



Long Comment Regarding a Proposed Exemption Under 17 U.S.C. § 1201

Item A. Commenter Information

American Council of the Blind (ACB)

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The American Council of the Blind (ACB) is a national grassroots consumer organization representing Americans who are blind and visually impaired. With 70 affiliates, ACB strives to increase the independence, security, equality of opportunity, and to improve quality of life for all blind and visually impaired people.

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The American Foundation for the Blind (AFB) works to create a world of no limits for people who are blind or visually impaired by mobilizing leaders, advancing understanding, and championing impactful policies and practices using research and data.

Association for Education and Rehabilitation of the Blind and Visually Impaired (AER)

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The Association for Education and Rehabilitation of the Blind and Visually Impaired (AER) strives to support and advocate for AER members who represent all major professional disciplines serving children, working-age adults and older people living with vision loss. Through direct member services, professional development, publications, networking, leadership development, accreditation, and public education, AER is the leading national and international voice of the professional vision loss community.

Privacy Act Advisory Statement: Required by the Privacy Act of 1974 (P.L. 93-579)

The authority for requesting this information is 17 U.S.C. §§ 1201(a)(1) and 705. Furnishing the requested information is voluntary. The principal use of the requested information is publication on the Copyright Office Web site and use by Copyright Office staff for purposes of the rulemaking proceeding conducted under 17 U.S.C. § 1201(a)(1). NOTE: No other advisory statement will be given in connection with this submission. Please keep this statement and refer to it if we communicate with you regarding this submission.

Association of Late-Deafened Adults (ALDA)

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The Association of Late Deafened Adults (ALDA) is a non-profit membership corporation comprised principally of people who lost some or all of their hearing after having acquired spoken language. Its members include people who communicate primarily through sign language and people who use hearing aids or cochlear implants and communicate aurally. Part of its mission includes advocating for measures that will better enable its members and other similarly situated people to fully participate in all aspects of life.

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The Association of Transcribers and Speech-to-Text Providers (ATSP) is a non-profit organization devoted to advancing the delivery of real-time speech-to-text services to deaf or hard-of-hearing people.

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The Association of Higher Education and Disability (AHEAD) is the leading professional membership association for individuals committed to equity for persons with disabilities in higher education. Since 1977, AHEAD has offered an unparalleled member experience to disability resource professionals, student affairs personnel, ADA coordinators, diversity officers, AT/IT staff, faculty and other instructional personnel, and colleagues who are invested in creating welcoming higher education experiences for disabled individuals.

Benetech/Bookshare

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Bookshare is an ebook library that makes reading easier. People with dyslexia, blindness, cerebral palsy, and other reading barriers can read in ways that work for them with ebooks in audio, audio + highlighted text, braille, and other customizable formats.

Gallaudet University Technology Access Program

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The Gallaudet University Technology Access Program (TAP) conducts research related to communication technologies and services, with the goal of producing knowledge useful to industry, government, and deaf and hard of hearing consumers in the quest for equality in communications. The program provides education to Gallaudet students through coursework and mentored research projects related to TAP's research mission. TAP is one of Gallaudet University's research centers and has faculty affiliated with the School of Science, Technology, Accessibility, Mathematics and Public Health.

HathiTrust

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HathiTrust's Digital Library contains over 17 million books digitized from academic libraries. Through its Accessible Text Request Service, print disabled users in higher education institutions in the US and in Marrakesh Treaty nations may obtain DRM-free digital access to the text of any item in this collection, consistent with Section 121 of the Copyright Act.

Hearing Loss Association of America (HLAA)

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The Hearing Loss Association of America (HLAA) has opened the world of communication to people with hearing loss through information, education, support, and advocacy since 1979. In addition to the Walk4Hearing, HLAA holds annual conventions, publishes the magazine, Hearing Life, serves as an advocate for people with hearing loss across the broad spectrum of communication access needs. HLAA has a nationwide network of more than 140 chapters and state associations reaching out to and supporting people with hearing loss across the country.

Library Copyright Alliance (LCA)

The Library Copyright Alliance (LCA) consists of three major library associations—the American Library Association (ALA), the Association of College and Research Libraries (ACRL), and the Association of Research Libraries (ARL)—that collectively represent over 100,000 libraries in the United States. Libraries provide services to visually impaired people, both inside and outside of educational settings, in particular by converting works into formats accessible to the print disabled.

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The National Association of the Deaf, established in 1880, is the oldest national civil rights organization in the United States of America. The NAD is also the largest consumer-based advocacy organization safeguarding the civil and accessibility rights of deaf and hard of hearing individuals in the USA through public education, litigation, and policy advocacy. The advocacy scope of the NAD is broad, covering the breadth of a lifetime and impacting future generations in the areas of education, technology, and more.

National Federation of the Blind (NFB)

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The National Federation of the Blind has advocated for equality of opportunity for the nation's blind since 1940, and as part of that mission, the Federation has vigorously stood for equal access to information through its leadership in many ways including leading efforts to secure passage of the Chafee Amendment to the Copyright Act and adoption of the Marrakesh Treaty and its intervention as a party in the *HathiTrust* case.

Perkins Braille & Talking Book Library

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Telecommunications for the Deaf and Hard of Hearing, Inc.

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Telecommunications for the Deaf and Hard of Hearing, Inc.(TDI) shapes America's public policy in telecommunications, media, and information technology to advance the interests of all people who are deaf, hard of hearing, late-deafened, deafblind, and deaf-plus (with other disabilities).

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**Item B. Proposed Class Addressed:
Proposed Class 17: All Works—Accessibility Uses**

The Copyright Office initiated the eighth triennial rulemaking to consider exemptions from the anticircumvention provisions of the Digital Millennium Copyright Act (DMCA) on June 22, 2020 by issuing a Notice of Inquiry and Request for Petitions.¹ In response, the above-signed organizations filed a petition for a new, broadly inclusive exemption for accessibility uses.²

On October 15, 2020, the Copyright Office issued a Notice of Proposed Rulemaking (NPRM) for this proceeding.³ As recognized in the NPRM, “[t]he proposed exemption would permit circumvention to access ‘all cognizable classes of works under Section 102 (a) of the Copyright Act’ to facilitate accessibility for persons with disabilities.”⁴ In the NPRM, the Office announced that there are “important public policy considerations raised by this request and past exemptions adopted with respect to facilitating accessibility uses” and “is noticing this category for public comment while flagging the need to further develop and refine petitioners’ request into separate proposed classes.”⁵

While the goal of this exemption is to “resolve the shortcomings of the current, piecemeal approach to Section 1201 exemptions for accessibility,”⁶ the Office states that “its authority in this proceeding is bound by the provisions of [Section 1201],” implying that Section 1201 imposes a barrier to noninfringing accessibility uses.⁷ To the contrary, we believe it is within the Office’s authority under Section 1201 to recommend more general exemptions like the one proposed here where a compelling use—here, accessibility—is identified. The proposed class, which would broadly allow for circumvention for accessibility purposes consistent with fair use precedent, is an acceptable and necessary categorization for these proceedings.

¹ Exemptions to Permit Circumvention of Access Controls on Copyrighted Works, 85 Fed. Reg. 37,399 (Jun. 22, 2020) (2020 NOI).
<https://www.govinfo.gov/content/pkg/FR-2020-06-22/pdf/2020-12911.pdf>.

² Petition for New Exemption of ACB, et al. (Sept. 8, 2020) (Accessibility Petition),
<https://www.copyright.gov/1201/2021/petitions/proposed/New%20Pet.%20-%20Accessibility%20Petitioners.pdf>.

³ Exemptions to Permit Circumvention of Access Controls on Copyrighted Works, 85 Fed. Reg. 65,293 (Oct. 15, 2020) (2020 NPRM)
<https://www.govinfo.gov/content/pkg/FR-2020-10-15/pdf/2020-22893.pdf>.

⁴ *Id.* at 65,308.

⁵ *Id.* at 65,309.

⁶ Accessibility Petition at 4.

⁷ *See* 2020 NPRM, 85 Fed. Reg. at 65,309.

Item C. Overview

People with disabilities and supporting organizations face the difficult challenge of interpreting a patchwork of underinclusive Section 1201 exemptions when navigating making copyrighted works encumbered with technological protection measures (TPMs) accessible. The civil and human rights of people with disabilities demand a broad and clear exemption from Section 1201 that allows for uncontroversially noninfringing accessibility uses can be made beyond the narrow, circumscribed carveouts for accessibility uses that the Library of Congress and the Copyright Office have thus far been willing to consider.⁸ Such an exemption is critical to ensure the creative third-party approaches to accessibility can arise in response to new technological barriers and do not become stifled by the necessity of waiting years on end and the burden of navigating the triennial review.

