UNITED STATES COPYRIGHT OFFICE

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

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ITEM A. COMMENTER INFORMATION

Entertainment Software Association

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These comments are submitted by the Entertainment Software Association ("ESA"), the U.S. trade association serving companies that publish computer and video games for game consoles, handheld devices, personal computers and the Internet. ESA represents the major game platform providers and almost all of the major video game publishers in the United States.¹

ESA's member companies are leaders in bringing creative and innovative products and services into American homes and have made major contributions to the U.S. economy.² In fact, the U.S. video game industry generated \$36 billion in revenue during 2017,³ and provided jobs to more than 220,000 people across all fifty states.⁴ This innovation and economic activity depends on strong copyright protection for the software and other creative works that are the

¹ A complete list of ESA's member companies is available at http://www.theesa.com/about-esa/members/ (last reviewed January 19, 2018).

² Aside from their significant and ongoing contributions to the traditional home video game and handheld video game markets, member companies have established fully-fledged online entertainment services (including mobile), developed popular and forward-looking immersive technologies (augmented, virtual, and mixed reality), and have taken the lead in the burgeoning esports industry. More innovation and creativity is promised in the future as the industry begins to embrace artificial intelligence and new ways to play and enjoy video games.

³ Press Release, Entertainment Software Association, *US Video Game Industry Revenue Reaches \$36 Billion in 2017* (Jan. 18, 2018), http://www.theesa.com/article/us-video-game-industry-revenue-reaches-36-billion-2017/ ("ESA Press Release").

⁴ Stephen E. Siwek, Entertainment Software Association, *Video Games in the 21st Century* 2, 36 (2017), http://www.theesa.com/wp-content/uploads/2017/02/ESA_EconomicImpactReport_Design_V3.pdf ("Video Games in the 21st Century"). In fact, about two thirds of U.S. households are home to at least one person who plays three or more hours of video games a week. Entertainment Software Association, *2017 Essential Facts about the Computer and Video Game Industry* 6 (Apr. 2017), http://www.theesa.com/wpcontent/uploads/2017/09/EF2017 Design FinalDigital.pdf ("2017 ESA Essential Facts").

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.

lifeblood of the video game industry. Accordingly, ESA member companies have a strong interest in maintaining effective copyright protection, including protection against circumvention of technologies that control access to copyrighted game software.

ITEM B. PROPOSED CLASS ADDRESSED

Proposed Class 7: Computer Program-Repair

ITEM C. OVERVIEW

Class 7 is a proposal to expand the narrow exemption for circumventing certain access controls on software controlling motorized land vehicles for the purpose of diagnosis, repair, or lawful modification.⁵ Several proponents of broadening the existing exemption are concerned only with details of its application to motor vehicles. However, the Electronic Frontier Foundation ("EFF") proposed "to eliminate the limitation on motorized land vehicles"⁶ and extend the exemption to allow circumvention of TPMs to any "software enabled device."⁷ Consumers Union and the Free Software Foundation provided only brief and general comments, but seem to support EFF's approach.

The breadth of EFF's proposal really cannot be overstated. Extending a carefully crafted repair exemption for motor vehicles to all products with embedded software seems broad enough to subsume the existing exemptions for mobile device unlocking,⁸ mobile device and smart TV jailbreaking,⁹ and 3D printers,¹⁰ since they are all exemptions for software controlling particular types of devices, and directed to modifying the functionality of those devices. As relevant here, EFF's proposal encompasses video game consoles.¹¹

ESA did not (and does not) oppose continuation of the existing exemption for software controlling motorized land vehicles. However, it would be inappropriate to expand the existing motor vehicle repair exemption to other types of devices without first considering the relevant TPMs and methods of circumvention, and performing the required statutory analysis, at a level more granular than all devices. In these comments,¹² ESA provides a particularized analysis with respect to video game consoles that is missing from EFF's proposal and comments. ESA demonstrates that expanding the existing motor vehicle repair exemption to video game consoles is unwarranted, because EFF fails to assess whether repairs to video game consoles can be accomplished without circumvention, and because console manufacturers provide warranty and repair options that adequately address any need for repair that might require circumventing

⁵ Exemptions to Permit Circumvention of Access Controls on Copyrighted Works, 82 Fed. Reg. 49,550, 49,561 (Oct. 26, 2017) ("NPRM").

