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

Item 1. Commenter Information

This reply comment is respectfully submitted by Public Knowledge. Public Knowledge is a nonprofit organization dedicated to representing the public interest in digital policy debates. Public Knowledge promotes freedom of expression, an open internet, and access to affordable communications tools and creative works.

Sherwin Siy (ssiy@PublicKnowledge.org) or Raza Panjwani (raza@PublicKnowledge.org) as Public Knowledge’s authorized representatives in this matter. Public Knowledge’s contact information is as follows:

Public Knowledge  
1818 N St. NW Suite 410  
Washington, DC 20036  
(202) 861-0020

Item 2. Proposed Class Addressed

This reply comment addresses Proposed Class 26: Software – 3D Printers

Item 3. Statement Regarding Proposed Exemption

Public Knowledge submits this Reply Comment in support of the proposed exemption for Class 26: Software – 3D Printers. In particular, we wish to respond to a number of arguments raised by Stratasys, Ltd. (“Stratasys”) in its comments filed in opposition to the granting of this exemption.

A. Technological Protection Measures and Methods of Circumvention Have Been Identified.

In its December 12, 2014 Notice of Proposed Rulemaking (“NPRM”), the Copyright Office (the “Office”) outlined the requirement for identifying technological protection measures (“TPM”) as follows: “[t]he description should provide sufficient information to allow the Office to understand the nature and basic operation of the relevant technologies, as well as how they are disabled or bypassed.”¹ The Office has not requested a disclosure of technical details. In our comments we identified what we believe to be one example of a TPM used in this class of work, and noted that the TPM might be circumvented either through software (code) or hardware.

(physical methods). In an abundance of caution, we chose not to provide additional detail in a public filing.

In its comments, Stratasys argue that the exemption should be denied because we have not provided “sufficient information about the circumvention [we] seek to facilitate” and therefore the “Librarian cannot evaluate whether the act of circumvention creates an infringing copy[.]”\(^2\)

As a first matter, there is no basis in either the statute or the NPRM for a requirement that proponents disclose circumvention methods in technical detail. As a second matter, the Register and Librarian’s determination of non-infringement is related to the requested use, not the method of circumvention.\(^3\)

As a final matter, notwithstanding our position that such a disclosure is not required, Stratasys provides the detailed description of circumvention methods in its comments that are allegedly lacking from our comments, thereby curing the claimed deficiency in the record.\(^4\)

As Stratasys notes, chip-verification based TPMs can be circumvented by either copying factual information from a verification chip to a third-party chip, or by recycling and reprogramming an original chip with information about the third-party replacement feedstock.\(^5\)

**B. Non-Infringing Uses Have Been Identified**

The Office’s NPRM requests that proponents of exemptions “[e]xplain the asserted noninfringing use(s) of copyrighted works said to be facilitated by the proposed exemption.”\(^6\)

In our comments we observed that the use of third-party replacement feedstock in 3D printers would not infringe the copyright in any software which effectively restricted the use of such refills, in part because Congress has recognized the right of consumers to use and modify software.\(^7\)

Stratasys argues that use of third-party feedstock is not a non-infringing use. Curiously, one argument is that some TPMs that prevent use of third-party feedstock do not control access to a copyrighted work, and therefore no exemption can be granted.\(^9\)

Given that device manufacturers have proven that they are more than happy to bring and litigate anticircumvention claims despite the lack of an underlying copyrighted work,\(^10\) we do not think it should be a bar to granting an exemption that would forestall such abusive litigation. At a minimum, the fact that some TPMs that prevent use of third-party replacement feedstock do not control access to a copyrighted work should not prevent the Librarian from crafting and granting an exemption covering those cases where the TPM does control access.

\(^2\) Comments of Stratasys, Ltd. In Opposition to Proposed Class 26: Software or Firmware in 3D Printers To Allow Use of Non-Manufacturer-Approved Feedstock, March 27, 2015, at 12-13

\(^3\) NPRM at 73858. “Explain the asserted noninfringing use(s) of copyrighted works said to be facilitated by the proposed exemption.”

