performed by, or at the direction of, a party that has standing to bring a breach of license claim; and that it otherwise comply with applicable law. NTIA supported the proposed exemption as modified.

Opponents—DVD CCA and AACLS LA; the Equipment Dealers Association, and its regional affiliates, and Associated Equipment Distributors; Joint Creators; and Marcia Wilbur—argued that FOSS licensors could obtain the information they seek by other means. They objected to application of the proposed exemption to a broad category of devices, and requested exclusion of DVD and Blu-ray players, video game consoles, set-top boxes, and vehicles. They argued that any exemption should be limited to investigating potential violations of FOSS licenses, rather than infringement of any proprietary software, and that the investigation must be based on a good-faith, reasonable belief that the device may violate FOSS license terms. Finally, opponents expressed concerns about devices being left exposed to piracy or unauthorized access after circumvention.

For the reasons discussed in the Register’s Recommendation, the Register recommended adopting an exemption with several limitations. First, the purpose of the investigation must be limited to investigating whether a computer program potentially infringes FOSS, and the user must have a good-faith, reasonable belief in the need for the investigation. Second, circumvention must be undertaken by, or at the direction of, a party that would have standing to bring either a breach of license claim or a copyright infringement claim. Third, the copy of a computer program made pursuant to the exemption, or the device or machine on which it operates, cannot be used in a manner that facilitates copyright infringement. Finally, video game consoles should be excluded from the types of devices on which TPMs may be circumvented.

#### 14. Proposed Class 17: All Works—Accessibility Uses<sup>74</sup>

Petitioners, a coalition of accessibility groups, requested a new exemption to create accessible versions of any copyrighted works that are inaccessible to individuals with disabilities. They argued that the Librarian has the authority to define a class of works that share the attribute of being inaccessible

to individuals with disabilities and that creating accessible versions of inaccessible works is unquestionably a fair use. Proponents argued that a broad exemption is warranted to prevent individuals with disabilities from being forced to make piecemeal requests every three years when new accessibility issues arise. NTIA supported the proposed exemption.

Joint Creators, DVD CCA and AACLS LA, and AAP filed comments opposing the proposed exemption, focusing primarily on the ground that the statute does not give the Librarian the authority to adopt a class consisting of “all works” sharing a particular attribute. Joint Creators also raised concerns about the lack of limitations on the use of copies, such as prohibiting further distribution to individuals without disabilities.

As discussed in greater detail in the Register’s Recommendation, although the Register supports the policy goals that underpin the proposed exemption, the statute requires proponents to provide evidence of actual or likely adverse effects resulting from the prohibition on circumvention with respect to “particular class(es)” of works. Here, the Register determined that proponents submitted insufficient evidence of such adverse effects as to most types of works. Proponents did, however, provide evidence to support an exemption to enable individuals with disabilities to use alternate input devices to play video games.

#### C. Classes Considered but Not Recommended

Based upon the record in this proceeding, the Register recommended that the Librarian determine that the following classes of works shall not be exempt during the next three-year period from the prohibition against circumvention of technological measures set forth in section 1201(a)(1):

##### 1. Proposed Class 2: Audiovisual Works—Texting<sup>75</sup>

Proposed Class 2 would allow circumvention of technological measures protecting motion pictures and other audiovisual works to create short audiovisual clips for expressive purposes in text messages. Petitioner did not provide legal arguments or evidence in support of its petition and did not participate in the public hearings. Petitioner failed to explain how the proposed uses were noninfringing and why an exemption is

<sup>72</sup> The Register’s analysis and conclusions for this class, including citations to the record and relevant legal authority, can be found in the Register’s Recommendation at V.O.

<sup>73</sup> The Register’s analysis and conclusions for this class, including citations to the record and relevant legal authority, can be found in the Register’s Recommendation at V.P.

<sup>74</sup> The Register’s analysis and conclusions for this class, including citations to the record and relevant legal authority, can be found in the Register’s Recommendation at V.Q.