⁶ NPRM, 82 Fed. Reg. at 49,561.

⁷ EFF Petition at 2.

⁸ 37 C.F.R. § 201.40(b)(3).

⁹ *Id.* § 201.40(b)(4), (5).

¹⁰ *Id.* § 201.40(b)(9).

¹¹ EFF Comments at 2.

¹² While ESA writes to provide an analysis of how the proposed expansion would affect video game consoles, it opposes the expansion as to any device that provides access to expressive works, including in-vehicle entertainment systems.

access controls on a console. Importantly, such manufacturer options address repair needs that require circumvention *without* comprising the security of console-based distribution systems.

Moreover, while it is convenient to think of the existing motor vehicle repair exemption as a repair exemption (and we refer to it as such in these comments), the existing exemption extends to "lawful modification of a vehicle function."¹³ As its comments make clear, EFF seeks permission to tinker with and customize software-enabled devices, such as by modifying or loading new software.¹⁴ To that end, in describing "exemplary" uses under its broad exemption, EFF identifies an example of hackers releasing a master decryption key for the PlayStation 3 console.¹⁵ That release simplified so-called jailbreaking¹⁶ of PS3 consoles, making it possible for "a user to run software of their choice"¹⁷ on the console (which is the essence of jailbreaking). That is, the one concrete reference to video game consoles in EFF's comments is simply an example of console jailbreaking.

The Register has considerable experience with the subject of video game console jailbreaking.

In the 2012 triennial proceeding, proposed Class 3 targeted jailbreaking of video game consoles. That proposal was decisively rejected by the Register because "the circumvention of console restrictions – even when initially undertaken for salutary purposes – is inextricably linked to and tends to foster piracy."¹⁸ The Register also found that the proponents of the exemption "fail[ed] to demonstrate that video game console access controls have or are likely to have a substantial adverse impact on [noninfringing] uses."¹⁹

A warmed-over version of that proposal was presented as Class 19 in the 2015 proceeding, where the Register found the evidence presented "not materially different from the evidence considered in 2012."²⁰ The Register again rejected the proposal decisively, because substantial evidence continued "to support the conclusion that jailbreaking of video game consoles leads to infringing activity," while the proponents offered only "sparse evidence" that was not materially different from the case rejected in 2012.²¹

https://www.copyright.gov/1201/2012/Section_1201_Rulemaking_2012_Recommendation.pdf ("Register's 2012 Recommendation".

¹⁹ Register's 2012 Recommendation at 45.

https://www.copyright.gov/1201/2015/registers-recommendation.pdf ("Register's 2015 Recommendation"). ²¹ Register's 2015 Recommendation at 200.

¹³ 37 C.F.R. § 201.40(b)(6).

¹⁴ EFF Comments at 2-3.

¹⁵ *Id*. at 3, 6.

¹⁶ In these comments, we use the term "jailbreaking" because the Office has done so from time to time. However, we note that it is a loaded term intended by those who popularized it to downplay the importance of protecting copyrighted works. By contrast, the Register has repeatedly found that the hugely valuable copyrighted works distributed for and through game consoles are reasonably and appropriately secured with technological protection measures.

¹⁷ EFF Comments at 3, 6.

¹⁸ U.S. Copyright Office, Section 1201 Rulemaking: Fifth Triennial Proceeding to Determine Exemptions to the Prohibition on Circumvention, Recommendation of the Register of Copyrights 43 (Oct. 2012),

²⁰ U.S. Copyright Office, Section 1201 Rulemaking: Sixth Triennial Proceeding to Determine Exemptions to the Prohibition on Circumvention, Recommendation of the Register of Copyrights 200 (Oct. 2015),

With respect to proposed Class 7 in this proceeding, there is even less evidence justifying a console jailbreaking exemption than was proffered in 2012 and 2015 – just an example of console jailbreaking as being one of the many things EFF would like to enable by extending the motor vehicle repair exemption to every other type of software-enabled device. The Register should not expand the existing motor vehicle repair exemption to cover video game consoles.

