

***Lexmark International, Inc. v. Static Control Components:
Enjoining Proper Usage of the Digital Millennium Copyright
Act's Anti-Circumvention Provisions***

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I. Introduction

Since the adoption of the Digital Millennium Copyright Act² (“DMCA”) in 1998, the courts have failed to fully define the scope of which copyrighted works are protected by the anti-circumvention provisions.³ Courts have struggled to define this scope because Congress promulgated the DMCA in the context of promoting commerce over the Internet.⁴ Congress, however, drafted the DMCA anti-circumvention provisions with such broad and arguably unambiguous language⁵ that courts have been hard-pressed to limit the application of the provisions to Internet commerce.⁶ Yet, not until *Lexmark International, Inc. v. Static Control Components*⁷ had a court interpreted the scope of the anti-circumvention provisions as broad enough to protect purely functional, not independently marketed, copyrighted works.⁸

This Recent Development uses *Lexmark* as a case study and comes to the conclusion that although the anti-circumvention provisions seem to apply to the *Lexmark* facts courts should not

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² See Digital Millennium Copyright Act of 1998, Pub. L. 105-304, 112 Stat. 2860 (1998) (codified at 17 U.S.C. § 1201 (1998)).

³ 17 U.S.C. § 1201.

⁴ THE DIGITAL MILLENIUM COPYRIGHT ACT OF 1998, S. REP. NO. 105-190, at 2 (1998) [hereinafter DMCA S. REP.].

⁵ See 17 U.S.C. § 1201(a)(2)(A)–(C).

⁶ See *Sony Computer Entm't v. Connectix Corp.*, 203 F.3d 596 (9th Cir. 2000); *Sony Computer Entm't v. Gamemasters*, 87 F. Supp. 2d 976 (N.D. Cal. 1999).

⁷ 253 F. Supp. 2d 943, 943–74 (E.D. Ky. 2003) (trial scheduled for May 2004).

⁸ Brief of Amicus Curiae of Law Professors at 7, *Lexmark* (No. 02-571-KSF), at http://www.scc-inc.com/special/oemwarfare/lexmark_vs_scc.htm (Jan. 30, 2003) (on file with the North Carolina Journal of Law & Technology) [hereinafter *Lexmark* Amicus Brief].

allow plaintiffs to use the anti-circumvention provisions to protect purely functional and not independently marketed copyrighted works because doing so leads to outcomes that are contrary to public policy.

This Recent Development first examines the history of the creation of the DMCA and the DMCA's anti-circumvention provisions. Next, this Recent Development considers the *Lexmark* case and analyzes the reasoning the *Lexmark* court used to determine the plaintiff was likely to succeed on the merits of its anti-circumvention claim. Against this backdrop, this Recent Development considers the policy implications of allowing plaintiffs to use the anti-circumvention provisions to protect purely functional, not independently marketed, copyrighted works. This Recent Development then argues that because of negative policy implications, the *Lexmark* court should not have applied the anti-circumvention provisions. Finally, this Recent Development briefly examines *Real Networks Inc. v. Streambox, Inc.*, a case in which a court correctly applied the anti-circumvention provisions.

II. History and Purpose of the Digital Millennium Copyright Act

As mandated by the World Intellectual Property Organization Copyright Treaty,⁹ Congress codified the Digital Millennium Copyright Act ("DMCA") in 1998.¹⁰ Congress promulgated the DMCA to "facilitate the robust development and world-wide expansion of electronic commerce, communications, research, development, and education in the digital age."¹¹ When enacting the law, Congress focused on the narrow topics of electronic commerce and online marketplaces, as evidenced in the Senate Report:¹²

⁹ See World Intellectual Prop. Org. Copyright Treaty, Apr. 12, 1997, S. TREATY DOC. NO. 105-17 (1998) [hereinafter WIPO Copyright Treaty].

¹⁰ Digital Millennium Copyright Act of 1998, Pub. L. 105-304, 112 Stat. 2860 (1998).

¹¹ DMCA S. REP., *supra* note 4, at 2.

