

**Before the  
UNITED STATES COPYRIGHT OFFICE  
Library of Congress  
Washington, D.C.**

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**In the Matter of:**

**Section 1201 Study  
Notice of Inquiry and  
Request for Additional Comments**

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**Docket No. 2015-8**

**Additional Comments of  
International Imaging Technology Council and Static Control Components, Inc.**

International Imaging Technology Council (“I-ITC”) and Static Control Components, Inc. (“Static Control”) appreciate this opportunity to submit these additional comments on the questions and issues posed by the Copyright Office in the September 27, 2016 Notice of Inquiry in support of its Section 1201 Study.

**I. Background**

International Imaging Technology Council represents the interests of the imaging supplies industry, including office-machine retail and repair, office-supply retail, computer retail, repair and networking companies, and all related industry suppliers. An estimated 2,000 domestic businesses employ some 50,000 people in the United States to recondition and repair office imaging supplies. In 2014, consumers spent more than \$13 billion for repair and maintenance of electronic and precision equipment, approximately \$6 billion of which was attributable to computer and office machine repair and maintenance.<sup>1</sup> Approximately 30% of toner and ink-jet cartridges sold last year were aftermarket products, at a price approximately 50-60% less than new cartridges sold by the original equipment manufacturer.

Static Control began in 1987 and is headquartered in Sanford, North Carolina. Static Control employs approximately 800 workers and manufactures and sells printer components and supplies, including microchips that it sells to third-party companies for use in the repair and remanufacture of toner and inkjet cartridges. Static Control also, regrettably, has extensive experience in complex litigation entailing Section 1201 anti-circumvention and reverse engineering, as well as patent, copyright, contract, antitrust, and Lanham Act false advertising issues.<sup>2</sup>

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<sup>1</sup> U.S. Census Bureau, 2014 Annual Services Report, Table 2: Estimated Revenue by Tax Status for Employer Firms: 2007 through 2014, [www.census.gov/services/index.html](http://www.census.gov/services/index.html).

<sup>2</sup> *Lexmark Int’l Inc. v. Static Control Components, Inc.*, 572 U.S. \_\_\_, 134 S. Ct. 1377 (2014); *Lexmark Int’l Inc. v. Static Control Components, Inc.*, 387 F.3d 522 (6th Cir. 2004).

For more than 150 years, the right of businesses and consumers to repair equipment has been a central tenet of patent law. But since the passage of the DMCA, the imaging products repair industry has been shrouded in a “cloud of uncertainty [that] discourages perfectly reasonable and legal activity.”<sup>3</sup> Companies that repair products controlled by functional software, such as printers and printer cartridges, garage door openers, and auto parts, have battled original equipment manufacturers to re-establish their right of repair under the laws of patent exhaustion, copyright exhaustion, and DMCA Section 1201.

Static Control was the first in the imaging industry to face litigation under the DMCA, and successfully defended against one of the most notorious attempts to use Section 1201 against aftermarket competition. In 2003, Static Control petitioned for an exemption from Section 1201, and appeared at a hearing conducted by the Copyright Office to advocate why Section 1201 should not apply to circumvention of a technological measure intended to lock-out competition for remanufactured printer cartridges.<sup>4</sup> From that hearing to the present proceeding, a broad consensus of opinion has supported the Sixth Circuit’s holding that Section 1201 should not cover these types of circumventions.<sup>5</sup>

Despite these victories, printer manufacturers continue to apply technological measures designed to shut out aftermarket competition.<sup>6</sup> These companies need to be able to repair products and ensure that they interoperate with other devices, without fear of being hauled into court. This uncertainty was noted by the former Register of Copyrights, the National Telecommunications and Information Administration (NTIA), Public Knowledge, and the Library Copyright Alliance as grounds for a proposed and later accepted exemption for 3D printers.<sup>7</sup> To address the continuing attempts of intellectual property owners to expand their rights under the DMCA in contravention of the intent of the legislation, I-ITC and Static Control support an express exemption to both the anticircumvention and trafficking provisions. Such an

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<sup>3</sup> Public Knowledge and Library Copyright Alliance, Long Comment Regarding a Proposed Exemption Under 17 U.S.C. §1201, at 3 (Feb. 6, 2015 (“Public Knowledge and LCA Supp.”)).

