UNITED STATES COPYRIGHT OFFICE

Petition to Renew a Current Exemption Under 17 U.S.C. § 1201

8th Triennial Rulemaking

Please submit a separate petition for each current exemption for which renewal is sought.

NOTE: Use this form if you want to renew a current exemption <u>without modification</u>. If you are seeking to engage in activities not currently permitted by an existing exemption, including those that would require the expansion of a current exemption, you must submit a petition for a new exemption using the form available at **https://www.copyright.gov/1201/2021/new-petition.pdf**.

If you are seeking to expand a current exemption, we recommend that you submit <u>both</u> a petition to renew the current exemption without modification using this form, <u>and</u>, separately, a petition for a new exemption that identifies the current exemption, and addresses only those issues relevant to the proposed expansion of that exemption.

ITEM A. PETITIONERS AND CONTACT INFORMATION

Please identify the petitioners and provide a means to contact the petitioners and/or their representatives, if any. The "petitioner" is the individual or entity seeking renewal.

J. Alex Halderman Professor of Computer Science & Engineering, University of Michigan Director, University of Michigan Center for Computer Security and Society Ann Arbor, MI jhalderm@eecs.umich.edu Represented by: Samuelson-Glushko Technology Law & Policy Clinic at Colorado Law Blake E. Reid, Director Mikaela Colvin, Student Attorney Boulder, CO blake.reid@colorado.edu Center for Democracy & Technology Stan Adams, Open Internet Counsel and Deputy General Counsel Washington, DC sadams@cdt.org U.S. Technology Policy Committee of the Association for Computing Machinery James Hendler, Chair Paul Hyland, Intellectual Property Subcommittee Chair Washington, DC acmpo@acm.org

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

PETITION TO RENEW A CURRENT EXEMPTION UNDER 17 U.S.C. § 1201 REV: 06/2020

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 website and use by Copyright Office staff for purposes of the rulemaking proceeding conducted pursuant to 17 U.S.C. § 1201(a)(1). NOTE: No other advisory statement will be given in connection with this application. Please keep this statement and refer to it if we communicate with you regarding this petition.

ITEM B. IDENTIFY WHICH CURRENT EXEMPTION PETITIONERS SEEK TO RENEW

Check the appropriate box below that corresponds with the current temporary exemption (see **37 C.F.R. § 201.40**) the petitioners seek to renew. Please check only one box. If renewal of more than one exemption is sought, a separate petition must be submitted for each one.

Motion Pictures (including television programs and videos):

- O Excerpts for educational purposes by college and university or K-12 faculty and students
- O Excerpts for educational purposes by faculty in massive open online courses ("MOOCs")
- O Excerpts for educational purposes in digital and literacy programs offered by libraries, museums, and other nonprofits
- O Excerpts for use in nonfiction multimedia e-books
- O Excerpts for use in documentary filmmaking or other films where use is in parody or for a biographical or historically significant nature
- O Excerpts for use in noncommercial videos
- O For the provision of captioning and/or audio description by disability services offices or similar units at educational institutions for students with disabilities

Literary Works:

- O Literary works distributed electronically (*i.e.*, e-books), for use with assistive technologies for persons who are blind, visually impaired, or have print disabilities
- O Literary works consisting of compilations of data generated by implanted medical devices and corresponding personal monitoring systems, to access personal data

Computer Programs and Video Games:

- O Computer programs that operate cellphones, tablets, mobile hotspots, or wearable devices (*e.g.*, smartwatches), to allow connection of a new or used device to an alternative wireless network ("unlocking")
- O Computer programs that operate smartphones, tablets and other all-purpose mobile computing devices, smart TVs, or voice assistant devices to allow the device to interoperate with or to remove software applications ("jailbreaking")
- O Computer programs that control motorized land vehicles, including farm equipment, for purposes of diagnosis, repair, or modification of the vehicle, including to access diagnostic data
- O Computer programs that control smartphones, home appliances, or home systems, for diagnosis, maintenance, or repair of the device or system
- Computer programs for purposes of good-faith security research
- O Computer programs other than video games, for the preservation of computer programs and computer program-dependent materials by libraries, archives, and museums
- O Video games for which outside server support has been discontinued, to allow individual play by gamers and preservation of games by libraries, archives, and museums (as well as necessary jailbreaking of console computer code for preservation uses only), and discontinued video games that never required server support, for preservation by libraries, archives, and museums
- O Computer programs that operate 3D printers, to allow use of alternative feedstock

ITEM C. EXPLANATION OF NEED FOR RENEWAL

Provide a brief explanation summarizing the continuing need and justification for renewing the exemption. The Office anticipates that petitioners may provide a paragraph or two detailing this information, but there is no page limit. While it is permissible to attach supporting documentary evidence as exhibits to this petition, it is not necessary. Below is a hypothetical example of the kind of explanation that the Office would regard as sufficient to support renewal of the unlocking exemption. The Office notes, however, that explanations can take many forms and may differ significantly based on the individual making the declaration and the exemption at issue.