In addition to the separately filed renewal and expansion requests for accessibility-oriented exemptions for making e-books and motion pictures accessible,⁹ a broader, more flexible exemption would permit circumvention of access controls on a comprehensive range of copyrighted works. The need for significant changes to exemptions to accommodate new non-infringing accessibility uses arise as facts on the ground change, exemptions begin to be used, and unpredictable shortcomings of the highly specific exemptions crafted by the Office become clear. These dynamics occur notwithstanding the good-faith efforts of proponents to articulate, and the Office to consider, a thorough record for exemptions sufficiently broad to address the wide array of accessibility needs during the triennial review.

⁸ See, e.g., Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 77 Fed. Reg. 65,260, 65,270 (Oct. 26, 2012) (2012 Final Rule), <https://www.copyright.gov/fedreg/2012/77fr65260.pdf> (granting a narrow exemption for research on closed captioning and audio description technologies).

⁹ See Renewal Petition of ATSP, et al., (July 22, 2020) (2020 Captioning Renewal Petition), <https://www.copyright.gov/1201/2021/petitions/renewal/Renewal%20Pet.%20-%20Captioning%20-%20ATSP%20et%20al.pdf>, Renewal Petition of ACB, et al., (July 22, 2020) (2020 E-books Renewal Petition), <https://www.copyright.gov/1201/2021/petitions/renewal/Renewal%20Pet.%20-%20Assistive%20Technologies%20-%20ACB%20et%20al.pdf>, Modification Petition ATSP, et al., (Sep. 8, 2020) (2020 Captioning Petition), <https://www.copyright.gov/1201/2021/petitions/proposed/New%20Pet.%20-%20Association%20of%20Transcribers%20and%20Speech-to-Text%20Providers%20et%20al.pdf>, Petition of Class 8. ACB et al, (Sep. 8 2020) <https://www.copyright.gov/1201/2021/petitions/proposed/New%20Pet.%20-%20American%20Council%20of%20the%20Blind%20et%20al.pdf>.

The proposed exemption would account for new barriers to accessibility that materialize during the interim period of each triennial review by making clear that the widespread need for accessibility—particularly during a pandemic that has shifted much of America’s educational, economic, and cultural activity to virtual spaces—can be met without waiting for years for the instantiation of the triennial review or the Office’s lengthy review. Such an exemption would serve the core goals of the Americans with Disabilities Act by ensuring that viewers, readers, and users of copyrighted works with disabilities can have some means of engaging in self-help or seeking the assistance of third parties to access those works on equal terms when copyright holders fail to make access available.¹⁰

While the Office states that the “proposed exemption is beyond the Librarian’s authority to adopt because it does not meet the statutory requirement to describe ‘a particular class of copyrighted works,’”¹¹ we urge the Office to reconsider its restrictive interpretation of “classes of works” eligible for exemption under the triennial review.¹² Instead, the Office can and should grant the proposed exemption by defining classes by similar attributes—in this case, use intended to facilitate the accessibility of copyrighted works for people with disabilities.

Doing so would serve Congress’s clear intent to make all the features of the information age accessible to people with disabilities. Of course, the accessibility of copyrighted works frequently can and should be achieved by copyright holders and their distribution partners with universal design approaches¹³ and a commitment to ensuring that their works are “born accessible.”¹⁴ However, it is vitally important that copyright policy allow sufficient flexibility not only for the routine need of after-the-fact remediation where copyright industries fail to take accessibility

¹⁰ See 42 U.S.C. § 12101(a)(7) (declaring that “the Nation’s proper goals regarding individuals with disabilities are to assure equality of opportunity, full participation, independent living, and economic self-sufficiency for such individuals”).

¹¹ 2020 NPRM at 65,309.

¹² 17 U.S.C. § 1201(a)(1)(B) exempts “particular class[es] of works” from the circumvention prohibition in 17 U.S.C. § 1201(a)(1)(A), while 17 U.S.C. § 1201(a)(1)(C)’s description of the triennial review process uses the term “particular class of copyrighted works,” and 17 U.S.C. § 1201(a)(1)(D) uses both terms. For the sake of brevity, we use “class of works” to refer to this concept throughout the document.

¹³ See generally National Disability Authority, *What is Universal Design*, <http://universaldesign.ie/What-is-Universal-Design/> (last visited Dec. 13, 2020).

¹⁴ See, e.g., Gerardo Capiel, *Born Accessible*, 17 Books In Browsers IV Proceedings 1 (2014) (“Making content “born accessible” means that the often prohibitive cost of time and resources required to retrofit content for accessibility is eliminated.”).

seriously,¹⁵ but to ensure the freedom for people with disabilities and those they work with to adapt copyrighted works for their own, individual needs.¹⁶

The adoption of a single, broad accessibility exemption would allow people with disabilities, their advocates, and organizations that produce accessible versions and adaptations of copyrighted works to creatively push technical boundaries and fill accessibility gaps routinely left by a wide range of copyright holders. Accordingly, the Office should recommend an exemption for the circumvention of technological protection measures on all works for non-infringing accessibility uses. The proposed exemption would read:

Any work protected by a technological protection measure where circumvention is undertaken for the purpose of creating an accessible version of the work for people with disabilities.

In 2018, NTIA recommended considering adopting a “more structured” format for each individual exemption setting out the classes of works, the groups of beneficiaries, and the types of circumvention permitted¹⁷. According to NTIA, this approach would likely improve readability and might make it easier to manage requests to expand or modify existing exemptions in future rulemaking cycles.¹⁸ Under this potential new framing of the exemptions, our proposed modifications would result in the following language:

Class: All works

Use: Creating an accessible version of a work for the benefit of a person or people with disabilities.

Item D. Technological Protection Measure(s) and Method(s) of Circumvention

It is impossible to list every TPM that controls access for every resource that is being made inaccessible to people with disabilities, and it is similarly infeasible to list every method of circumvention for these TPMs. However, there are a number of exemplary TPMs and modes of circumvention that respectively illustrate the

¹⁵ See, e.g., Alan F. Newell, David Sloan & Peter Gregor, *Disability and Technology: Building Barriers or Creating Opportunities?* in *Advances in Computers*, Vol. 64 at 283-346 (2005); see discussion *supra*, Item E.2.

¹⁶ See, e.g., Cory Doctorow, *Human Rights and TPMs: Lessons from 22 Years of the U.S. DMCA* (Sep. 9, 2020), <https://www.eff.org/deeplinks/2020/09/human-rights-and-tpms-lessons-22-years-us-dmca>.

¹⁷ Recommendations of the National Telecommunications and Information Administration to the Register of Copyrights at 4 (2018 NTIA Recommendation), https://www.ntia.doc.gov/files/ntia/publications/ntia_dmca_consultation_092520_18.pdf.

¹⁸ *Id.*

technical barriers that must be overcome to facilitate accessibility—some that are already familiar subjects in the triennial review.

Past triennial reviews have acknowledged that most copyrighted motion pictures are encumbered with some form of access control measures,¹⁹ which have required some disability services professionals to circumvent them before converting the works into accessible formats for people with disabilities such as captions and audio descriptions.²⁰ These access control measures include, but are not limited to: the Content Scramble System (CSS) on Digital Versatile Discs (DVDs), the Advanced Access Content System (AACS) on Blu-ray discs, and BD+ on some Blu-ray discs.²¹ A multitude of Digital Rights Management (DRM) technologies also exist for controlling access to online streaming content.²²

The 2015 triennial review likewise acknowledged that “many e-books are protected by TPMs that interfere with the proper operation of assistive technologies,”²³ as all major e-book platform providers including Amazon, Barnes and Noble, and Apple utilize TPMs that can affect accessibility or render an otherwise accessible e-book completely inaccessible to people with disabilities.²⁴ Without circumvention, these resources are all inaccessible to people with disabilities who are otherwise entitled to access and fair use.

TPMs can also interfere with the accessibility of a wide range of web content. For example, the World Wide Web Consortium’s “Encrypted Media Extensions” (EME) technology²⁵ indiscriminately blocks “any unauthorized alterations to videos, including color-shifting.”²⁶ This prevents the use of digital video analysis

¹⁹ Recommendation of the Register of Copyrights at 29 (Oct. 8, 2015) (2015 Recommendation), <https://www.copyright.gov/1201/2015/registers-recommendation.pdf> (describing several TPMs employed on DVDs, Blu-ray discs, and various online streaming services); Recommendation of the Acting Register of Copyrights at 34 (Oct. 2018) (2018 Recommendation), [https://cdn.loc.gov/copyright/1201/2018/2018 Section 1201 Acting Registers R ecommendation.pdf](https://cdn.loc.gov/copyright/1201/2018/2018%20Section%201201%20Acting%20Registers%20Recommendation.pdf) (same).