<sup>75</sup> The Register’s analysis and conclusions for these classes, including citations to the record and relevant legal authority, can be found in the Register’s Recommendation at V.B.

necessary. NTIA recommended denying the proposed exemption. As discussed more fully in the Register's Recommendation, due to the *de minimis* showing provided by proponents, the Register does not recommend the adoption of an exemption for proposed Class 2.

#### 2. Proposed Class 4: Audiovisual Works—Livestream Recording<sup>76</sup>

Proposed Class 4 would allow circumvention of HTTP Live Streaming technology for the purpose of recording audiovisual works originating as livestreams. Petitioner did not provide legal arguments or evidence to support its petition and did not participate in the public hearings. Petitioner first described the exemption as encompassing sports and other competitive events, but elsewhere stated that the class includes "any and all works" where audiovisual recordings may be made, including individual school performances. NTIA recommended denying the proposed exemption. As discussed more fully in the Register's Recommendation, the Register does not recommend the adoption of an exemption for proposed Class 4.

#### 3. Proposed Class 6: Audiovisual Works—Space-Shifting<sup>77</sup>

Proposed Class 6 would allow circumvention of TPMs protecting motion pictures and other audiovisual works to engage in space-shifting. Petitioner failed to provide legal arguments or evidence to demonstrate that space-shifting is a noninfringing use. Additionally, petitioner did not participate in the public hearings to support its petition or clarify whether the proposed exemption would extend to commercial services. Opponents argued that petitioner did not provide the evidence necessary to support an exemption, citing several substantive and procedural deficiencies. NTIA recommended denying the proposed exemption. As discussed more fully in the Register's Recommendation, the Register does not recommend the adoption of an exemption for proposed Class 6.

#### D. Conclusion

Having considered the evidence in the record, the contentions of the

<sup>76</sup> The Register's analysis and conclusions for these classes, including citations to the record and relevant legal authority, can be found in the Register's Recommendation at V.D.

<sup>77</sup> The Register's analysis and conclusions for this class, including citations to the record and relevant legal authority, can be found in the Register's Recommendation at V.F.

commenting parties, and the statutory objectives, the Register of Copyrights has recommended that the Librarian of Congress publish certain classes of works, as designated above, so that the prohibition against circumvention of technological measures that effectively control access to copyrighted works shall not apply for the next three years to persons who engage in noninfringing uses of those particular classes of works.

Dated: October 20, 2021.

**Shira Perlmutter,**

*Register of Copyrights and Director of the U.S. Copyright Office.*

#### Determination of the Librarian of Congress

Having duly considered and accepted the recommendation of the Register of Copyrights, the Librarian of Congress, pursuant to 17 U.S.C. 1201(a)(1)(C) and (D), hereby publishes as a new rule the classes of copyrighted works that shall for a three-year period be subject to the exemption provided in 17 U.S.C. 1201(a)(1)(B) from the prohibition against circumvention of technological measures that effectively control access to copyrighted works set forth in 17 U.S.C. 1201(a)(1)(A).

#### List of Subjects in 37 CFR Part 201

Copyright, Exemptions to prohibition against circumvention.

#### Final Regulations

For the reasons set forth in the preamble, 37 CFR part 201 is amended as follows:

#### PART 201—GENERAL PROVISIONS

■ 1. The authority citation for part 201 continues to read as follows:

**Authority:** 17 U.S.C. 702.

■ 2. Section 201.40 is amended by revising paragraph (b) to read as follows:

#### § 201.40 Exemption to prohibition against circumvention.

\* \* \* \* \*

(b) *Classes of copyrighted works.* Pursuant to the authority set forth in 17 U.S.C. 1201(a)(1)(C) and (D), and upon the recommendation of the Register of Copyrights, the Librarian has determined that the prohibition against circumvention of technological measures that effectively control access to copyrighted works set forth in 17 U.S.C. 1201(a)(1)(A) shall not apply to persons who engage in noninfringing uses of the following classes of copyrighted works:

(1) Motion pictures (including television shows and videos), as defined in 17 U.S.C. 101, where the motion picture is lawfully made and acquired

on a DVD protected by the Content Scramble System, on a Blu-ray disc protected by the Advanced Access Content System, or via a digital transmission protected by a technological measure, and the person engaging in circumvention under paragraphs (b)(1)(i) and (b)(1)(ii)(A) and (B) of this section reasonably believes that non-circumventing alternatives are unable to produce the required level of high-quality content, or 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, where circumvention is undertaken solely in order to make use of short portions of the motion pictures in the following instances:

(i) For the purpose of criticism or comment:

(A) For use in documentary filmmaking, or other films where the motion picture clip is used in parody or for its biographical or historically significant nature;

(B) For use in noncommercial videos (including videos produced for a paid commission if the commissioning entity's use is noncommercial); or

(C) For use in nonfiction multimedia e-books.

(ii) For educational purposes:

(A) By college and university faculty and students or kindergarten through twelfth-grade (K–12) educators and students (where the K–12 student is circumventing under the direct supervision of an educator), or employees acting at the direction of faculty of such educational institutions for the purpose of teaching a course, including of accredited general educational development (GED) programs, for the purpose of criticism, comment, teaching, or scholarship;

(B) By faculty of accredited nonprofit educational institutions and employees acting at the direction of faculty members of those institutions, for purposes of offering massive open online courses (MOOCs) to officially enrolled students through online platforms (which platforms themselves may be operated for profit), in film studies or other courses requiring close analysis of film and media excerpts, for the purpose of criticism or comment, where the MOOC provider through the online platform limits transmissions to the extent technologically feasible to such officially enrolled students, institutes copyright policies and provides copyright informational materials to faculty, students, and relevant staff members, and applies technological measures that reasonably

prevent unauthorized further dissemination of a work in accessible form to others or retention of the work for longer than the course session by recipients of a transmission through the platform, as contemplated by 17 U.S.C. 110(2); or

(C) By educators and participants in nonprofit digital and media literacy programs offered by libraries, museums, and other nonprofit entities with an educational mission, in the course of face-to-face instructional activities, for the purpose of criticism or comment, except that such users may only circumvent 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.

(2)(i) Motion pictures (including television shows and videos), as defined in 17 U.S.C. 101, where the motion picture is lawfully acquired on a DVD protected by the Content Scramble System, on a Blu-ray disc protected by the Advanced Access Content System, or via a digital transmission protected by a technological measure, where:

(A) Circumvention is undertaken by a disability services office or other unit of a kindergarten through twelfth-grade educational institution, college, or university engaged in and/or responsible for the provision of accessibility services for the purpose of adding captions and/or audio description to a motion picture to create an accessible version for students, faculty, or staff with disabilities;

(B) The educational institution unit in paragraph (b)(2)(i)(A) of this section has a reasonable belief that the motion picture will be used for a specific future activity of the institution and, after a reasonable effort, has determined that an accessible version of sufficient quality cannot be obtained at a fair market price or in a timely manner, including where a copyright holder has not provided an accessible version of a motion picture that was included with a textbook; and

(C) The accessible versions are provided to students or educators and stored by the educational institution in a manner intended to reasonably prevent unauthorized further dissemination of a work.

(ii) For purposes of paragraph (b)(2) of this section,

(A) “Audio description” means an oral narration that provides an accurate rendering of the motion picture;

(B) “Accessible version of sufficient quality” means a version that in the reasonable judgment of the educational institution unit has captions and/or audio description that are sufficient to

meet the accessibility needs of students, faculty, or staff with disabilities and are substantially free of errors that would materially interfere with those needs; and

(C) Accessible materials created pursuant to this exemption and stored pursuant to paragraph (b)(2)(i)(C) of this section may be reused by the educational institution unit to meet the accessibility needs of students, faculty, or staff with disabilities pursuant to paragraphs (b)(2)(i)(A) and (B) of this section.