ITEM D. TECHNOLOGICAL PROTECTION MEASURE(S) AND METHOD(S) OF CIRCUMVENTION

Video game consoles are the center of an intellectual property ecosystem that makes copyrighted content easily and legally accessible, to the benefit of creators, distributors, and video game fans. More than 150 million Americans play video games,²² and 48% of U.S. households own a dedicated gaming console.²³ Through these consoles, consumers can access vast numbers of valuable copyrighted works, including not only video games, but also movies, television, music, and live-sports programming that is provided by ESA's members and a wide range of content partners.²⁴

These creators make their copyrighted works available through video game consoles because platform providers use access controls to make consoles a secure platform for content distribution. As the Register concluded in 2012:

Console access controls protect not only the integrity of the console code, but the copyrighted works that run on the consoles. In so doing, they provide important incentives to create video games and other content for consoles, and thus play a critical role in the development and dissemination of highly innovative copyrighted works.²⁵

This is just the kind of result that Congress intended when it enacted Section 1201.²⁶

The fundamental nature of the technological protection measures ("TPMs") used to secure video game consoles has not changed since the Register considered console jailbreaking in 2012 and 2015. Video game consoles use a range of access controls, the details of which vary from console to console, but all of which aim to prevent users from making unauthorized copies of the copyrighted video games and other content available on consoles, distributing those unauthorized copies to others, or using the console to play unauthorized copies of such works. In general, these TPMs include encryption of the firmware that controls access to the video game console and other software, as well as authentication checks that prevent the installation and

²² Entertainment Software Association, 2015 Essential Facts about the Computer and Video Game Industry, at 2 (Apr. 2015), http://www.theesa.com/article/150-million-americans-play-video-games/.

²³ 2017 ESA Essential Facts at 6.

²⁴ See, e.g., Xbox Entertainment, http://www.xbox.com/en-US/entertainment?xr=shellnav (last visited Feb. 7, 2018); Nintendo Wii U eShop, https://www.nintendo.com/wiiu/built-in-software#/nintendo-eshop (last visited Feb. 7, 2018); Nintendo Switch Hulu, https://www.nintendo.com/games/detail/hulu-switch (last visited Feb. 7, 2018); PlayStation Network, https://www.playstation.com/en-us/network/ (last visited Feb. 7, 2018).

²⁵ Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 77 Fed. Reg. 65,260, 65,274 (Oct. 26, 2012) ("2012 Final Rule").

²⁶ *E.g.*, H.R. Rep. No. 105–551, pt. 1, at 10 (1998) ("When copyrighted material is adequately protected in the digital environment, a plethora of works will be distributed and performed over the Internet.").

execution of unauthorized software and likewise protect access to media content.²⁷ These TPMs work in concert to create a secure media platform. However, the TPMs cease to serve their protective function once circumvented, and some unauthorized repairs to video game consoles may involve circumvention.

A modern game console cannot be used to run modified firmware or to load other software that has not been authorized for use on the console without first circumventing one or more TPMs. In many cases, successful circumvention requires users to bypass the encryption on the console firmware and successfully avoid authentication processes used to check for unauthorized software loaded to the console. Once a console's TPMs have been cracked, it can be used to play infringing copies of games, regardless of the user's intent. In some instances, circumvention of a console renders it unable to run properly licensed content. In addition, jailbreaking permits copying of other kinds of copyrighted works distributed through the console. The Register has repeatedly acknowledged these facts, finding that there is a strong link between jailbroken consoles and piracy.²⁸

ITEM E. ASSERTED ADVERSE EFFECTS ON NONINFRINGING USES

Section 1201 does not, and over the next three years will not, adversely affect the ability of consumers to have their video game consoles repaired or to make noninfringing uses of software on consoles. As a result, there is no basis for extending the exemption for motor vehicle repair to video game consoles.