²⁰ 2018 Recommendation 92-93.

²¹ 2015 Recommendation at 29.

²² 2018 Recommendation at 34

²³ 2015 Recommendation at 128.

²⁴ *Id.* at 129.

²⁵ See *Encrypted Media Extensions*, W3C (Dec. 19, 2019), <https://www.w3.org/TR/encrypted-media/>.

²⁶ Cory Doctorow, *Disabilities vs DRM: the World Cup Edition*, Electronic Frontier Foundation (June 22, 2018), <https://www.eff.org/deeplinks/2018/06/disabilities-vs-drm-world-cup-edition>.

applications like DanKam,²⁷ an app that exists to help people with colorblindness view videos by shifting the colors displayed on devices, replacing the colors that they are unable to perceive with colors that they can actually see.²⁸ Because of EME, people with red/green colorblindness were unable to fully watch and enjoy the 2018 World Cup because they could not perceive the differences between the Russian team's red jerseys and the Saudi team's green jerseys.²⁹ The U.K. Colour Blind Awareness organization notes “[c]olour blindness is an important issue in sport . . . and [can] spoil the enjoyment of watching sport (live or on TV) and have an adverse effect on revenues.”³⁰

EME also blocks currently existing technologies that “protect people with photosensitive epilepsy from strobe effects in videos.”³¹ Due to EME, people with photosensitive epilepsy cannot use automated tools to “identify and skip past strobing effects in videos that could trigger dangerous seizures.”³² Without EME, people with photosensitive epilepsy would be able to utilize accessibility adaptations so as to better protect themselves from potentially dangerous triggers in videos.³³

Accessibility-related barriers caused by TPMs also extend to software used by people with disabilities. In 2019, a user created a patch to the FreeStyle LibreLink app,³⁴ which allows people with diabetes to monitor their blood-glucose levels. The patch, entitled Libre2-patched-App, allowed people with diabetes to “link their

²⁷ See *DanKam*, Dan Kaminski (last visited Dec. 13, 2020), <https://dankaminsky.com/dankam/>.

²⁸ Paul Ridden, *DanKam App Clears Up Color Blind Confusion*, New Atlas (Jan. 04, 2011), <https://newatlas.com/dankam-smartphone-app-helps-color-blind/17451/>.

²⁹ See *Dankam*, *supra* note 26; see also Rebecca Seales, *World Cup 2018: Why Millions of Fans See the Football Like This*, BBC (July 11, 2018), <https://www.bbc.com/news/world-44535687>.

³⁰ *Colour Blindness and Sport*, Colour Blind Awareness (last visited Dec. 6, 2020), <http://www.colourblindawareness.org/colour-blindness-and-sport/>.

³¹ *Disabilities vs DRM*, *supra* note 26.

³² *Human Rights and TPMs*, *supra* note 16.

³³ See Carol Pinchefskey, *The Laws That are Ruining the Internet*, Hewlett Packard Enterprise (Sept. 14, 2017), <https://www.hpe.com/us/en/insights/articles/the-laws-that-are-ruining-the-internet-1709.html> (describing a person with epilepsy who was hospitalized after watching a Netflix video, and how the copyright holder prevented the creation of an accessibility adaptation that would have necessitated running Netflix video through an analysis program).

³⁴ See *FreeStyle LibreLink*, Abbot (last visited Dec. 13, 2020), <https://www.freestylelibre.us/system-overview/continous-glucose-monitor-app.html>.

glucose monitors to their insulin pumps, in order to automatically calculate and administer doses of insulin in an ‘artificial pancreas.’”³⁵ However, because this patch bypassed a TPM in the app by disassembling the LibreLink program, Abbot Diabetes Care Inc.—the copyright holder—used a DMCA 1201 takedown notice to force Github to cease making the patch available.³⁶

AbleGamers is a 501(c)(3) nonprofit charity organization that uses assistive technology expertise to build customized devices to help make video games accessible for people with a wide variety of disabilities.³⁷ AbleGamers published *Includification: A Practical Guide to Game Accessibility*, an “award-winning, first of its kind, outline on how to make games accessible for players with disabilities,” recently updated with an array of accessible design patterns designed in partnership with the University of York.³⁸ In *Includification*, several video game TPMs are outlined, including “Game Guard,” which blocks third-party applications and hardware from accessing the video game.³⁹ *Includification* states that the use of Game Guard can prevent “people from being able to use the very technology they have become dependent upon in order to use their computer and play games.”⁴⁰

When developers use Game Guard in their video games, “the software prevents the use of on-screen keyboards and head-mice and [other accessible gaming technology], virtually locking out anyone who could not use a standard keyboard and mouse.”⁴¹ For example, the use of Game Guard in NCSoft’s MMORPG *Aion* prevented people with disabilities from meaningful access.⁴² Even in 2020, several popular games still utilize nProtect GameGuard, including Sega’s *Phantasy Star*

³⁵ *Human Rights and TPMs*, *supra* note 16.

³⁶ *Patching LibreLink for Libre2 – Clearing the FUD*, Diabettech (July 19, 2019), <https://www.diabettech.com/wearenotwaiting/patching-librelink-for-libre2-clearing-the-fud/>.

³⁷ *See Frequently Asked Questions*, AbleGamers (last visited Dec. 13, 2020), <https://ablegamers.org/faq/>.

³⁸ *Includification*, Accessible.Games (last visited Dec. 13, 2020), <https://accessible.games/includification/>.

³⁹ Mark C. Barlet & Steve D. Spohn, *Includification*, AbleGamers at 15, https://accessible.games/wp-content/uploads/2018/11/AbleGamers_Includification.pdf (last visited Dec. 5, 2020).

⁴⁰ *Id.*

⁴¹ *Id.*

⁴² *See id.*

Online 2,⁴³ Estsoft Inc.'s *Cabal Online*,⁴⁴ and Redfox Games's *9Dragons*.⁴⁵ *Includification* explains that “[i]t is important for developers and publishers to be careful when choosing the proper scheme to watch over their games and/or DRM. If every guideline in this paper is followed, but the wrong protection software is included, then your work implementing other parts of this document will be for naught.”⁴⁶

These are just some examples of the ways that TPMs prevent accessibility for people with disabilities. While many more no doubt exist, we urge the Office not to impose on people with disabilities the burden of pinpointing every detail and every instance of problematic TPMs, and instead recognize the well-developed record over the past two decades that access controls so routinely cause access problems that a more categorical treatment based on accessibility use is appropriate.

Item E. Asserted Adverse Effects on Noninfringing Uses

The NPRM encourages commenters to focus on the following elements to demonstrate that proposed modifications to existing exemptions satisfy the requirements for the exemption to be granted under Section 1201:

1. The proposed class includes at least some works protected by copyright;
2. The proposed uses are noninfringing under title 17;
3. Users are adversely affected in their ability to make such noninfringing uses and users are likely to be adversely affected in their ability to make such noninfringing uses during the next three years; and
4. The statutory prohibition on circumventing access controls is the cause of the adverse effects.⁴⁷

The proposed class includes works protected by copyright because the class includes all inaccessible copyrighted works. The uses of this proposed exemption are making works accessible, and the users who are adversely affected are people attempting to make works accessible and people with disabilities. As a result, the prohibition on circumvention also restricts technological innovation in accessibility

⁴³ See @play_pso2, Twitter (June 10, 2020, 5:26 AM), https://twitter.com/play_pso2/status/1270678761294360576?lang=en (*Phantasy Star Online 2*'s official Twitter apologizing to players for an error caused by the game's utilization of nProtect GameGuard).

⁴⁴ See Milan Stanojevic, *Windows 10 GameGuard Error: What it is and How to Fix it*, Windows Report (May 12, 2020), <https://windowsreport.com/windows-10-gameguard-error/> (noting that *Cabal Online* is an MMORPG that utilizes nProtect GameGuard).

⁴⁵ See *id.* (noting that *9Dragons* is also an MMORPG that utilizes nProtect GameGuard).

⁴⁶ *Includification*, *supra* note 39 at 15.

⁴⁷ 2020 NPRM, 85 Fed. Reg. at 65,301.

and the civil rights of individuals with disabilities. Making works accessible is an uncontroversially noninfringing fair use and the 1201(a)'s five statutory factors weigh in favor of the exemption.

Finally, the Office should reinterpret the term “class of works” to govern instances where the works obvious common attributes and the uses governed by the exemption are indisputably fair. This re-interpretation would enable the fair use the DMCA was intended to protect, further technological innovation, and secure the civil rights of marginalized populations.