¹² *Id.*

The law must adapt in order to make digital networks safe places to disseminate and exploit copyrighted materials. . . . Title I of this bill provides this protection and creates the legal platform for launching the global digital online marketplace for copyrighted works. It will also make available via the Internet the movies, music, software, and literary works that are the fruit of the American creative genius.¹³

In brief, the Senate and House of Representatives reports denote the following reasons for enacting the DMCA: (1) to make online marketplaces “a safe place to disseminate and exploit copyrighted materials,”¹⁴ (2) to adapt the law so as to create rights in an “unregulated and beneficial environment,”¹⁵ (3) to encourage trade in electronic works over the Internet,¹⁶ and (4) to bring the electronic marketplace copyright law in line with standard American copyright law.¹⁷

¹³ *Id.*

¹⁴ *Id.* (“The law must adapt in order to make digital networks safe places to disseminate and exploit copyrighted materials. The legislation implementing the treaties, Title I of this bill, provides this protection and creates the legal platform for launching the global digital online marketplace for copyrighted works.”).

¹⁵ STAFF OF HOUSE COMM. ON THE JUDICIARY, 105TH CONG., SECTION-BY-SECTION ANALYSIS OF H.R. 2281, 2 (Comm. Print 1998) (“The digital environment now allows users of electronic media to send and retrieve perfect reproductions easily and nearly instantaneously, to and from locations around the works. With this evolution in technology, the law must adapt in order to make digital networks safe places to disseminate and exploit materials in which American citizens have rights in an unregulated and beneficial environment.”).

¹⁶ H.R. REP. NO. 105-511, 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. In order to protect the owner, copyrighted works will most likely be encrypted and made available to consumers once payment is made for access to a copy of the work.”).

¹⁷ 144 CONG. REC. 4435, 4440 (1998) (Sen. Leahy stated, “The bill addresses the problems caused when copyrighted works are disseminated through the Internet and other electronic transmissions without the authority of the copyright owner. By establishing clear rules of the road, this bill will allow electronic commerce to flourish in a way that does not undermine America’s copyright community.”).

All of the stated reasons for enacting the DMCA apply to building consumer confidence in the Internet. Yet, in the process of creating the legislation, Congress never addressed whether the DMCA should protect electronic works that are not disseminated by means of the Internet.¹⁸ Congress also failed to address whether the anti-circumvention provisions apply to protect purely functional, not independently marketed, copyrighted works.¹⁹ As discussed in Part III, the broad wording²⁰ of the anti-circumvention provisions leads to the conclusion that both works that are not disseminated through means of the Internet and purely functional, not independently marketed, copyrighted works fall within the class of works protected by the anti-circumvention provisions.

III. The Anti-Circumvention Provisions of the DMCA

The Information Infrastructure Task Force Working Group on Intellectual Property Rights was the first group to discuss the anti-circumvention provisions.²¹ It did so in a 1995 report²² that recommended that the United States encourage the international community to adopt a provision similar to the eventual 17 U.S.C. § 1201(a).²³ During treaty talks before the World Intellectual Property Organization (“WIPO”), the United States, following the Task Force’s recommendation, took the position that the anti-

¹⁸ 17 U.S.C. § 1201 (1998); *see* text on legislative history *infra* Part II.

¹⁹ *See infra* text on legislative history Part II.

²⁰ *See infra* text on legislative history Part III.

²¹ 17 U.S.C. § 1201.

²² *See generally* THE DIGITAL MILLENNIUM COPYRIGHT ACT OF 1998, S. REP. NO. 105-190, at 2 (1998); *Lexmark* Amicus Brief, *supra* note 8, at 3–4 (citing BRUCE A. LEHMAN, “INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE” THE REPORT OF THE WORKING GROUP ON INTELLECTUAL PROP., app. 1 at 6 (1995)).

²³ *Lexmark* Amicus Brief, *supra* note 8, at 3–4 (“No person shall import, manufacture or distribute any device product or component incorporated into a device or product, or offer or perform any service, the primary purpose or effect of which is to avoid, bypass, remove, deactivate, or otherwise circumvent, without the authority of the copyright owner or the law, any process treatment, mechanism or system which prevents or inhibits the violation of any of the exclusive rights of the copyright owner under § 106.”) (citing LEHMAN, *supra* note 22, at app. 1 at 6).

circumvention provisions should be added to the WIPO Copyright Treaty.²⁴ Other countries considering the treaty supported this recommendation, and the provisions were ultimately mandated by treaty as follows:

Contracting parties shall provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures that are used by authors in connection with the exercise of their rights under this Treaty or the Berne Convention and that restrict acts, in respect of their works, which are not authorized by the authors concerned or permitted by law.²⁵

After signing the WIPO Copyright Treaty, Congress complied with this WIPO provision. In order to “ensure a thriving electronic marketplace for copyrighted works on the Internet,”²⁶ Congress added anti-circumvention provisions to the DMCA.