1. An expanded exemption on circumvention should not be granted as to video game consoles because proponents fail to demonstrate the requisite adverse effects as to video game consoles.

"Those who seek an exemption from the prohibition on circumvention bear the burden of establishing that the requirements for granting an exemption have been satisfied."²⁹ With respect to adverse impact, "the proponent of an exemption must show by a preponderance of the evidence that the harmful impact on noninfringing uses of copyrighted works 'is more likely than not."³⁰ This showing must be made with "reliable, probative, and substantial evidence."³¹ No such showing has been made with respect to TPMs controlling access to copyrighted video game console software, video games, and other copyrighted works distributed through video game consoles.

²⁷ In the 2015 Triennial Proceeding, the Register compiled a robust record regarding the access controls that protect video game consoles. Those access controls have not meaningfully changed since the 2015 Proceeding. Information concerning the nature of TPMs on major consoles was attached to ESA's 2015 comment on proposed Class 23. *See* Statement of Peter Waxman (Microsoft); Statement of Dylan Rhoads (Nintendo); Statement of Anthony Justman (Sony), available at https://www.copyright.gov/1201/2015/comments-032715/.

²⁸ Register's 2015 Recommendation at 200 ("[J]ailbreaking of video game consoles leads to infringing activity."); Register's 2012 Recommendation at 43 ("[T]he circumvention of console restrictions – even when initially undertaken for salutary purposes – is inextricably linked to and tends to foster piracy.").

²⁹ Register's 2015 Recommendation at 13.

³⁰ *Id*. at 14.

³¹ *Id.* at 14 (citation omitted).

Here, EFF seeks to extend the carefully crafted exemption for repair, diagnosis, and modification of a motorized land vehicle to all devices with embedded software. However, EFF does not recognize any distinctions among types of devices as to the TPMs and methods of circumvention involved, the associated use cases, and the infringement that would be involved in circumvention or result from it. Nor does EFF perform the required statutory analysis at a sufficiently granular level to be meaningful. A fundamental principle governing this proceeding is that a "particular class of copyrighted works" subject to a Section 1201 exemption should "be a narrow and focused subset of the broad categories" of copyrighted works.³² The importance of that principle is illustrated by EFF's sweeping proposal here.

Although EFF would extend the existing exemption to video game consoles,³³ it barely mentions them in its comments.³⁴ EFF does not specify the console-based access controls that it seeks to circumvent and does not provide any particularized analysis of the adverse effects they purportedly impose on individuals seeking to make noninfringing uses of copyrighted material (either now or in the next three years). Further, EFF fails to assess whether the existence of alternative repair services are sufficient to mitigate any adverse effects. These failures provide sufficient basis to reject EFF's proposal.³⁵

In fact, there is no need for an exemption to permit circumvention of access controls for purposes of repairing video game consoles. Most obviously, Microsoft, Nintendo, and Sony all offer 12-month warranties for their consoles,³⁶ as well as low-cost options for out-of-warranty repairs. These warranty and repair services are fast and reliable, use authentic parts, can return consoles to conformance with factory specifications, and are well-rated by consumers. And of course, the console manufacturers "are able to offer repair services without the need to circumvent."³⁷ In 2015, the Register found the existence of warranty and repair options significant in rejecting a proposed console jailbreaking exemption that proponents justified, at least in part, on the basis of repair.³⁸ In the absence of any indication whatsoever from EFF that these options are insufficient, there is no reason for the Register to find otherwise in this proceeding.³⁹

³² H.R. Rep. No. 105-551, pt. 2, at 38 (1998) (internal quotation marks omitted).

³³ EFF Comments at 2.

³⁴ *Id.* at 2, 6 (asserting that proposed extension encompasses video game consoles, identifying jailbreaking of console as a desired use case, and foregoing any particularized analysis of whether application of exemption to consoles is warranted under governing legal framework).