1. The proposed class of works includes works protected by copyright.

The exemption would cover all copyrighted works. Accordingly, the proposed class necessarily includes works protected by copyright.

2. The prohibition on circumvention adversely affects innovative modes of making copyrighted works accessible.

The Office must recommend the proposed exemption to enable technological innovation and accessibility, honor Congresses’ dedication to civil rights, and celebrate America’s foundational ideals of freedom and equality. The statute assigns the Office the power to grant this exemption. The DMCA demands the Office grant this exemption to comply with the provision’s recognition of innovation and dedication to safeguarding fair use.

The current prohibition on circumvention imposes barriers not only on access, but imagination. Chancey Fleet, a blind scientist, has described the effect of inaccessibility of copyrighted works for people who are blind or visually impaired as “image poverty”:

[A]s a Blind child, I thought I was someone who didn’t have any aptitude at all in STEM, even though I did well academically. . . . Looking back, it seems as though I was a spatial learner. . . . If the images are [accessible], it turns out that the aptitudes are there.”⁴⁸

Across the country, children with disabilities may face barriers to realizing their dreams, not for lack of trying nor desire, but for lack of opportunity. The circumvention prohibition thus creates barriers not only to accessing copyrighted works, but to the knowledge of the existence and attributes of works.

Inaccessible technology used to deliver copyrighted works excludes people with disabilities from many professions, places them at a disadvantage in their chosen

⁴⁸ David M. Perry, *Disabled Do-It-Yourselfers Lead Way to Technology Gains*, N.Y. Times (updated Jul. 20, 2020), <https://www.nytimes.com/2020/07/14/style/assistive-technology.html>.

professions, and alienates them from economic and social opportunities.⁴⁹ As scholars have noted, “[t]his exclusion is becoming increasingly problematic as the developed world relies more and more on this technology.”⁵⁰ Thus, innovators desiring to create accessible technology must have the freedom to do so to ensure that individuals with disabilities are increasingly included in society.

The proposed class would empower innovators to continue creating technology for everyday use because this technology provides individuals with disabilities access to a world often built without disability in mind. As Mark Riccobono, President of the National Federation of the Blind, explains, “GPS and spell-check, so ubiquitous for so many people, are technologies that assist me with dyslexia. Smartphones, where I find my GPS, may be the most powerful accessibility devices in history, especially now that voice control offers an alternative to touch screens for Blind and low-vision users, or people without the manual dexterity to operate them.”⁵¹

As the world becomes increasingly more digitized, technology will continue to empower individuals with disabilities in unimaginable ways. As scholar David Perry explains, “[d]isability-related technologies are not just growing through incremental adjustments to existing products; transformative ones are on the horizon.”⁵² For instance, smartphones may soon be capable of driving power chairs and driverless cars, and “companies are working on mapping interior spaces to help people navigate them the same way detailed exterior maps currently do.”⁵³

This technology will increasingly be intermediated by copyright law. Prominent disability organizations and innovation leaders such as Christian Vogler, computer scientist and professor at Gallaudet University, routinely identify and imagine digital technologies that would break down barriers for people who are deaf, hard of hearing, blind, visually impaired, or DeafBlind to access copyrighted works. In developing this comment, Dr. Vogler identified:⁵⁴

- A project to enable tactile accessibility for images via digitizing the contours and colors into tactile patterns and descriptive labels, an idea that has already gained traction in recent accessibility research.
- A project that would enable people who are deaf or hard of hearing to individualize not only the format but the pace and even the content of subtitles and captions, overcoming the limitations of a one-size-fits-all model that ignores the unique reading needs of individual people.

⁴⁹ Newell, Sloan, & Gregor, *supra* note 15.

⁵⁰ *Id.* at 285.

⁵¹ Perry, *supra* note 47.

⁵² *Id.*

⁵³ *Id.*

⁵⁴ Zoom Interview with Dr. Christian Vogler (Oct. 2020).

- A project that would enable people with disabilities to visualize digital audio with color patterns, transform audio into individualized custom forms to reduce distortion among hearing device users, and allow individuals to focus on the features most of interest to them, such as a singer’s voice, or a lead instrument over the accompanying ones.

The Office can contribute to the inclusive and accessible digital future contemplated in projects like these by granting the proposed exemption, which would provide innovators with the authority to turn these possibilities into reality.

The Office must also grant the exemption to grant individuals with disabilities the freedom to provide themselves with the equal access they deserve. People with disabilities are experts in technological inaccessibility. Yet, as Ian Smith, a software engineer who is Deaf, has dwarfism and uses a power wheelchair, points out, “too often disabled people are not permitted to tinker with devices” because of 1201(a)(1)’s prohibition.⁵⁵ And as Sara Hendren, a design professor at Olin College of Engineering in Massachusetts and parent of a child with Down syndrome, explains, a benefit of “empowering disabled designers” is that “the right technology can make the ‘world bend a little bit’ toward the user rather than just bending the user toward a normative world.”⁵⁶ Thus, the proposed exemption not only serves the goal of innovation, but champions America’s do-it-yourself attitude and emphasis on independence, too.

The exemption also addresses the needs of the growing American population. Currently, approximately one in four American adults “have some type of disability.”⁵⁷ However, “America is getting older,”⁵⁸ and since “as people grow older, they are increasingly likely to have a disability.”⁵⁹ Thus, technology built for people with disabilities to access copyrighted works is technology that will also benefit the majority of Americans as they become increasingly reliant on technology to access copyrighted works.

The proposed exemption champions technological innovation beneficial to each and every individual. Americans will feel the adverse effects of 1201(a)(1), as access to copyrighted works becomes increasingly digital and Americans become correspondingly more reliant on digital accessibility. Furthermore, “[t]echnology

⁵⁵ Perry, *supra* note 47.

⁵⁶ *Id.*

⁵⁷ *Disability Impacts All of Us*, CDC, <https://www.cdc.gov/ncbddd/disabilityandhealth/infographic-disability-impacts-all.html>.

⁵⁸ E.g., Leonard A. Sandler & Brian Kaskie, *A Protocol for Examining and Mapping Elder Abuse Pathways in Iowa*, 59 Wash. U. J.L. & Pol’y 27, 30–31 (2019).

⁵⁹ Robert G. Schwemm & Michael Allen, *For the Rest of Their Lives: Seniors and the Fair Housing Act*, 90 Iowa L. Rev. 121, 129 (2004).

goes beyond mere tool making; it is a process of creating ever more powerful technology using the tools from the previous round of innovation.”⁶⁰ Thus, the future of technological innovation for accessibility is dependent on what today’s innovators will create, and the Office should address the adverse effects of Section 1201 on accessibility innovation by granting the proposed exemption.

3. Making works accessible is an uncontroversially noninfringing fair use.

As a general matter, Congress, the courts, and the Copyright Office have routinely recognized that accessibility is fair use. First, the legislative history of the 1976 Copyright Act makes clear that converting works into formats that are accessible to people with sensory disabilities is a quintessential example of fair use. The House Committee Reports explicitly states:

Another special instance illustrating the application of the fair use doctrine pertains to making copies or phonorecords of works in special forms for blind persons. These special forms . . . are not usually made by the publishers for commercial distribution . . . the making of a single copy or phonorecord as a free service for a blind person would properly be considered a fair use under section 107.⁶¹

Additionally, the courts have affirmed Congress’s “commitment to ameliorating the hardships faced by” people with sensory disabilities.⁶² In *Sony v. Universal City Studios*, the Supreme Court stated that when copyrighted works are made accessible for the convenience of people with sensory disabilities, it “is expressly identified by the House Committee Report as an example of fair use, with no suggestion that anything more than a purpose to entertain or to inform need motivate the copying.”⁶³

The Second Circuit elaborated in *Authors Guild v. HathiTrust*:

In the Americans with Disabilities Act, Congress declared that our ‘Nation’s proper goals regarding individuals with disabilities are to assure equality of opportunity, full participation, independent living, and economic self-sufficiency for such individuals.’ 42 U.S.C. Section 12101(7). Similarly, the Chafee Amendment illustrates Congress’s intent that copyright law make appropriate

⁶⁰ Ray Kurzweil, *The Law of Accelerating Returns* (Mar. 7, 2001), <https://www.kurzweilai.net/the-law-of-accelerating-returns>.

⁶¹ H.R. Rep. No. 94-1476, at 73 (1976).

⁶² See *HathiTrust*, 755 F.3d at 102.

⁶³ 464 U.S. 417, 455 n.40 (1984); see also *HathiTrust*, 755 F.3d at 102.

accommodations for the blind and print disabled. See 17 U.S.C. Section 121.