The applicable anti-circumvention provisions are codified at 17 U.S.C. § 1201. The text of § 1201(a)(1)(A) states, “No person shall circumvent a technological measure that effectively controls access to a work protected under this title.” Section 1201(a)(2) provides,

No person shall manufacture, import, offer to the public, provide, or otherwise traffic in any technology, product, service, device, component, or part thereof, that—

- (A) is primarily designed or produced for the purpose of circumventing a technological measure that effectively controls access to a work under this title;
- (B) has only a limited commercially significant purpose or use other than to circumvent protection afforded by a technological measure that effectively controls access to a work protected under this title; or

²⁴ S. REP. NO. 105-190, at 2; *Lexmark Amicus Brief*, *supra* note 8, at 3–4.

²⁵ WIPO Copyright Treaty, *supra* note 9.

²⁶ H.R. REP. NO. 105-551, at 9 (1998).

(C) is marketed by that person or another acting in concert with that person with that person's knowledge for use in circumventing a technological measure that effectively controls access to a work protected under this title.²⁷

Senate Report 105-109²⁸ explains that these provisions are "designed to protect access to a copyrighted work."²⁹ The report goes on to explain why the anti-circumvention provisions are necessary:

The prohibition in [§] 1201(a)(1) is necessary because prior to this Act, the conduct of circumvention was never before made unlawful.

The device limitation in [§] 1201(a)(2) enforces this new prohibition on conduct. The copyright law has long forbidden copyright infringements, so no new prohibition was necessary. The device limitation in [§] 1201(b) enforces the longstanding prohibitions on infringements.³⁰

The DMCA's anti-circumvention provisions were added to strengthen copyright law. Through § 1201(a)(1), Congress buttressed the protections of copyright law by punishing not only those who infringe a copyright but also those who circumvent effective technological measures in order to gain access to a copyrighted work. Section 1201(a)(2) further strengthens the protections of copyright law by making it illegal for manufacturers, retailers, and others to deal in products that are primarily used to circumvent technological measures that control access to copyrighted works.

²⁷ Digital Millennium Copyright Act, 17 U.S.C. § 1201(a)(2)(A)-(C) (1998).

²⁸ S. REP. NO. 105-190, at 12.

²⁹ *Id.*

³⁰ *Id.*

IV. Facts and Holding of *Lexmark International, Inc. v. Static Control Components*³¹

The Lexmark corporation designed and implemented a business strategy that enabled owners of certain Lexmark printers to buy either an ink cartridge at the regular price or a “prebate” ink cartridge³² at a discounted price.³³ A prebate is similar to a rebate, but with a prebate there is no need to send in a receipt to acquire a refund. Instead, the consumer accepts an agreement and is offered an on-the-spot discount. For instance, in *Lexmark*, by opening the prebate cartridge packaging, consumers accepted an agreement³⁴ that required them to return their spent prebate cartridge to Lexmark after the initial use and prohibited them from refilling the spent cartridge. To ensure compliance, Lexmark manufactured the prebate cartridges with a microchip that prevented their compatibility with a Lexmark printer if the cartridges had been refilled.³⁵

Static Control Components (“SCC”) manufactured a microchip designed to circumvent the authentication sequence that prevented the use of refilled prebate printer cartridges in Lexmark printers.³⁶ Consequentially, Lexmark sought to enjoin SCC from “making, selling, distributing, offering for sale, or otherwise trafficking”³⁷ in these microchips. In its complaint, Lexmark

³¹ 253 F. Supp. 2d 943, 943–74 (E.D. Ky. 2003) (trial scheduled for May 2004).

³² *Id.* at 947.

³³ *Id.*

³⁴ *Id.* at 947 n.1 (“The Prebate agreement states as follows: ‘RETURN EMPTY CARTRIDGE TO LEXMARK FOR REMANUFACTURING AND RECYCLING. Please read before opening. Opening this package or using the patented cartridge inside confirms your acceptance of the following license/agreement. This all-new cartridge is sold at a special price subject to a restriction that it may be used only once. Following this initial use, you agree to return the empty cartridge only to Lexmark for remanufacturing and recycling. If you don’t accept these terms, return the unopened package to your point of purchase. A regular price cartridge without these terms is available.’”).

³⁵ *Id.* at 948.

³⁶ *Id.* at 947.