(3)(i) Motion pictures (including television shows and videos), as defined in 17 U.S.C. 101, where the motion picture is lawfully acquired on a DVD protected by the Content Scramble System, or on a Blu-ray disc protected by the Advanced Access Content System, solely for the purpose of lawful preservation or the creation of a replacement copy of the motion picture, by an eligible library, archives, or museum, where:

(A) Such activity is carried out without any purpose of direct or indirect commercial advantage;

(B) The DVD or Blu-ray disc is damaged or deteriorating;

(C) The eligible institution, after a reasonable effort, has determined that an unused and undamaged replacement copy cannot be obtained at a fair price and that no streaming service, download service, or on-demand cable and satellite service makes the motion picture available to libraries, archives, and museums at a fair price; and

(D) The preservation or replacement copies are not distributed or made available outside of the physical premises of the eligible library, archives, or museum.

(ii) For purposes of paragraph (b)(3)(i) of this section, a library, archives, or museum is considered “eligible” if—

(A) The collections of the library, archives, or museum are open to the public and/or are routinely made available to researchers who are not affiliated with the library, archives, or museum;

(B) The library, archives, or museum has a public service mission;

(C) The library, archives, or museum’s trained staff or volunteers provide professional services normally associated with libraries, archives, or museums;

(D) The collections of the library, archives, or museum are composed of lawfully acquired and/or licensed materials; and

(E) The library, archives, or museum implements reasonable digital security measures as appropriate for the

activities permitted by paragraph (b)(3)(i) of this section.

(4)(i) Motion pictures, as defined in 17 U.S.C. 101, where the motion picture is on a DVD protected by the Content Scramble System, on a Blu-ray disc protected by the Advanced Access Content System, or made available for digital download where:

(A) The circumvention is undertaken by a researcher affiliated with a nonprofit institution of higher education, or by a student or information technology staff member of the institution at the direction of such researcher, solely to deploy text and data mining techniques on a corpus of motion pictures for the purpose of scholarly research and teaching;

(B) The copy of each motion picture is lawfully acquired and owned by the institution, or licensed to the institution without a time limitation on access;

(C) The person undertaking the circumvention views or listens to the contents of the motion pictures in the corpus solely for the purpose of verification of the research findings; and

(D) The institution uses effective security measures to prevent further dissemination or downloading of motion pictures in the corpus, and to limit access to only the persons identified in paragraph (b)(4)(i)(A) of this section or to researchers affiliated with other institutions of higher education solely for purposes of collaboration or replication of the research.

(ii) For purposes of paragraph (b)(4)(i) of this section:

(A) An institution of higher education is defined as one that:

(1) Admits regular students who have a certificate of graduation from a secondary school or the equivalent of such a certificate;

(2) Is legally authorized to provide a postsecondary education program;

(3) Awards a bachelor’s degree or provides not less than a two-year program acceptable towards such a degree;

(4) Is a public or other nonprofit institution; and

(5) Is accredited by a nationally recognized accrediting agency or association.

(B) The term “effective security measures” means security measures that have been agreed to by interested copyright owners of motion pictures and institutions of higher education; or, in the absence of such measures, those measures that the institution uses to keep its own highly confidential information secure. If the institution uses the security measures it uses to protect its own highly confidential

information, it must, upon a reasonable request from a copyright owner whose work is contained in the corpus, provide information to that copyright owner regarding the nature of such measures.