The *HathiTrust* court held that “the doctrine of fair use allows [the] provi[sion of] full digital access to copyrighted works” to people with disabilities.⁶⁴

Not only have the courts affirmed Congress’s commitment to accessibility for people with disabilities, but the Office also has consistently adopted exemptions to Section 1201 that allow for accessibility-related circumvention.⁶⁵ In 2012 the Office recommended an exemption for “the circumvention of literary works that are distributed electronically to allow blind and other persons with disabilities to obtain books through the open market and use screen readers and other assistive technologies to read them.”⁶⁶ The e-book exemption was renewed by in 2015⁶⁷ and 2018,⁶⁸ and recommended for renewal again in 2020.⁶⁹

For similar reasons, in 2018 the Office recommended a circumvention exemption that allowed “adding captions and/or audio description to motion pictures for the purpose of making them accessible to students with disabilities.”⁷⁰ This audiovisual works exemption for accessibility has also been recommended for renewal by the Register in 2020.⁷¹

Making works accessible to people with sensory disabilities is an uncontroversially fair, noninfringing use. Moreover, the same conclusion flows from the traditional four factor analysis of noninfringing fair use, which focuses on the purpose and character of the use, the nature of the copyrighted work, the amount and substantiality of the portion used in relation to the copyrighted work

⁶⁴ See *HathiTrust*, 755 F. 3d at 103.

⁶⁵ 2012 Final Rule, 77 Fed. Reg. at 65,262 (exemption for e-book accessibility) & 65,270-71 (exemption for accessibility research on audiovisual works); Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 80 Fed. Reg. 65,944, 65,950 (Oct. 28, 2015) (2015 Final Rule), <https://www.copyright.gov/fedreg/2015/80fr65944.pdf> (e-book accessibility); Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 83 Fed. Reg. 54,010, 54,013 (e-book accessibility) & 54,019 (accessibility for audiovisual works by disability services professionals); 2020 NPRM, 85 Fed. Reg. at 65,298 (e-book accessibility and disability services).

⁶⁶ 2012 Final Rule, 77 Fed. Reg. at 65,262.

⁶⁷ 2015 Final Rule, 80 Fed. Reg. at 65,950.

⁶⁸ 2018 Final Rule, 83 Fed. Reg. at 54,013.

⁶⁹ 2020 NPRM, 85 Fed. Reg. at 65,298

⁷⁰ 2018 Final Rule, 83 Fed. Reg. at 54,019.

⁷¹ 2020 NPRM, 85 Fed. Reg. at 65298.

as a whole, the effect of the use upon the potential market for or value of the copyrighted work.⁷²

i. The purpose and character of making works accessible weighs in favor of fair use.

The first factor of the fair use analysis focuses on the purpose and character of the use.⁷³ This first factor requires that the use “serve broader public purposes.”⁷⁴ Converting an inaccessible copyrighted work into an accessible format serves a broad public benefit and results in direct and tangible benefits for people with disabilities. For the same reasons that the Acting Register concluded that the first factor weighs in favor of fair use in both the cases of audiovisual work accessibility in 2018, accessibility uses weigh the first factor in favor of fair use.⁷⁵

First, Congress has routinely enshrined in law the civil rights of people with disabilities.⁷⁶ This supports a finding of fair use under the first factor.⁷⁷ In the Americans with Disabilities Act, Congress declared the goal of “assur[ing] equality of opportunity, full participation, independent living, and economic self-sufficiency for such individuals.”⁷⁸ Congress reaffirmed this commitment with the Chafee Amendment,⁷⁹ which “illustrates Congress’s intent that copyright law make appropriate accommodations for the blind, visually impaired, or print disabled.”⁸⁰ Whether the underlying works are books, motion pictures, architectural works, or musical scores, people with disabilities have the right to access copyrighted works to the extent necessary to secure “the opportunity to compete on an equal basis and to pursue those opportunities for which our free society is justifiably famous.”⁸¹

Both the Supreme Court and the Second Circuit have made it clear that accessibility for people with disabilities is fair use under the first factor.⁸² In *Sony* the Supreme Court made clear that making copyrighted works accessible to people who are blind, visually impaired, deaf, or hard of hearing is a fair use under the first factor. In *Sony*, the Court expressed that “[m]aking a copy of a copyrighted work for the convenience of a blind person is expressly identified by the House

⁷² See 17 U.S.C. § 107.

⁷³ *Id.*

⁷⁴ *Twin Peaks v. Publications Int’l*, 996 F.2d 1366, 1375 (2d Cir. 1993).

⁷⁵ 2018 Recommendation at 97 (audiovisual accessibility).

⁷⁶ See *HathiTrust*, 755 F.3d at 102.

⁷⁷ See *id.*

⁷⁸ 42 U.S.C. § 12101(7).

⁷⁹ 17 U.S.C. § 121.

⁸⁰ *HathiTrust*, 755 F.3d at 102.

⁸¹ See 42 U.S.C. § 12101(a)(8).

⁸² *Sony*, 464 U.S. at 455 n.40 (1984); see also *HathiTrust*, 755 F.3d at 102.

Committee Report as an example of fair use, with no suggestion that anything more than a purpose to entertain or to inform need motivate the copying.”⁸³ The *HathiTrust* court also pointed out that the legislative history referred to by the Supreme Court provides clear “guidance support[ing] a finding of fair use in the unique circumstances presented by print-disabled readers.”⁸⁴

The Copyright Office’s own history supports the conclusion that accessibility generally weighs in favor of fair use under factor one. In 2018 the Register agreed that, for the audiovisual works accessibility exemption, current precedent, “including the 2014 *HathiTrust* opinion,” weighed in favor of fair use for the first factor.⁸⁵ Additionally, the Register recognized that the precedent created in *HathiTrust* was not limited “to individuals with disabilities relating to sight impairments, thereby implying that creating accessible formats for individuals with other types of disabilities also constitutes a ‘valid purpose’” for the purpose of the first factor.⁸⁶

ii. The nature of inaccessible works is heterogeneous and not dispositive.

The second fair use factor asks courts to examine the nature of the copyrighted work.⁸⁷ The proposed exemption would cover all works that are inaccessible to people with disabilities. While they share a common characteristic of inaccessibility, the formats and genres come in many different forms. As the *HathiTrust* court explained, the mixed nature of works used for accessibility purposes “does not preclude a finding of fair use . . . given [the] analysis of the other factors”.⁸⁸ The Acting Register’s 2018 Recommendation echoes this conclusion.⁸⁹

iii. The amount and substantiality of the portion used in converting an inaccessible work into accessible formats varies and is not dispositive.

The third fair use factor asks courts to consider “whether ‘the amount and substantiality of the portion used in relation to the copyrighted work as a whole’ are reasonable in relation to the copying’s purpose.”⁹⁰ Put another way, this inquiry asks whether “no more was taken than necessary.”⁹¹

⁸³ *Id.*

⁸⁴ *HathiTrust*, 755 F.3d at 102.

⁸⁵ 2018 Recommendation at 97.

⁸⁶ *Id.* (citing *HathiTrust*, 755 F.3d at 103).

⁸⁷ *HathiTrust*, 755 F.3d at 102.

⁸⁸ *Id.* at 102.

⁸⁹ See 2018 Recommendation at 98.

⁹⁰ *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 586 (1994) (internal citations omitted).

⁹¹ *Id.* at 589 (internal citations omitted).

The *HathiTrust* court explained that “[f]or some purposes, it may be necessary to copy the entire copyrighted work, in which case Factor Three does not weigh against a finding of fair use”—a principle the court applied in concluding that the third factor does not weigh against accessibility uses.⁹² The Register likewise concluded in 2018 that, “[f]or some purposes, however, ‘it may be necessary to copy the entire copyrighted work,’ and in such cases, the third factor, ‘does not weigh against a finding of fair use.’”⁹³

iv. The effect of converting inaccessible works into accessible formats on the potential market or value weighs in favor of fair use.

Making inaccessible works accessible would not negatively affect the market or the value of copyrighted works. In fact, the need for this exemption is due to the routine failure of copyright holders to address markets of accessible works.

The House Report on the 1976 Copyright Act noted that accessible versions, “such as copies in Braille and phonorecords of oral readings (talking books), are not usually made by the publishers for commercial distribution.”⁹⁴ The same shortcomings of accessible works was again recognized by the *HathiTrust* court, which noted that “[i]t is undisputed that the present-day market for books accessible to the handicapped is so insignificant that ‘it is common practice in the publishing industry for authors to forgo royalties that are generated through the sale of books manufactured in specialized formats for the blind.’”⁹⁵ A comment in favor of the 2018 exemption for the accessibility of motion pictures explained that in *HathiTrust*:

The industry’s failure to provide accessible e-books signaled to the court that preserving the ability to convert books into accessible versions that can be consumed and enjoyed by people who are blind, visually impaired, or print disabled weighed the fourth factor conclusively in favor of fair use.⁹⁶

In the Acting Register’s 2018 recommendation regarding accessibility for audiovisual works, the Acting Register likewise found the fourth factor weighed in favor of fair use for accessibility purposes. Specifically, the Register recommended that, “the overall market has not yet adequately met the needs of individuals with

⁹² *HathiTrust*, 755 F.3d at 98, 103.