<sup>4</sup> See Anticircumvention Rulemaking Hearing (May 9, 2003) <http://www.copyright.gov/1201/2003/hearings/transcript-may9.pdf>

<sup>5</sup> See, *Chapter 12 of Title 17: Hearing Before the Subcomm. On Courts, Intellectual Property, and the Internet of the H. Comm. on the Judiciary*, 113<sup>th</sup> Cong. (2014) at 1-2, 4 (comments of Rep. Marino), at 64 (comments of Ranking Member Conyers) and 77-78 (comments of Rep. Farenthold); Transcripts of the U.S. Copyright Office Public Roundtable on Section 1201, Section 1201 Study, May 19, 2016 at 26-27, 50 (comments of Jonathan Zuck, ACT The App Association) and 65 (comments of Raza Pajwani, Public Knowledge); May 20, 2016 at 25 (comments of Seth Greenstein, Auto Care Association) and 76 (comments of James Love, Knowledge Ecology Int’l); May 25, 2016 at 56 (comments of Ben Sheffner, MPAA), 69 (comments of Susan Chertkof, RIAA), 69-71 (comments of Professor Pamela Samuelson, Univ. of Cal., Berkeley), and 71 (comments of Mitch Stoltz, Electronic Frontier Foundation).

<sup>6</sup> See, e.g., Alex Hern, “HP ‘timebomb’ prevents inkjet printers from using unofficial cartridges,” *The Guardian* (Sept. 20, 2016) available online at <https://www.theguardian.com/technology/2016/sep/20/hp-inkjet-printers-unofficial-cartridges-software-update>; James Walker, “HP printer ‘timebomb’ leaves third-party ink cartridges unusable,” *Digital Journal*, (Sept. 19, 2016) available online at <http://www.digitaljournal.com/tech-and-science/technology/hp-printer-timebomb-leaves-third-party-ink-cartridges-unusable/article/475211>

<sup>7</sup> U.S. COPYRIGHT OFFICE, SECTION 1201 RULEMAKING: SIXTH TRIENNIAL PROCEEDING TO DETERMINE EXEMPTIONS TO THE PROHIBITION ON CIRCUMVENTION, RECOMMENDATION OF THE REGISTER OF COPYRIGHTS at 361 (2015), <http://copyright.gov/1201/2015/registers-recommendation.pdf> (citing Public Knowledge and LCA Supp. at 3, 10); NTIA, SIXTH TRIENNIAL SECTION 1201 RULEMAKING, RECOMMENDATIONS OF THE NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION TO THE REGISTER OF COPYRIGHTS, at 90, Sep. 18, 2015 (“2015 NTIA Recommendation”) ((internal citations omitted)).

exemption is justified by the need to secure, to businesses and consumers, a meaningful exercisable right to access, repair, replace, and customize products and parts that include control software. Specifically, as Static Control recommended in its initial March 3, 2016 comments in this proceeding, legislative action to amend Section 1201 is needed to—

- Confirm that circumvention of technological measures is permissible to repair and refurbish products and parts whose functional operation is controlled by embedded software;
- Confirm that such circumvention is allowed to enable interoperability of repaired or replacement parts with the original equipment, and to develop new interoperable software that replaces or augments the functionality of the original equipment software; and,
- Extend the exemptions for anti-circumvention to the anti-trafficking provisions.

## **II. Comments to Subjects of Notice of Inquiry**

### **A. Section 1(c): Computer Programs**

The imaging products aftermarket provides a paradigmatic example of the abuses of Section 1201 that amply justify these exemptions. Increasingly, printer manufacturers, seeking to preserve their market share for the lucrative consumable replacement ink jet and toner cartridges, apply a technological measure that disables printer functionality in the presence of an “unauthorized” cartridge made or remanufactured by a competitor. In some cases, the printer manufacturer registered a copyright over a minuscule software program and embedded it in a chip on a cartridge, specifically to leverage the DMCA anticircumvention laws and penalties against competitors.<sup>8</sup> Although thus far companies have successfully defended against these specious claims, the threat of crippling damages and injunctive relief, and the expense and disruption of “bet the company” litigation, chills legitimate innovation and competition.