(5)(i) Literary works, excluding computer programs and compilations that were compiled specifically for text and data mining purposes, distributed electronically where:

(A) The circumvention is undertaken by a researcher affiliated with a nonprofit institution of higher education, or by a student or information technology staff member of the institution at the direction of such researcher, solely to deploy text and data mining techniques on a corpus of literary works for the purpose of scholarly research and teaching;

(B) The copy of each literary work is lawfully acquired and owned by the institution, or licensed to the institution without a time limitation on access;

(C) The person undertaking the circumvention views the contents of the literary works in the corpus solely for the purpose of verification of the research findings; and

(D) The institution uses effective security measures to prevent further dissemination or downloading of literary works in the corpus, and to limit access to only the persons identified in paragraph (b)(5)(i)(A) of this section or to researchers or to researchers affiliated with other institutions of higher education solely for purposes of collaboration or replication of the research.

(ii) For purposes of paragraph (b)(5)(i) of this section:

(A) An institution of higher education is defined as one that:

(1) Admits regular students who have a certificate of graduation from a secondary school or the equivalent of such a certificate;

(2) Is legally authorized to provide a postsecondary education program;

(3) Awards a bachelor's degree or provides not less than a two-year program acceptable towards such a degree;

(4) Is a public or other nonprofit institution; and

(5) Is accredited by a nationally recognized accrediting agency or association.

(B) The term "effective security measures" means security measures that have been agreed to by interested copyright owners of literary works and institutions of higher education; or, in the absence of such measures, those measures that the institution uses to keep its own highly confidential information secure. If the institution uses the security measures it uses to

protect its own highly confidential information, it must, upon a reasonable request from a copyright owner whose work is contained in the corpus, provide information to that copyright owner regarding the nature of such measures.

(6)(i) Literary works or previously published musical works that have been fixed in the form of text or notation, distributed electronically, that are protected by technological measures that either prevent the enabling of read-aloud functionality or interfere with screen readers or other applications or assistive technologies:

(A) When a copy or phonorecord of such a work is lawfully obtained by an eligible person, as such a person is defined in 17 U.S.C. 121; provided, however, that the rights owner is remunerated, as appropriate, for the market price of an inaccessible copy of the work as made available to the general public through customary channels; or

(B) When such a work is lawfully obtained and used by an authorized entity pursuant to 17 U.S.C. 121.

(ii) For the purposes of paragraph (b)(6)(i) of this section, a "phonorecord of such a work" does not include a sound recording of a performance of a musical work unless and only to the extent the recording is included as part of an audiobook or e-book.

(7) Literary works consisting of compilations of data generated by medical devices or by their personal corresponding monitoring systems, where such circumvention is undertaken by or on behalf of a patient for the sole purpose of lawfully accessing data generated by a patient's own medical device or monitoring system. Eligibility for this exemption is not a safe harbor from, or defense to, liability under other applicable laws, including without limitation the Health Insurance Portability and Accountability Act of 1996, the Computer Fraud and Abuse Act of 1986, or regulations of the Food and Drug Administration.

(8) Computer programs that enable wireless devices to connect to a wireless telecommunications network, when circumvention is undertaken solely in order to connect to a wireless telecommunications network and such connection is authorized by the operator of such network.

(9) Computer programs that enable smartphones and portable all-purpose mobile computing devices to execute lawfully obtained software applications, where circumvention is accomplished for the sole purpose of enabling interoperability of such applications with computer programs on the

smartphone or device, or to permit removal of software from the smartphone or device. For purposes of this paragraph (b)(9), a "portable all-purpose mobile computing device" is a device that is primarily designed 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 mobile use, and is intended to be carried or worn by an individual.

(10) Computer programs that enable smart televisions to execute lawfully obtained software applications, where circumvention is accomplished for the sole purpose of enabling interoperability of such applications with computer programs on the smart television, and is not accomplished for the purpose of gaining unauthorized access to other copyrighted works. For purposes of this paragraph (b)(10), "smart televisions" includes both internet-enabled televisions, as well as devices that are physically separate from a television and whose primary purpose is to run software applications that stream authorized video from the internet for display on a screen.