³⁵ Register's 2015 Recommendation at 13-14.

³⁶ Repairs performed under these 12-month warranties are free of charge. Moreover, manufacturers offer guidance on how to troubleshoot issues with the console and, in doing so, avert the need for repair. *See, e.g., Troubleshooting before sending to PlayStation Service and Repair*, Sony (last visited Feb. 9, 2018),

https://support.us.playstation.com/articles/en_US/KC_Article/How-to-get-service-or-repair; Nintendo Switch, Troubleshooting & Repairs (lasted visited Feb. 11, 2018) https://en-americas-

support.nintendo.com/app/answers/landing/p/897/c/944; Xbox One, Console (last visited Feb. 11, 2018), https://support.xbox.com/en-US/browse/xbox-one/console.

³⁷ Register's 2015 Recommendation at 200-201.

³⁸ *Id*. at 196.

³⁹ Reasonable parties might disagree about the adequacy of this alternative with respect to consumer goods that *do not* implicate copyright law. However, there is no doubt that Congress intended Section 1201 to apply where, as in the case of video game consoles, TPMs ensure that copyright holders can control access to their protected works. 2012 Final Rule, 77 Fed. Reg. at 65,274; *see also* H.R. Rep. No. 105-551, pt. 1, at 10 (1998).

In addition to seeking an exemption for purposes of repair, EFF also suggests that the Register sanction "modification" and "tinkering."⁴⁰ In other words, EFF again asks the Register to sanction console jailbreaking. EFF makes no meaningful effort to supply evidence that adverse effects justify its request. Instead, it identifies a single instance in which jailbreaking occurred, enabling users "to run software of their choice, including installing the Linux operating system."⁴¹ In 2012, the Register rejected this basis for a jailbreaking exemption. In addition to finding that there were relatively few users of "homebrew" video games, the Register concluded that "independent development of video games and other applications can be pursued on thousands of other Linux-based devices and other platforms, as well as through various programs offered by the console manufacturers themselves."⁴² The Register reached the same conclusion in 2015.⁴³ These circumstances remain true today, and the even more sparse record in this proceeding provides no basis for revisiting the Register's long held view on this issue. EFF's request to circumvent access controls that protect the software on video game consoles – that is, to permit jailbreaking – should be rejected.

2. An expanded exemption on circumvention should not be granted as to game consoles because the expanded exemption would promote infringement.

It is also EFF's burden to show "that uses affected by the prohibition on circumvention are or are likely to be noninfringing."⁴⁴ Because EFF has not provided any particularized analysis of video game consoles, they have made no such showing.

In any event, while hardware repair may constitute noninfringing activity, circumventing access controls on console firmware for purposes of repair enables consoles to load and run infringing games.⁴⁵ Bypassing console TPMs for purposes of repair will likewise enable users to make infringing copies of other kinds of copyrighted works distributed through consoles, including television programs, movies, and other media. Because the current prohibition on circumvention inhibits a substantial amount of infringing use, and because extending the motor vehicle repair exemption to video game consoles will allow infringing uses to flourish, an extension for purposes of repair should be denied.⁴⁶

For the same reasons, the Register should also reject EFF's request to extend the existing exemption for purposes of modifying video game consoles apart from repair. As described above, the request is best understood as an attempt to permit console jailbreaking. In 2012 and 2015, the Register rightly concluded that there is a strong link between console jailbreaking and

⁴³ Register's 2015 Recommendation at 196, 200.

⁴⁰ EFF Comments at 2-3.

⁴¹ *Id*. at 6.

⁴² Register's 2012 Recommendation at 47; *accord* Register's 2015 Recommendation at 200.

⁴⁴ *Id.* at 14-15; *see also* NPRM 82 Fed. Reg. at 49551-52.

⁴⁵ See supra Part D.