I-ITC and Static Control submit that the law should prevent companies from devising clever tactics that improperly attempt to restrict repair and interoperation and reduce confidence in the copyright law. Many companies have misused TPMs and access controls in an attempt to protect an unprotected product rather than an expressive or original copyrighted work. Concerns over such misuse of Section 1201 to reach “anti-competitive goals” were echoed by the NTIA in its recommendations to the Copyright Office.<sup>9</sup> As NTIA warned, such a “fundamental misuse of § 1201 ... can lead to the reduced respect for the DMCA and copyright law.”<sup>10</sup>

In many cases, manufacturers substitute software to control or perform operations that could have been performed, and in the past were performed, in hardware. This software shares common characteristics: it is primarily functional; it is embedded in the product permanently or in firmware; it is protected against alteration by anyone other than the original equipment

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<sup>8</sup> The district court in the *Lexmark* case held on summary judgment that the program code embedded on Lexmark’s cartridge chip that was asserted to have been protected by Lexmark’s technological protection measure lacked the requisite originality and was not copyrightable. *Lexmark Int’l v. Static Control*, 5:04-cv-00084-GFVT, Dkt. 975 at 7 (E.D. Ky. Apr. 18, 2007).

<sup>9</sup> 2015 NTIA Recommendations at 7.

<sup>10</sup> *Id.*

manufacturer or its “authorized” service representative; it is not intended to transmit or display another copyrightable work to the user; and it is used specifically to control the operation of physical machine components and products. The Copyright Act has encountered this type of software before in other contexts, and has found it necessary and just to create an exception to the Section 106 distribution right to avoid absurd results contrary to the public interest.<sup>11</sup>

Repairs and modifications that in the past could have been made to hardware now must be done in software. Currently, whether the purpose of a specific circumvention falls under the doctrine of fair use or within the interoperability realm is a decision done on a case-by-case, court-by-court basis, which risks inconsistent results and threatens innovation.<sup>12</sup> Aftermarket competitors should not have to face an additional threshold anticircumvention claim even before reaching the questions of fair use or interoperability. The Copyright Office should make clear that these repair activities remain lawful, and are not precluded by Section 1201.

Companies should not be able to use the DMCA to restrict interoperability or competition, as they are necessary and lawful components for advancement and innovation of intellectual property. Toward that end, I-ITC and Static Control request that the Copyright Office adopt a permanent exemption for circumvention for the purpose of repair, and advocate legislative action to protect lawful repair against these types of claims under Section 1201(a) and (b). These regulatory and legislative actions should insulate from liability all activities normally incident to repair of physical products, and particularly products with embedded software. Specifically, these measures must protect:

- (1) gaining access to the embedded software<sup>13</sup>
- (2) making interim copies of the software to facilitate analysis
- (3) decompiling the software
- (4) analyzing the software
- (5) accessing, copying, decompiling, and analyzing any software with which the embedded software interacts, to the extent necessary to facilitate interoperability
- (6) revising, augmenting, or replacing all or part of the software code in order to repair or customize the operation of the component or product, and
- (7) making, using, and trafficking in tools that make these specific repair activities possible (including circumvention of technological protection measures, and decompilation, revision, and replacement ).

We recognize that the Copyright Office may take that position that a rulemaking exemption may not reach all of these activities necessary and incident to lawful repair. Nevertheless, the

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<sup>11</sup> See 17 U.S.C. § 109(b)(1)(B)(i) (first sale exemption for software “embodied in a machine or product and which cannot be copied during the ordinary operation or use of the machine or product”).

<sup>12</sup> See generally *Lexmark Int’l, Inc. v. Static Control Components, Inc.*, 387 F.3d 522 (6th Cir. 2004); *Sega Enterprises, Ltd. v. Accolade, Inc.*, 977 F.2d 1510 (9th Cir. 1993) (use of copyrighted computer work to gain understanding of unprotected functional elements was fair use); *Chamberlain Group, Inc. v. Skylink Tech., Inc.*, 381 F.3d 1178 (Fed. Cir. 2004) (universal transmitter that allowed consumers to access copyrighted software embedded in manufacturer’s “rolling code” garage door openers did not violate anticircumvention section of DMCA).

<sup>13</sup> “Software” as used in these comments should be understood to also include the types of data tables and compilations commonly used to set machine parameters. Such data represents functional operations rather than copyrightable expression (for example, print speeds or ink or toner deposit), and so should not be copyrightable in the first place. To the extent a collection of these data could be considered copyrightable, the ability to alter or replace these parameters is essential to repair and customizing machine performance.

granting of a permanent exemption to the limits of Section 1201 will instruct the courts that repair and interoperability are lawful fair uses even if circumvention or copying is required to allow that repair or interoperability. The granting of that permanent exemption also should give aftermarket manufacturers and repair services confidence that they should prevail against any attempts to enforce the anticircumvention or anti-trafficking provisions against activities that otherwise are permissible under patent and copyright law.