⁹³ 2018 Recommendation at 98-99 (citing *HathiTrust* at 98).

⁹⁴ H.R. Rep. No. 94-1476, at 73 (1976).

⁹⁵ *HathiTrust*, 755 F.3d at 102.

⁹⁶ Long Comment of ATSP, et al. at 9-10 (Dec. 18, 2017) (2018 Disability Services Comment), <https://cdn.loc.gov/copyright/1201/2018/comments-121817/class2/class-02-initialcomments-atsp-et-al.pdf>.

disabilities by retroactively offering catalog videos in accessible formats.”⁹⁷ Where “an accessible version is not available in the marketplace, the proposed use is less likely to interfere with the primary or derivative markets for the motion picture.”⁹⁸

Audiovisual works and e-books are not the only copyrighted materials that people with disabilities should be free to access. The entire class of inaccessible works are similar in that copyright holders routinely choose not to serve the market of people with disabilities. The foregoing examples demonstrate that the same dynamic is likely to recur with respect to other categories of works, weighing the fourth factor in favor of fairness.

4. The Section 1201(a)(1)(C) statutory factors weigh in favor of granting a broad, general exemption for accessibility uses.

The Office requires that proponents show a need for circumvention by analyzing the five statutory factors listed in Section 1201(a)(1)(C).⁹⁹ Under Section 1201(a)(1)(C), the Librarian examines five factors in considering whether to grant an exemption:

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;
5. Such other factors as the Librarian considers appropriate.¹⁰⁰

The Office has consistently found that the Section 1201(a)(1)(C) statutory factors weigh in favor of accessibility-related exemptions.¹⁰¹ Likewise, the statutory

⁹⁷ 2018 Recommendation at 100.

⁹⁸ *Id.*

⁹⁹ 17 U.S.C. § 1201(a)(1)(C).

¹⁰⁰ *Id.*

¹⁰¹ *See* 2018 Recommendation at 104 (finding that all of the statutory factors favored the disability services exemption); 2015 Recommendation at 135 (finding that all of the statutory factors favored the e-book accessibility exemption); Recommendation of the Register of Copyrights at 22 (Oct. 12, 2012), (“2012 Recommendation”)

https://cdn.loc.gov/copyright/1201/2012/Section_1201_Rulemaking_2012_Recommendation.pdf (same).

factors weigh in favor of granting a broad, general exemption for disability accessibility.

i. The three availability factors weigh in favor of granting a broad, general exemption for accessibility uses.

Comparable to the 2018 triennial rulemaking’s disability services accessibility exemption, the prohibitions on circumvention have a similar impact under each of the first three Section 1201(a)(1)(C) factors.¹⁰² The Office has already acknowledged that exemptions “to facilitate assistive technologies” enhance the availability for use of copyrighted works “because [they] increas[e] the number of works that may be accessed” by people with disabilities.¹⁰³

As previously noted, accessibility to resources is vital for people with disabilities to retain their independence and lead fulfilling lives.¹⁰⁴ As such, the Office has historically granted exemptions for people with disabilities in order to facilitate technologies necessary for accessibility.¹⁰⁵ A broad, general exemption for accessibility would help ensure that people with disabilities “have meaningful access to the same content that individuals without such impairments” access without need of circumvention.¹⁰⁶

Without a broad exemption for accessibility, people with disabilities are denied equal access to copyrighted works, which contradicts Congress’s commitment to the civil rights of people with disabilities.¹⁰⁷ The triennial exemption petition process unduly burdens people with disabilities by forcing them to repeatedly make petitions to the Office every three years for access to necessary resources. The Office’s 2017 Policy Study recommended that Congress adopt a permanent exemption that would “enable blind or visually impaired persons to utilize assistive technologies” because “an assistive technologies exemption has been adopted as a temporary exemption in the past five triennial rulemakings.”¹⁰⁸ The Register acknowledged that “repeated participation in the rulemaking process has become especially burdensome and time-consuming for the blind and print-disabled

¹⁰² See 2018 Recommendation at 101 (“In discussing the purported adverse effects and addressing the section 1201 statutory factors, proponents combined discussion of the first three factors because ‘the prohibitions on circumvention have a similar impact under each factor.’”) (internal citations omitted).

¹⁰³ See 2015 Recommendation at 135.

¹⁰⁴ See discussion *supra*, Item E.2

¹⁰⁵ See 2018 Recommendation at 104; 2015 Recommendation at 135.

¹⁰⁶ 2012 Recommendation at 22.

¹⁰⁷ See *HathiTrust*, 755 F.3d at 102.

¹⁰⁸ U.S. Copyright Office, A Report of the Register of Copyrights at 84 (June 2017), <https://www.copyright.gov/policy/1201/section-1201-full-report.pdf>.

community.”¹⁰⁹ Congress has even inquired about the possibility of a permanent accessibility exemption in the context of broader reform to the DMCA.¹¹⁰

By defining “class of works” in terms of accessibility rather than activity-specific categorization, people with disabilities would be given a greater opportunity to access copyrighted works on equal terms. Doing so would broadly serve the first three statutory factors.

ii. A broad, general exemption for disability accessibility would have no negative impact on the market for or value of copyrighted works.

An exemption would have no negative impact on the market for or value of copyrighted works. As previously noted, the need for this exemption is in large part rooted in the routine failure of copyright holders to serve the market for accessible works.¹¹¹ As such, this exemption would protect current markets and only add to potential future markets of copyrighted works.

iii. The Librarian should consider emergencies like the COVID-19 crisis, which highlight the disastrous impact of delaying access to necessary resources, as a factor for a broad, general exemption for accessibility.

The COVID-19 crisis has created a situation that highlights how “[d]igital accessibility is more important than ever before.”¹¹² Level Access, a digital accessibility company, notes that people are now relying on digital services for everyday activities including shopping, remote work, education, healthcare, and banking, and that people with disabilities in particular “need these services more than ever before.”¹¹³ “Websites, mobile apps, video/audio conferencing, electronic documents, emails, and social media posts need to be accessible to them.”¹¹⁴ The Office should recognize that a failure of copyright holders to make fully accessible the software, graphical, audiovisual, and other aspects of works involved in the delivery of digital services demands latitude for people with disabilities, and the organizations and advocates that they work with to engage in self-help.

¹⁰⁹ *Id.* at 84.

¹¹⁰ *Are Reforms to Section 1201 Needed and Warranted? Before the Subcommittee on Intellectual Property of the Senate Committee on the Judiciary*, 116th Cong. at 8-10 (2020) (Response of Blake Reid to questions submitted for the record), <https://www.judiciary.senate.gov/imo/media/doc/Reid%20Responses%20to%20QFRs.pdf>.

¹¹¹ See discussion *supra*, Item E.3.iv.

¹¹² *COVID-19: Digital Accessibility Support and Resources*, Level Access, <https://www.levelaccess.com/covid-19-digital-accessibility/> (last visited Dec. 13, 2020).

¹¹³ *Id.*

¹¹⁴ *Id.*

When accessibility is not considered from the outset of designing digital services, people with disabilities face barriers to necessary activities for healthcare, employment, and education. For example, people who are blind or visually impaired have less access to vital information on the spread of COVID-19.¹¹⁵ In 2020, WebAIM analyzed one million home pages for accessibility issues and found that 98.1 percent of websites had at least one Web Content Accessibility Guidelines 2.0 (WCAG 2.0) failure.¹¹⁶ WebAIM also found that websites averaged 60.9 WCAG 2.0 errors per home page.¹¹⁷ Likewise, video-conferencing platforms such as Zoom have raised significant accessibility issues in a variety of employment, healthcare, and other contexts.¹¹⁸ Hadi Rangin, an IT Accessibility Specialist at the University of Washington, noted that “[a]t the time Zoom was introduced to us, it almost had zero percent accessibility.”¹¹⁹ Although updates to Zoom have increased accessibility, problems still persist. For example, people who are deaf or hard of hearing are now able to pin multiple videos such that they can watch both the active speaker and the sign language interpreter, but “[u]nfortunately, and inexplicably, the host must explicitly enable permission to multi-pin on a per-participant basis This limitation reduces the overall scalability of this approach.”¹²⁰ Zoom’s whiteboard and polling features also remain inaccessible for people with motor or visual disabilities.¹²¹

¹¹⁵ See Abrar Al-Heeti, *COVID-19 Exposes Hypocrisy Over Lack of Disability Accommodations*, CNET (May 21, 2020), <https://www.cnet.com/health/the-covid-19-crisis-highlights-how-far-accessibility-still-has-to-go/>.