⁴⁶ The Office's Section 1201 Report does not suggest a contrary result. United States Copyright Office, *Section 1201 of Title 17*, at 92, 94 (June 2017), https://www.copyright.gov/policy/1201/ (recognizing that exemption for repair activities must be "properly tailored" to ensure it does not create "a material risk of harm to the market for or value of copyrighted works" and suggesting that concerns about breadth or misuse of exemption be addressed through appropriate language).

piracy.⁴⁷ That conclusion remains true. For example, online forums continue to describe jailbreaking as a means to allow users to play unauthorized copies of games on consoles.

The firmware in video game consoles is a computer program protected by copyright, and that firmware protects highly valuable and expressive video games, as well as other copyrighted content available for play on consoles.⁴⁸ Copying and modifying the console firmware implicates the copyright owner's rights to control the reproduction and distribution of the firmware and the creation of derivative works. It also enables other infringement of games and media content. As the Register has concluded,⁴⁹ those activities are not a fair use:

- The purpose and character of the use is commercial and not transformative, because the primary reason many users seek to hack video game consoles is not to create new and different works, but to avoid paying the customary cost of acquiring existing works. That is a commercial use.⁵⁰ It is not a transformative use, because "the circumvented console code is serving the same fundamental purpose as is served by the unbroken code."⁵¹
- The nature of the copyrighted work does not support fair use, because the console firmware contains elements protected by copyright and, even if some elements of the console firmware are considered functional, the games, motion pictures and other works that are protected by the firmware are highly expressive.
- The amount and substantiality of the portion used is not reasonable, because virtually all of the hacks for video game consoles use nearly all of the code contained within the copyrighted computer programs.
- Jailbreaking harms the market for and value of copyrighted works, because "the compromised code can no longer serve as a secure platform for the development and distribution of legitimate content."⁵²

3. No exemption should be granted as to game consoles because the statutory factors weigh against such an exemption.

The Register has previously found that the statutory factors weigh against permitting a repair exemption for game consoles,⁵³ and nothing has changed in the last three years that would warrant a contrary conclusion in this proceeding.

With respect to the availability for use of copyrighted works, the Register has concluded that "console access controls encourage the development and dissemination of highly creative

⁴⁷ Register's 2015 Recommendation at 200; Register's 2012 Recommendation at 43.

⁴⁸ Register's 2012 Recommendation at 41, 43.

⁴⁹ Register's 2015 Recommendation at 200; Register's 2012 Recommendation at 44.

⁵⁰ A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004, 1015 (9th Cir. 2001).

⁵¹ Register's 2012 Recommendation at 41.

⁵² *Id*. at 44.

⁵³ Register's 2015 Recommendation at 200-01; Register's 2012 Recommendation at 47-48.

copyrighted works by facilitating secure platforms for the development and distribution of video games and other applications."⁵⁴ EFF makes no countervailing showing that extending the motor vehicle repair exemption to permit repair and modification of video game consoles will promote the availability of copyrighted works.

As to repair, EFF has not made any evidentiary showing that users' access to copyrighted works is negatively affected by an inability to circumvent TPMs in the circumstances where doing so may be needed to conduct unauthorized repairs.⁵⁵ As to modification, EFF's brief reference to a past instance of jailbreaking does not indicate that extending the exemption would increase the availability of works. In previous proceedings, the proponents of a console jailbreaking exemption made the argument that "homebrew" activities on consoles that have been jailbroken yield new works.⁵⁶ The Register rejected that argument, observing that there was little evidence of homebrew activity and that alternatives to jailbreaking consoles existed for purposes of creating new games.⁵⁷ The same remains true today,⁵⁸ and EFF did not try to show otherwise. Accordingly, as the Register has previously found, "console access controls, because they encourage the creation and distribution of valuable expressive works and do not foreclose independent channels of creative development, have the effect of increasing, rather than decreasing, the availability of copyrighted works."59

With respect to the availability of works for nonprofit archival, preservation, and educational purposes, EFF offers no evidence that users who repair or jailbreak consoles do so for these purposes. Moreover, the existing game preservation exemption adequately addresses any need for jailbreaking for these purposes.⁶⁰

With respect to any impact on criticism, comment, news reporting, teaching, scholarship, or research, the proponents of a console jailbreaking exemption tried to marshal evidence of such an impact in the 2012 proceeding. The Register found that evidence unpersuasive.⁶¹ In this proceeding, EFF has offered no evidence that users who repair or jailbreak their consoles do so for these purposes. In any event, the existing game preservation exemption also addresses scholarly purposes.⁶²

⁵⁴ Register's 2012 Recommendation at 48.