(11) Computer programs that enable voice assistant devices to execute lawfully obtained software applications, where circumvention is accomplished for the sole purpose of enabling interoperability of such applications with computer programs on the device, or to permit removal of software from the device, and is not accomplished for the purpose of gaining unauthorized access to other copyrighted works. For purposes of this paragraph (b)(11), a "voice assistant device" is a device that is primarily designed to run a wide variety of programs rather than for consumption of a particular type of media content, is designed to take user input primarily by voice, and is designed to be installed in a home or office.

(12) Computer programs that enable routers and dedicated network devices to execute lawfully obtained software applications, where circumvention is accomplished for the sole purpose of enabling interoperability of such applications with computer programs on the router or dedicated network device, and is not accomplished for the purpose of gaining unauthorized access to other copyrighted works. For the purposes of this paragraph (b)(12), "dedicated network device" includes switches, hubs, bridges, gateways, modems, repeaters, and access points, and excludes devices that are not lawfully owned.

(13) Computer programs that are contained in and control the functioning

of a lawfully acquired motorized land vehicle or marine vessel such as a personal automobile or boat, commercial vehicle or vessel, or mechanized agricultural vehicle or vessel, except for programs accessed through a separate subscription service, when circumvention is a necessary step to allow the diagnosis, repair, or lawful modification of a vehicle or vessel function, where such circumvention is not accomplished for the purpose of gaining unauthorized access to other copyrighted works. Eligibility for this exemption is not a safe harbor from, or defense to, liability under other applicable laws, including without limitation regulations promulgated by the Department of Transportation or the Environmental Protection Agency.

(14) Computer programs that are contained in and control the functioning of a lawfully acquired device that is primarily designed for use by consumers, when circumvention is a necessary step to allow the diagnosis, maintenance, or repair of such a device, and is not accomplished for the purpose of gaining access to other copyrighted works. For purposes of this paragraph (b)(14):

(i) The “maintenance” of a device is the servicing of the device in order to make it work in accordance with its original specifications and any changes to those specifications authorized for that device; and

(ii) The “repair” of a device is the restoring of the device to the state of working in accordance with its original specifications and any changes to those specifications authorized for that device. For video game consoles, “repair” is limited to repair or replacement of a console’s optical drive and requires restoring any technological protection measures that were circumvented or disabled.

(15) Computer programs that are contained in and control the functioning of a lawfully acquired medical device or system, and related data files, when circumvention is a necessary step to allow the diagnosis, maintenance, or repair of such a device or system. For purposes of this paragraph (b)(15):

(i) The “maintenance” of a device or system is the servicing of the device or system in order to make it work in accordance with its original specifications and any changes to those specifications authorized for that device or system; and

(ii) The “repair” of a device or system is the restoring of the device or system to the state of working in accordance with its original specifications and any changes to those specifications authorized for that device or system.

(16)(i) Computer programs, where the circumvention is undertaken on a lawfully acquired device or machine on which the computer program operates, or is undertaken on a computer, computer system, or computer network on which the computer program operates with the authorization of the owner or operator of such computer, computer system, or computer network, solely for the purpose of good-faith security research.

(ii) For purposes of paragraph (b)(16)(i) of this section, “good-faith security research” means accessing a computer program solely for purposes of good-faith testing, investigation, and/or correction of a security flaw or vulnerability, where such activity is carried out in an environment designed to avoid any harm to individuals or the public, and where the information derived from the activity is used primarily to promote the security or safety of the class of devices or machines on which the computer program operates, or those who use such devices or machines, and is not used or maintained in a manner that facilitates copyright infringement.

(iii) Good-faith security research that qualifies for the exemption under paragraph (b)(16)(i) of this section may nevertheless incur liability under other applicable laws, including without limitation the Computer Fraud and Abuse Act of 1986, as amended and codified in title 18, United States Code, and eligibility for that exemption is not a safe harbor from, or defense to, liability under other applicable laws.