¹¹⁶ See *What is Digital Accessibility?*, Global Accessibility Awareness Day (last visited Dec. 13, 2020), <https://globalaccessibilityawarenessday.org/>.

¹¹⁷ See *id.*

¹¹⁸ See Blake E. Reid, Christian Vogler, and Zainab Alkebsi, *Telehealth and Telework Accessibility in a Pandemic-Induced Virtual World*, Colo. L.R. Forum. (Nov. 9, 2020), <https://lawreview.colorado.edu/digital/telehealth-and-telework-accessibility-in-a-pandemic-induced-virtual-world/>.

¹¹⁹ Ignacio Lobos, *No One Left Behind: COVID-19 Pandemic Underscores Need for Accessibility*, University of Washington (May 20, 2020), <https://www.washington.edu/uwit/stories/covid-19-pandemic-underscores-need-for-universal-accessibility-on-the-web/>.

¹²⁰ Christian Vogler, Tina Childress, Michael McKee, Christopher Moreland, Robert Roth and Chad Ruffin, *Webinar Accessibility for Deaf and Hard of Hearing People*, DHH-RERC (Oct. 25, 2020), <https://www.deafhhtech.org/erc/webinar-accessibility-for-deaf-and-hard-of-hearing-people/>.

¹²¹ See *Zoom Considerations for Teaching Students with Disabilities*, The University of Chicago (last visited Dec. 14, 2020), <https://teachingremotely.uchicago.edu/zoom-students-with-disabilities/> (“The whiteboard and polling features in Zoom are currently not accessible for people with motor or visual disabilities.”); *Zoom*

Furthermore, people with disabilities are facing longer-than-usual delays for disability services professionals to provide them with proper access to necessary resources.¹²² The U.S. Equal Employment Opportunity Commission (EEOC) expressly warned that “the extraordinary circumstances of the COVID-19 pandemic may result in delay in discussing requests and in providing accommodation where warranted,”¹²³ leaving employees with disabilities to fend for themselves.

This situation has highlighted the inherent problems that come about as a result of needlessly delaying people with disabilities from necessary access to resources. Three years is too long of a period to force people with disabilities to wait in order to obtain accessibility, and the extra complications that have come about due to the COVID-19 crisis make that waiting period all the more untenable.

5. The Office should reinterpret its definition of “class of copyrighted works” to grant the proposed exemption.

Finally, the Office’s contention that the proposed class is incompatible with Section 1201’s temporary exemption provisions is based off a faulty interpretation of the term “class of works” in Section 1201(a)(1). The Office has concluded that classes of works must be defined by reference to 17 U.S.C. § 102(a) categories.¹²⁴ Accordingly, the Office has preliminarily rejected the notion that a broad accessibility exemption can be granted because “its authority in this proceeding is bound by the provisions of the statute.”¹²⁵

The Office should reconsider its interpretation of the statutory terminology to align with its own evolving approach to classes of works over the history of the triennial review, the purpose of the DMCA, and the judicial interpretation of the Section 102(a) categories. More specifically, the Office should recognize a “class of works” where the works share obvious common attributes, the users, and/or the

Considerations for Teaching Students with Disabilities, Yale University (last visited Dec. 14, 2020), <https://academiccontinuity.yale.edu/faculty/how-guides/zoom/zoom-considerations-teaching-students-disabilities> (“The whiteboard and polling features in Zoom are currently not accessible for people with motor or visual disabilities.”).

¹²² See generally Karen Weintraub & Jayne O’Donnell, *COVID-19 is a Disaster for People with Disabilities. Without 30-Year-Old Law, it Would be Worse*, USA Today (July 26, 2020), <https://www.usatoday.com/story/news/health/2020/07/26/ada-turns-30-covid-hits-those-disabilities-especially-hard/5490448002/>.

¹²³ *What You Should Know About COVID-19 and the ADA, the Rehabilitation Act, and Other EEO Laws*, U.S. Equal Employment Opportunity Commission (Sep. 8, 2020), <https://www.eeoc.gov/wysk/what-you-should-know-about-covid-19-and-ada-rehabilitation-act-and-other-eeo-laws>.

¹²⁴ NPRM 2020, 85 Fed. Reg. at 65,309.

¹²⁵ *Id.*

uses, and the purpose of the exemption is to enable indisputably fair uses, even where the works do not adhere to a “narrow and focused subset”¹²⁶ of a singular 17 U.S.C. §102(a) category.¹²⁷

Under this definition, the proposed exemption implicates is a “particular class of works” under the meaning of Section 1201 because:

- It shares common attributes among the covered works themselves—i.e., all works are inaccessible to their users;
- The works share common users—i.e., all users are either unable to access the works as a result of the works’ inaccessibility or are attempting to make such works accessible to such users;
- All works have a common use that is being adversely affected—i.e., the accessibility uses are prohibited by 1201(a)(1); and
- The purpose of the exemption—i.e., accessibility—is an indisputably fair and noninfringing use.

The Office should adopt this interpretation because the Office has yet to commit to a singular interpretation of “class of works,” as evidenced by its 2006 rulemaking process, 2010 rulemaking process, and 2015 rulemaking process. The Office should also adopt this interpretation because it is necessary to fulfill the DMCA’s insistence on protecting fair use. Finally, the Office should adopt this interpretation because unlike the Office’s current interpretation, it is more consistent with judicial understanding of the Section 102(a) categories.

i. The Office’s interpretation of “class of copyrighted works” has evolved from a strict focus on Section 102(a) categories to a more flexible common-attributes approach.

The Office has broadened its interpretation of “class of copyrighted works” since its first rulemaking two decades ago. A component of this expansion is noticeable in the Office’s stated definition of the term, which now encompasses classes of works that share common attributes among users and uses, and not simply commonalities between works. Moreover, this evolution demonstrates that the Office believes it has the authority to alter its interpretation, notwithstanding its declaration to the contrary in the 2020 NPRM.¹²⁸

¹²⁶ H.R. Rep. No. 105–551, pt. 2, at 38 (1998) (“Commerce Comm. Report”).

¹²⁷ 17 U.S.C. § 102(a) categories include: “(1) literary works; (2) musical works, including any accompanying words; (3) dramatic works, including any accompanying music; (4) pantomimes and choreographic works; (5) pictorial, graphic, and sculptural works; (6) motion pictures and other audiovisual works; (7) sound recordings; and (8) architectural works.”

¹²⁸ See 2020 NPRM, 85 Fed. Reg. at 65,305 & 65,309.

In the 2000 rulemaking, the Office derived an initial meaning of “class”: a “class” would share common attributes of the works themselves, but not common attributes of the users or uses.¹²⁹ In later assessing the proposed exemptions, however, the Librarian acknowledged that the Act and legislative history lacked an affirmative approach to analyzing “class of works.”¹³⁰ Accordingly, the Librarian noted that “[t]he only examples cited and guidance provided in the legislative history [led] the Register to conclude that a class must be defined primarily by reference to attributes of the works themselves, typically based upon the categories set forth in section 102(a) or some subset thereof, e.g., motion pictures or video games.”¹³¹

The Office continued to use the 2000 narrow definition until 2006, when the Register took a new approach that allowed for refinements of classes of works under Section 1201(a)(1)(C) by common attributes of intended use and users.¹³² The change in approach was prompted by an exemption that called for professors to be able to circumvent TPMs on lawfully acquired audiovisual works for educational purposes.¹³³ The Register acknowledged that a new approach was

¹²⁹ See Librarian of Congress, Copyright Office, Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies: Final Rule, 65 Fed. Reg. 64,556, 64,559 (Oct. 27, 2000) (“2000 Final Rule”), <https://www.gpo.gov/fdsys/pkg/FR-2000-10-27/pdf/00-27714.pdf>.

¹³⁰ *Id.*

¹³¹ *Id.* at 64,562. Curiously, the Librarian described a video game as a discrete subset of a Section 102(a) category, in contrast to the Register’s 2010 treatment of video games as a “hybrid” that “f[ell] within two statutory classes of works.” See Recommendation of the Register of Copyrights at 178 (2010) (“2010 Recommendation”), <https://cdn.loc.gov/copyright/1201/2010/initialed-registers-recommendation-june-11-2010.pdf>. Also, the Librarian failed to incorporate the 1975 House Judiciary Committee’s report explaining that the 102(a) categories formed a non-exhaustive list of overlapping categories. See H.R. Rep. No. 94-1476, at 53 (1976) (“1976 Judiciary Report”). See discussion *infra*, Item E.5.iii.