 $^{^{55}}$ Cf. id. at 48 (recognizing that proponents provided no evidence that access to copyrighted works is impaired by inability to repair consoles and determining that, on balance, first statutory factor counseled against exemption for purposes of jailbreaking consoles). ⁵⁶ Register's 2012 Recommendation at 47; *accord* 2015 Recommendation at 196, 200.

⁵⁷ Register's 2012 Recommendation at 47; accord 2015 Recommendation at 196, 200.

⁵⁸ Indeed, widely accessible and highly sophisticated applications now enable any individual to create high quality games. See, e.g., Unreal Engine, Frequently Asked Questions (last visited Feb. 9, 2018),

https://www.unrealengine.com/en-US/faq; see also Unity, About Unity (last visited Feb. 9, 2018),

https://unity3d.com/public-relations. These independently created games can be sold across several (legitimate) platforms. This renders it entirely unnecessary to jailbreak consoles for the purpose of playing homebrew games. In fact, because individuals - be they skilled programmers or hobbyists - can use widely available tools to create independent games, jailbreaking consoles and cracking other access controls will not enhance the market for games. ⁵⁹ Register's 2012 Recommendation at 49.

⁶⁰ See 37 C.F.R. § 201.40(b)(8)(ii).

⁶¹ Register's 2012 Recommendation at 49.

⁶² See 37 C.F.R. § 201.40(b)(8)(i)(B).

As to the effect of circumvention on the market for or value of copyrighted works, extending the exemption to permit repair (in circumstances where circumvention is required) and to permit jailbreaking would allow the widespread play of infringing games on consoles. As the Register explained in 2012:

[D]ue to the particular characteristics of the video game marketplace, the circumvention of access controls protecting a console computer program so that it can be copied and modified for the purpose of enabling unauthorized applications has the effect of decreasing the market for, and value of, that program, as it can no longer serve to facilitate a secure gaming platform. Further, by enabling the ability to obtain and play pirated games and other unauthorized content, the dismantling of console access controls undermines the value of legitimate copyrighted works in the marketplace, many of which require a substantial investment of creative and financial resources to create.⁶³

This factor weighs decisively against extending the motor vehicle repair exemption to game consoles.⁶⁴

One additional factor warrants consideration. Extending the existing motor vehicle repair exemption to video game consoles would leave users with the misimpression that they can traffic in circumvention tools to hack their video game consoles. This has at least two negative consequences. First, it may result in actual trafficking and thus increase the amount of infringing activity that occurs as a direct result of the exemption. Second, it will bring users into violation of the DMCA anti-trafficking provisions, which cannot be waived in this proceeding. These practical concerns counsel against granting the proposed extension.

* * *

The proponents of Class 7 have failed to meet their burden of establishing that the motor vehicle repair exemption should be extended to video game consoles. The Register should not recommend such an extension.

DOCUMENTARY EVIDENCE

ESA is not submitting any exhibits regarding this proposed class.

⁶³ Register's 2012 Recommendation at 49; *see also* Register's 2015 Recommendation at 200.

⁶⁴ EFF may assert that infringement is not a relevant consideration with respect to the proposed extension because it is intended to facilitate lawful purposes. The Register has previously rejected this argument. "Simply to suggest . . . that unlawful uses are outside the scope of the exemption and therefore of no concern is not a persuasive answer" to evidence demonstrating the link between circumvention and infringement. Register's 2012 Recommendation at 49.