(17)(i) Video games in the form of computer programs embodied in physical or downloaded formats that have been lawfully acquired as complete games, when the copyright owner or its authorized representative has ceased to provide access to an external computer server necessary to facilitate an authentication process to enable gameplay, solely for the purpose of:

(A) Permitting access to the video game to allow copying and modification of the computer program to restore access to the game for personal, local gameplay on a personal computer or video game console; or

(B) Permitting access to the video game to allow copying and modification of the computer program to restore access to the game on a personal computer or video game console when necessary to allow preservation of the game in a playable form by an eligible library, archives, or museum, where such activities are carried out without any purpose of direct or indirect commercial advantage and the video

game is not distributed or made available outside of the physical premises of the eligible library, archives, or museum.

(ii) Video games in the form of computer programs embodied in physical or downloaded formats that have been lawfully acquired as complete games, that do not require access to an external computer server for gameplay, and that are no longer reasonably available in the commercial marketplace, solely for the purpose of preservation of the game in a playable form by an eligible library, archives, or museum, where such activities are carried out without any purpose of direct or indirect commercial advantage and the video game is not distributed or made available outside of the physical premises of the eligible library, archives, or museum.

(iii) Computer programs used to operate video game consoles solely to the extent necessary for an eligible library, archives, or museum to engage in the preservation activities described in paragraph (b)(17)(i)(B) or (b)(17)(ii) of this section.

(iv) For purposes of this paragraph (b)(17), the following definitions shall apply:

(A) For purposes of paragraphs (b)(17)(i)(A) and (b)(17)(ii) of this section, “complete games” means video games that can be played by users without accessing or reproducing copyrightable content stored or previously stored on an external computer server.

(B) For purposes of paragraph (b)(17)(i)(B) of this section, “complete games” means video games that meet the definition in paragraph (b)(17)(iv)(A) of this section, or that consist of both a copy of a game intended for a personal computer or video game console and a copy of the game’s code that was stored or previously stored on an external computer server.

(C) “Ceased to provide access” means that the copyright owner or its authorized representative has either issued an affirmative statement indicating that external server support for the video game has ended and such support is in fact no longer available or, alternatively, server support has been discontinued for a period of at least six months; provided, however, that server support has not since been restored.

(D) “Local gameplay” means gameplay conducted on a personal computer or video game console, or locally connected personal computers or consoles, and not through an online service or facility.

(E) A library, archives, or museum is considered “eligible” if—

(1) The collections of the library, archives, or museum are open to the public and/or are routinely made available to researchers who are not affiliated with the library, archives, or museum;

(2) The library, archives, or museum has a public service mission;

(3) The library, archives, or museum's trained staff or volunteers provide professional services normally associated with libraries, archives, or museums;

(4) The collections of the library, archives, or museum are composed of lawfully acquired and/or licensed materials; and

(5) The library, archives, or museum implements reasonable digital security measures as appropriate for the activities permitted by this paragraph (b)(17).

(18)(i) Computer programs, except video games, that have been lawfully acquired and that are no longer reasonably available in the commercial marketplace, solely for the purpose of lawful preservation of a computer program, or of digital materials dependent upon a computer program as a condition of access, by an eligible library, archives, or museum, where such activities are carried out without any purpose of direct or indirect commercial advantage. Any electronic distribution, display, or performance made outside of the physical premises of an eligible library, archives, or museum of works preserved under this paragraph may be made to only one user at a time, for a limited time, and only where the library, archives, or museum has no notice that the copy would be used for any purpose other than private study, scholarship, or research.