³⁷ *Id.* at 974; see Complaint at 14, *Lexmark* (No. 02-571-KSF), available at http://www.eff.org/IP/DMCA/20030108_lexmark_v_static_control_components

asserted three causes of action: (1) the SCC microchip “infringes Lexmark’s copyright in its ‘Toner Loading Programs’”;³⁸ (2) the SCC microchip circumvents a technology measure that effectively controls access to Lexmark’s Toner Loading Programs in violation of the anti-circumvention provisions of sections 1201(a)(2)(A), (B), and (C) of the DMCA;³⁹ and (3) the SCC microchip circumvents a technological measure that effectively controls access to Lexmark’s Printer Engine Program in violation of the anti-circumvention provisions of § 1201(a)(2)(A), (B), and (C) of the DMCA.⁴⁰

The court granted the preliminary injunction against SCC, holding that “Lexmark . . . demonstrated a likelihood of success on the merits of its . . . claims under section 1201(a)(2) of the Digital Millennium Copyright Act.”⁴¹

V. The *Lexmark* Court’s Reasoning in Deciding to Apply the DMCA Anti-Circumvention Provisions⁴²

A. Adopting Lexmark’s Theory of the Case

By concluding that the DMCA anti-circumvention provisions applied in *Lexmark*,⁴³ the court agreed with Lexmark’s theory of the case.⁴⁴ Lexmark’s theory was that SCC created microchips to circumvent a protection measure known as

.pdf (Dec. 30, 2002) (on file with the North Carolina Journal of Law & Technology) [hereinafter *Lexmark Complaint*].

³⁸ *Lexmark*, 253 F. Supp. 2d at 974; see also *Lexmark Complaint*, *supra* note 37, at 10.

³⁹ See *Lexmark*, 253 F. Supp. 2d at 974; see also *Lexmark Complaint*, *supra* note 37, at 10.

⁴⁰ See *Lexmark*, 253 F. Supp. 2d at 974; see also *Lexmark Complaint*, *supra* note 37, at 11.

⁴¹ *Lexmark*, 253 F. Supp. 2d at 966.

⁴² This section will briefly explain the court’s reasoning in applying the DMCA anti-circumvention provisions; a more in-depth analysis will follow in part VI of this Recent Development which will explain some failings in the *Lexmark* court’s reasoning and why it should not have applied the anti-circumvention provisions.

⁴³ *Lexmark*, 253 F. Supp. 2d at 967–69.

⁴⁴ See *id.* at 968–69.

“Lexmark’s Authentication Sequence” that controlled access to the Lexmark Printer Engine Program and the Toner Loading Program, both of which are protected by copyright.⁴⁵ The purposes of these copyrighted works were functional in nature.⁴⁶ The Printer Engine Program “controls various operations of the printer including, for example, paper feed, paper movement, motor control, fuser operation, and voltage control for the electrophotographic . . . system.”⁴⁷ The Toner Loading Programs “reside within microchips attached to the toner cartridges . . . [and] enable the printers to approximate the amount of toner remaining in the cartridges.”⁴⁸ The court, adopting Lexmark’s theory of the case, determined that SCC had indeed created microchips to circumvent the Lexmark authentication process to gain access to these non-tangible, functional, copyrighted components of certain Lexmark printers.⁴⁹

B. The Court’s Analysis of the Words Used in the Provisions

After adopting Lexmark’s theory of the case, the court considered whether the DMCA’s anti-circumvention provisions were applicable to the facts of the case. In making this determination, the court first considered the definitions of the words used in the anti-circumvention provisions, as provided in § 1201(a)(3):

- (A) to “circumvent a technological measure” means to descramble a scrambled work, to decrypt an encrypted work, or otherwise to avoid, bypass, remove, deactivate, or impair a technological measure, without the authority of the copyright owner; and
- (B) a technological measure “effectively controls access to a work” if the measure, in the ordinary

⁴⁵ See Lexmark Complaint, *supra* note 37, at 11.

⁴⁶ See Lexmark, 253 F. Supp. 2d at 948–49.

⁴⁷ *Id.* at 948.

⁴⁸ *Id.* at 949.