¹³² See Recommendation of the Acting Register of Copyrights at 10 (2006) (“2006 Recommendation”), https://cdn.loc.gov/copyright/1201/docs/1201_recommendation.pdf (“However, in the current proceeding the Register has concluded, based upon the record before her, that in appropriate circumstances a ‘class of works’ that is defined initially by reference to a section 102 category of works or a subcategory thereof, may additionally be refined not only by reference to the medium on which the works are distributed or the access control measures applied to them, but also by reference to the particular type of use and/or user to which the exemption shall be applicable.”).

¹³³ *Id.* at 13-24.

needed to enable fair use,¹³⁴ and so recommended expanding the scope of 1201 classes of works to include works sharing common attributes of intended users and/or uses.¹³⁵

Though the Register has continued to iterate the same narrow definition of class of works, the Register's approach in 2010 and 2015 further departed from strict adherence to Section 102(a) categories. First, in 2010, the Register recommended an exemption for video games, a non-102(a) category, noting "[f]or purposes of categorization under Section 102(a) of the Copyright Act, video games are 'hybrid' in that they fall within two statutory classes of works"—literary works and "audiovisual elements."¹³⁶ Thus, the Register embraced a 1201 class that was *not* a "narrow subset" of an enumerated 102(a) category.¹³⁷

Second, the Register entertained an expansive exemption in 2015 that did not comport with the Office's narrow definition of class: a "broad, open-ended exemption for all consumer machines—or the Internet of Things—which would encompass a diverse range of devices and equipment"¹³⁸ The proposed exemption's class of works was not "a narrow and focused subset of the broad categories of works . . . identified in section 102."¹³⁹ Yet, the Office did not criticize the broad and generally scoped class.¹⁴⁰ Instead, the Office rejected the exemption on

¹³⁴ *Id.* at 24 ("Thus, the four nonexclusive factors enumerated in § 1201(a)(1)(C)(i)-(iv) favor both (1) an approach to defining 'classes' of works that may, when appropriate, be refined by reference to particular types of users and/or uses, and (2) an exemption pertaining to the class described below.")

¹³⁵ *Id.* at 10.

¹³⁶ 2010 Recommendation at 178.

¹³⁷ *Id.* at 15 ("While starting with a Section 102 category of works, or a subcategory thereof, the description of a "particular class" of works ordinarily should be further refined by reference to other factors that assist in ensuring that the scope of the class addresses the scope of the harm to noninfringing uses.").

¹³⁸ 2015 Recommendation at 146. Though the Register recommended denying this exemption, the Register's rationale centered not on the "class of works," but rather on the petitioners' alleged inability to develop an adequate record. Generally, the Register recommended denying the exemption because "proponents of Class 15, encompassing a broad and undefined range of 'consumer machines' or 'smart devices,' have failed to make a case for an exemption. Proponents declined to provide any specific information about the kinds of devices the proposal encompasses, what noninfringing uses would be facilitated by circumvention of TPMs on those devices, or any adverse effects understood to flow from the prohibition on circumvention." *Id.* at 170.

¹³⁹ *See* 2015 Recommendation at 10.

¹⁴⁰ *See* discussion *supra*, note 138.

evidentiary grounds.¹⁴¹ Thus, the fact that the Register did not assert the 102(a) category issue as at least a reason why the Register would not recommend this exemption implies that the Register did not view the “narrow and focused subset” of a 102(a) category requirement as dispositive.

The Office’s historical approach to “class of works” highlights the evolving and gradually increasing-in-breadth approach to the “class” definition that has over the years departed from a strict focus on 102(a) categories. The 2006 Register reinterpreted the “class” interpretation to incorporate common attributes, the Register in 2010 designated a “hybrid” class of Section 102(a) as a “narrow and focused subset” of a singular category, and the 2015 Register did not reject a class that bore no particular relationship to the Section 102(a) categories. Accordingly, the Office has laid the groundwork for accepting 1201 classes that are not narrow or focused subsets of a particular Section 102(a) category, but rather are refined simply by reference to common attributes that can simply include uses or users.

ii. The Office must allow use-based classes, including for accessibility, to satisfy the DMCA’s commitment to protecting fair use.

The Office’s rule that a “class” be confined to a singular enumerated §102(a) category, wherein each category is independent from the other, is also contradicted by the DMCA’s embedding of fair use and the understanding of 102(a) itself. The legislative history of the Act along with the Act’s language underscore this notion.

While Congress enacted the DMCA’s circumvention prohibition to cover emerging digital distribution technologies, Congress included the rulemaking process specifically to shield fair uses from Section 1201’s far-reaching ban.¹⁴² In particular, as the House Committee Report explains, Congress “[was] concerned that marketplace realities may someday dictate a different outcome, resulting in less access, rather than more, to copyrighted materials that are important to education, scholarship, and other socially vital endeavors.”¹⁴³ Thus, Congress included a rulemaking process for particular exemptions where “it [would] be appropriate to modify the flat prohibition against the circumvention of effective technological measures that control access to copyrighted materials, in order to ensure that access for lawful purposes [was] not unjustifiably diminished.”¹⁴⁴

¹⁴¹ *Id.*

¹⁴² *See, e.g.*, Letter from Gregory L. Rohde, Assistant Secretary of Commerce for Communications and Information and Administrator of National Telecommunications and Information Administration, to Marybeth Peters, Register of Copyrights, 2-3 (Sept. 29, 2000), <http://www.copyright.gov/1201/commerce.pdf>.

¹⁴³ Committee Comm. Report, *supra* note 126 at 36.

¹⁴⁴ Committee Comm. Report, *supra* note 126 at 36.

iii. Attribute-based classes of works, including for accessibility, are consistent with Section 102(a)'s flexible conception of works.

Likewise, Section 102(a) was written in accordance with Congresses' recognition of the unpredictable virtual future of expression.¹⁴⁵ As the 1975 House Judiciary Committee report explains,

The second sentence of section 102 lists seven broad categories which the concept of "works' of authorship" is said to "include." The use of the word "include," as defined in section 101, makes clear that the listing is "illustrative and not limitative," and that the seven categories do not necessarily exhaust the scope of "original works of authorship" that the bill is intended to protect.¹⁴⁶

In other words, the categories were never meant to be an exclusive nor a final list of works, as Congress's 1990 "architectural works" addition personifies.¹⁴⁷ Instead, the scope of copyrighted works was meant to evolve with technology, not hinder technological growth.¹⁴⁸

The Legislative History also clarifies that the categories were not isolated but intersecting. The 1975 Judiciary Report states that "[t]he [Section 102] items are also overlapping in the sense that a work falling within one class may encompass works coming within some or all of the other categories."¹⁴⁹ There the legislative history reveals the authors' understanding of these categories -- that they were listed independent of one and other but were likely to bleed into one and other, too. Thus, Section 102(a) was intended as a non-exhaustive list of intermingling categories in order to enable the Act to serve future copyright holders and users alike according to the balanced approach demanded by the Progress Clause.

¹⁴⁵ 1976 Judiciary Report, *supra* note 131 at 53 ("Section 102 implies neither that that subject matter is unlimited nor that new forms of expression within that general area of subject matter would necessarily be unprotected.").

¹⁴⁶ *Id.*

¹⁴⁷ Architectural Works Copyright Protection Act, Pub. L. No 101-650 § 703, 104 Stat. 5089 (1990).

¹⁴⁸ Thus, the Office's continues insistence that "the legislative history confirms that this language is intended to refer to 'a *narrow and focused subset* of the broad categories of works . . . identified in section 102 of the Copyright Act,'" 2020 NPRM, 85 Fed. Reg. at 65,309 (emphasis original), fails to account for the possibility that a "class" could be encompassed in a category not enumerated in Section 102(a).

¹⁴⁹ 1976 Judiciary Report, *supra* note 131 at 53.

iv. Recommending attribute-based classes of works would align with the legislative history and language of the DMCA while supporting technological innovation enabling fair uses, including accessibility.

For the foregoing reasons, the Office must adopt an attribute-based interpretation of “class of works”—i.e., a group of works that share common attributes among works, users, and/or uses—to encourage technological innovation and promote fair uses, including accessibility. The Office’s historical approach to “class of works” underscores the Office’s ability to expand its interpretation for fair use purposes. An attribute-based interpretation also comports with the text and purpose of the DMCA. Accordingly, the Office can and should adopt an attribute-based interpretation of “class” and, as a result, grant the proposed exemption.