(ii) For purposes of the exemption in paragraph (b)(18)(i) of this section, a library, archives, or museum is considered "eligible" if—

(A) The collections of the library, archives, or museum are open to the public and/or are routinely made available to researchers who are not affiliated with the library, archives, or museum;

(B) The library, archives, or museum has a public service mission;

(C) The library, archives, or museum's trained staff or volunteers provide professional services normally associated with libraries, archives, or museums;

(D) The collections of the library, archives, or museum are composed of lawfully acquired and/or licensed materials; and

(E) The library, archives, or museum implements reasonable digital security measures as appropriate for the

activities permitted by this paragraph (b)(18).

(19) Computer programs that operate 3D printers that employ technological measures to limit the use of material, when circumvention is accomplished solely for the purpose of using alternative material and not for the purpose of accessing design software, design files, or proprietary data.

(20) Computer programs, solely for the purpose of investigating a potential infringement of free and open source computer programs where:

(i) The circumvention is undertaken on a lawfully acquired device or machine other than a video game console, on which the computer program operates;

(ii) The circumvention is performed by, or at the direction of, a party that has a good-faith, reasonable belief in the need for the investigation and has standing to bring a breach of license or copyright infringement claim;

(iii) Such circumvention does not constitute a violation of applicable law; and

(iv) The copy of the computer program, or the device or machine on which it operates, is not used or maintained in a manner that facilitates copyright infringement.

(21) Video games in the form of computer programs, embodied in lawfully acquired physical or downloaded formats, and operated on a general-purpose computer, where circumvention is undertaken solely for the purpose of allowing an individual with a physical disability to use software or hardware input methods other than a standard keyboard or mouse.

\* \* \* \* \*

Dated: October 21, 2021.

**Carla D. Hayden,**  
*Librarian of Congress.*

[FR Doc. 2021-23311 Filed 10-27-21; 8:45 am]

**BILLING CODE 1410-30-P**

## ENVIRONMENTAL PROTECTION AGENCY

### 40 CFR Part 52

[EPA-R04-OAR-2020-0445; FRL-8779-02-R4]

#### Air Plan Approval; SC; Revisions to Definitions

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Final rule.

**SUMMARY:** The Environmental Protection Agency (EPA) is finalizing approval of

a State Implementation Plan (SIP) revision submitted by the State of South Carolina, through the South Carolina Department of Health and Environmental Control (SC DHEC or Department), on April 24, 2020. The SIP revision updates the definition of "Spec. Oil (Specification Oil)" and makes minor updates to formatting and numbering. EPA is finalizing approval of these changes pursuant to the Clean Air Act (CAA or Act) and implementing federal regulations.

**DATES:** This rule is effective November 29, 2021.

**ADDRESSES:** EPA has established a docket for this action under Docket Identification No. EPA-R04-OAR-2020-0445. All documents in the docket are listed on the [www.regulations.gov](http://www.regulations.gov) website. Although listed in the index, some information may not be publicly available, *i.e.*, Confidential Business Information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through [www.regulations.gov](http://www.regulations.gov) or in hard copy at the Air Regulatory Management Section, Air Planning and Implementation Branch, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street SW, Atlanta, Georgia 30303-8960. EPA requests that if at all possible, you contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section to schedule your inspection. The Regional Office's official hours of business are Monday through Friday 8:30 a.m. to 4:30 p.m., excluding Federal holidays.

**FOR FURTHER INFORMATION CONTACT:**

Andres Febres, Air Regulatory Management Section, Air Planning and Implementation Branch, Air and Radiation Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street SW, Atlanta, Georgia 30303-8960. The telephone number is (404) 562-8966. Mr. Febres can also be reached via electronic mail at [febres-martinez.andres@epa.gov](mailto:febres-martinez.andres@epa.gov).

**SUPPLEMENTARY INFORMATION:**

**I. Background**

On April 24, 2020, SC DHEC submitted a SIP revision to EPA for approval that includes changes to South Carolina Regulation 61-62.1, Section I—*Definitions*.<sup>1</sup> First, SC DHEC's April 24,

<sup>1</sup> In the April 24, 2020, SIP revision SC DHEC also submitted to EPA changes to Regulations 61-62.1,