Prof. Halderman is a computer scientist whose research focuses on computer security and privacy, with an emphasis on problems that broadly impact society and public policy, including software security, network security, data privacy, anonymity, electronic voting, censorship resistance, computer forensics, ethics, and cybercrime. He regularly conducts good faith security research on a variety of computer programs on devices and machines. These devices include voting machines, smartphones, and home routers, printers, and other "Internet of things" devices. He is especially well-positioned to speak to the ongoing necessity of renewing the current exemption for good faith security research on such devices because of his first-hand knowledge of the security research industry and his experience as an active participant in past triennial reviews for exemptions intended to mitigate the potential adverse effects resulting from legitimate security research. More specifically:

• In 2008, Prof. Halderman sought and received an exemption in connection with his non-infringing research into security flaws in digital rights management technologies included with sound recordings on compact discs.

• In 2010, Prof. Halderman sought and received an exemption in connection with his non-infringing research into security flaws in digital rights management technologies included with video games.

• In 2015, Prof. Halderman, in collaboration with several other security researchers, sought and received the existing exemption for security research.

• In 2018, Prof. Halderman advocated for the careful refinement and expansion of the existing exemption for security research to ensure that legitimate security research was encouraged and supported while continuing to mitigate the potential adverse effects of this research.

The Center for Democracy & Technology ("CDT") is a nonprofit public interest organization that supports laws, corporate policies, and technical tools to protect the civil liberties of Internet users and represents the public's interest in maintaining balanced copyright policies and a secure digital environment. CDT supports the clear and predictable application of laws and exemptions so that security researchers can perform beneficial research with certainty, and has advocated for a broad exemption to Section 1201's prohibition on the circumvention of technological protection measures in the 2015 and 2018 triennial rulemakings.

ACM (the Association for Computing Machinery) is the world's largest educational and scientific computing society. The ACM U.S. Technology Policy Committee (USTPC) serves as the focal point for ACM's interaction with the U.S. government in all matters of U.S. public policy related to information technology. USTPC's membership is comprised of individual computer scientists, educators, researchers, and other technology professionals. In the sixth triennial rulemaking, ACM's U.S. policy committee (renamed USTPC in 2018) strongly endorsed and documented the need for a new security research exemption to Section 1201 of the Digital Millennium Copyright Act (DMCA) in 2015 comments to the Copyright Office. Subsequently, in a 2017 filing in the last such proceeding, the Committee urged both renewal and expansion of that exemption. ACM first formally engaged with the Copyright Office on the matter of DMCA exemptions in February of 2000.

In the judgment of the petitioners, the concerns underlying the Office's decision to recommend the exemption remain and have been exacerbated since the previous rulemaking. For example:

ITEM C. EXPLANATION OF NEED FOR RENEWAL (CONT'D)

 In light of significant national concerns over the integrity of our election systems, there is now even greater urgency to find and detect any vulnerabilities in voting machines and other systems involved in the election process. However, vendors remain generally resistant to allowing research on their products. Moreover, voting depends on the security of commercial off-the-shelf technology, including tablet computers used to sign voters in at a polling place, printers used to print paper ballots, and—increasingly, due to COVID-19, voters' own computers or smartphones used to remotely download, mark, or return ballots for remote voting.

• The increasing proliferation of various and increasingly personal consumer devices such as in-home voice-controlled digital assistants, residential security cameras, medical devices/systems, and connected vehicles, comprising in part the Internet of Things (IoT), has increased the urgency to study and mitigate vulnerabilities, including those that have led to large-scale attacks leveraging the insecurity of IoT products.

• Compared to three years ago, (1) people are more reliant on digital systems; (2) threat actors, including nation states, have become more aggressive; and (3) it is now a universally accepted proposition among governmental actors and other stakeholders that cybersecurity must be a top national policy priority.

Moreover, no circumstances have arisen to change the reality that security research is a fundamentally non-infringing activity protected by the First Amendment and largely attenuated from legitimate copyright concerns. If the exemption is not renewed, the potential for Section 1201 to continue to adversely affect security researchers from engaging in these activities—in service of a significant national priority—is unquestionable. Accordingly, the Librarian and the Office should renew the exemption.

ITEM D. DECLARATION AND SIGNATURE

The declaration is a sworn statement made under penalty of perjury, and must be signed by one of the petitioners named above.

I declare under penalty of perjury under the laws of the United States of America that the following is true and correct:

- Based on my own personal knowledge and experience, I have a good faith belief that but for the above-selected exemption's continuation during the next triennial period (October 2021 – October 2024), technological measures controlling access to relevant copyrighted works are likely to diminish the ability of relevant users to make noninfringing uses of these works, and such users are likely to rely upon the above-selected exemption during the next triennial period.
- 2. To the best of my knowledge, there has not been any material change in the facts, law, or other circumstances set forth in the prior rulemaking record (available at https://www.copyright.gov/1201/2018) that originally demonstrated the need for the above-selected exemption, such that renewal of the exemption would not be justified.
- 3. To the best of my knowledge, the explanation provided in Item C above is true and correct, and supports the above statements.

Name/Organization:

If the petitioner is an entity, this declaration must be signed by an individual at the organization having appropriate personal knowledge.

J. Alex Halderman

Signature:

This declaration may be signed electronically (e.g., "/s/ John Smith").

/s/ J. Alex Halderman

Date:

July 16, 2020