We suggest below for your consideration the text of a permanent exemption, whereby the prohibition against circumvention in Section 1201(a) shall not apply to persons who engage in noninfringing uses of the following class of copyrighted works:

Computer programs, as defined in 17 U.S.C. § 101, that control access to or operation of a physical machine or device, including a component or part thereof, where the circumvention is undertaken to effectuate repair, customization, or replacement of the functional operations of such machine or device.

#### B. Section 3: Anti-Trafficking Provisions

Exemptions from the anti-trafficking provisions of Section 1201(a) and (b) are fundamental to the right to engage in noninfringing conduct that the Librarian believes should be available to businesses, institutions, and individuals. Our industry has firsthand experience with the level of sophistication required to understand and lawfully circumvent the technological measures applied by original equipment manufacturers. For nearly 20 years, remanufacturers have dedicated months of effort to analyze and solve each OEM technology measure, only to be undone by a new OEM chip or firmware download that starts the cat-and-mouse game all over again. Circumvention of these measures requires skill and tools that are not available to most remanufacturers, and almost certainly not to the typical owner of a computer ink jet or laser printer. Few companies, like Static Control, have the ability or have committed the resources to reverse engineer these technological measures in order to make compatible solutions available for remanufacturers.

Two weapons used by companies intending to impose unlawful and anticompetitive restrictions are the anti-trafficking provisions of Section 1201(a)(2) and 1201(b). The underlying requirement for each prong of liability in the anti-trafficking provisions is that the work must be “protected under this title.”<sup>14</sup> Thus, the work must have copyright protection before any of these provisions may be applied. However, as discussed above, business models that protect uncopyrightable products, code, and data have been used in anticompetitive ways to block interoperability and to lay claim to rights not granted under intellectual property laws. The anti-trafficking provisions need to be amended to clarify that repair and interoperability are lawful fair uses even if circumvention or copying is required to allow said repair or interoperability.

I-ITC and Static Control believe that the right to develop circumvention tools is implicit in the grant of an exemption. The right to circumvent is meaningless without the means to circumvent. As explained above, the means to circumvent are generally unavailable without the assistance of companies capable of devoting the skill, time, and expense to develop the necessary tools. Congress did not intend the exemptions to be mere paper promises, and it would have

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<sup>14</sup> 17 U.S.C. §§ 1201(a)(2) and 1201(b).

been pointless for Congress to instruct the Librarian to undertake a triennial review only to define exemption rights that can never be exercised. Therefore, Section 1201(a) exemptions properly should be interpreted to include exemptions to the anti-trafficking prohibitions.

If the Librarian of Congress concludes that she lacks authority to adopt exemptions for the anti-trafficking prohibitions in Section 1201(a)(2) or (b), congressional action and legislation are needed to extend such rights.<sup>15</sup> Otherwise, a lawful act of creating and developing a work under one portion of Section 1201 would be barred from being manufactured, imported, or sold, and the majority of consumers who are entitled to the exemption would see no benefit from it.<sup>16</sup> Therefore, extending the exemptions to anti-trafficking provisions not only makes common sense, but harmonizes the letter of the legislation with its plain intent.

I-ITC and Static Control thank the Copyright Office for this opportunity to submit additional comments. We respectfully request that the Copyright Office recommend to Congress to amend Section 1201 so that lawful repair and interoperability cannot be impeded by claims of circumvention or trafficking in circumvention tools; and that the Librarian adopt a permanent exemption from the anti-circumvention and the anti-trafficking provisions in order to enable otherwise lawful repair, customization, and replacement of products and parts with embedded software. We look forward to reviewing the comments of others, and to the opportunity to provide further comments in reply.

Respectfully submitted,

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<sup>15</sup> Copyright Office, Library of Congress, *Final Rule: Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies*, 37 C.F.R. 201, Docket No. 2014-07, Effective Oct. 28, 2015, dated Oct. 20, 2015, available at <http://federalregister.gov/a/2015-27212>.

<sup>16</sup> 17 U.S.C. §§ 1201(a)(2) and 1201(b).