\(^4\) Comments of Stratasys, at 9-10.

\(^5\) Id.

\(^6\) NPRM at 73858

\(^7\) Long Comment Submission of Public Knowledge and Library Copyright Alliance, February 6, 2015, at 6-7.

\(^8\) 17 U.S.C. 117

\(^9\) We note that Stratasys retained outside counsel to produce a 30 page brief, and an economic expert to produce a 13 page expert report, in opposition to an exemption that they argue may have no impact on copyrighted works.

\(^10\) Lexmark Intern. v. Static Control Components, 387 F.3d 522 (6th Cir. 2004)
Stratasys further argues that “unauthorized modification of system software and firmware to change how the 3D printer interacts with materials... would likely constitute the creation of an unauthorized derivative work.”\textsuperscript{11} However, as mentioned above (and conceded by Stratasys\textsuperscript{12}), 17 U.S.C. §117 facilitates the modification of software by owners of a copy of the software in the context of utilizing the software in conjunction with a machine (the printer) is expressly not an infringement.\textsuperscript{13}

\textbf{C. The Statutory Factors Favor an Exemption}

To its credit, Stratasys is open as to the real benefit of using TPMs to prevent the use of third-party replacement feedstock in 3D Printers: “[p]rinter manufacturers rely on anticipated revenue streams from the sale of materials in order to make printers available at attractive prices.” This may be true, but it is not the concern of copyright law.

Stratasys argues that the statutory factors support a denial of the exemption request. We disagree, and believe that the Librarian’s Final Rules in 2006 and 2010 with respect to cell phone unlocking provide a roadmap for evaluating the statutory factors with respect to this exemption request: “[t]he reason [the first] four factors appear[] to be neutral is that in this case, the access controls do not appear to actually be deployed in order to protect the interests of the copyright owner or the value or integrity of the copyrighted work; rather they are used by wireless carriers to limit the ability of subscribers to switch to other carriers, a business decision that has nothing to do whatsoever with the interests protected by copyright.”\textsuperscript{14} Here, Stratasys has many concerns which it believes justify denying the exemption in addition to pure price control, such as quality control and safety. What all of Stratasys’s concerns share in common is that none of them concern the rights of authorship in the software that limits use of third-party replacement feedstock. Similarly, with respect to the fifth factor and unlocking cellphones, the 2010 Final Rule states: “[b]ecause there appear to be no copyright-based reasons why circumvention under these circumstances should not be permitted, the Register recommends that the Librarian designate a class of works...”\textsuperscript{15} We believe the same reasoning applies here. Stratasys is not in the business of creating and selling software, and this exemption request will not result in the mass piracy of 3D printer firmware.

\textbf{D. Other Concerns}

The NPRM asks with respect to Class 26 the extent to which 3D printers without access controls are available, and whether their existence obviates the need for an exemption. In brief, the answer is that the existence of such printers would not obviate the need for an exemption. The ecosystem of 3D printers is vast – different models of printers offer different capabilities, in terms of the materials they can handle, in terms of their methods of “printing”, in terms of the fineness in resolutions that they are capable of printing, etc. The existence of some access control

\textsuperscript{11} Comments of Stratasys, at 14.
\textsuperscript{12} Comments of Stratasys, Fn. 58
\textsuperscript{13} No opponent has either argued or presented evidence suggesting that owners of 3D printers do not own the embedded software.
free models on the market does not mean that users have access to the full range of 3D printer technologies without access control restrictions. In addition, we believe that the existence of an alternative that requires spending more money (e.g. buying another printer) is never a reasonable alternative for permission to make an otherwise lawful use of something already in the user’s possession.

As to Stratasys’s array of concerns tied to the nature of 3D Printers – namely that they are finely tuned machines that should only be used as directed, for reasons of quality control and user safety – these are not new, and do not necessitate reliance on a new remedy. Stratasys has many other mechanisms to legally discourage users from attempting to alter their machines or use third-party replacement feedstock, from warning stickers, to disclaimers of warranty and liability. These are not problems for copyright law to solve.