⁴⁹ *Id.* at 955.

course of its operation, requires the application of information, or a process or a treatment, with the authority of the copyright owner, to gain access to the work.⁵⁰

Because “access” is not expressly defined in the DMCA, the court gave “access” an ordinary meaning by using Merriam-Webster’s Collegiate Dictionary. That dictionary defines “access” as the “ability to enter, to obtain, or to make use of.”⁵¹

Based on these definitions, the *Lexmark* court decided that the wording of the anti-circumvention provisions was unambiguous.⁵² Having determined the statute to be unambiguous, the court applied a well-known rule of statutory interpretation: “When a statute is unambiguous, resort[ing] to legislative history and policy considerations is improper.”⁵³ Yet, even if the legislative history had been considered, it is unclear whether these purely functional, not independently marketed, copyright components of the *Lexmark* printers should have been protected under the anti-circumvention provisions because Congress failed to discuss the scope of those provisions.

C. Reliance on *Sony Computer Entertainment America v. Gamemasters*⁵⁴

Having determined that the DMCA’s anti-circumvention provisions were applicable to *Lexmark*’s theory of the case, the court had to determine whether the *Lexmark* claim was novel and whether it should be distinguished from other cases in which the anti-circumvention provisions had been used. In making the determination that the claim was not novel, the court relied heavily⁵⁵ on *Sony Computer Entertainment America v.*

⁵⁰ 17 U.S.C. § 1201(a)(3)(A)–(B) (1998).

⁵¹ *Lexmark*, 253 F. Supp. 2d at 967 (citing MERRIAM-WEBSTER’S COLLEGIATE DICTIONARY 6 (10th ed. 1999)).

⁵² *Id.* at 967.

⁵³ *In re Koenig Sporting Goods, Inc.*, 203 F.3d 986, 988 (6th Cir. 2000).

⁵⁴ *Sony Computer Entm’t Am. v. Gamemasters*, 87 F. Supp. 2d 976 (N.D. Cal. 1999).

⁵⁵ *Lexmark*, 253 F. Supp. 2d at 966.

Gamemasters.⁵⁶ In *Gamemasters*, the defendant designed a device called the Game Enhancer.⁵⁷ The court found that the Game Enhancer . . . permit[ed] players to play games sold in Japan or Europe and intended by SCEA for use exclusively on Japanese or European PlayStation consoles.

...
The Game Enhancer circumvents the mechanism on the PlayStation console that ensures the console operates only when encrypted data is read from an authorized CD-ROM.⁵⁸

Based on this finding, the *Gamemasters* court decided that Sony, the plaintiff, was likely to prevail on the merits of its claim and granted Sony a preliminary injunction in order to prevent the alleged irreparable harm.⁵⁹

Gamemasters dealt with standard video games, electronics that were not distributed over the Internet. The decision in *Gamemasters* and similar cases⁶⁰ to apply the anti-circumvention provisions, although there was no Internet commerce, likely persuaded the *Lexmark* court that the anti-circumvention provisions should apply to the *Lexmark* facts.⁶¹

After making the determination that the DMCA's anti-circumvention provisions apply to standard electronics that were not used via the Internet, the court then considered whether the *Lexmark* claim was novel. It read the *Gamemasters* decision as using the anti-circumvention provisions to protect purely functional, not independently marketed, copyrighted components inside the PlayStation console and, therefore, found that the *Lexmark* facts were similar to the *Gamemasters* claim and that

⁵⁶ 87 F. Supp. 2d at 976.

⁵⁷ *Id.* at 981.

⁵⁸ *Id.* at 981, 987.

⁵⁹ *See id.* at 989–90.

⁶⁰ *Id.*; *Sony Computer Entm't v. Connectix Corp*, 203 F.3d 596 (9th Cir. 2000).

⁶¹ *See Gamemasters*, 87 F. Supp. 2d at 989–90; *Connectix*, 203 F.3d at 609–10.

Lexmark was not novel.⁶² Thus, the court found no reason to differentiate *Lexmark* from *Gamemasters*.⁶³

VI. Improper Versus Proper Application of the Anti-Circumvention Provisions

A. The Application of the Anti-Circumvention Provisions in *Lexmark*

1. *Lexmark*'s Theory of the Case

The *Lexmark* court made its first error by adopting *Lexmark*'s theory of the case and applying the DMCA's anti-circumvention provisions to these facts. There are two ways to view the *Lexmark* case. The district court and *Lexmark* characterized SCC's actions as manufacturing a microchip that circumvented an authentication sequence that effectively controlled access to two purely functional, not independently marketed, copyrighted works: the Printer Engine and the Toner Loading System.⁶⁴ The better interpretation, however, is that SCC manufactured a microchip that circumvented an authentication sequence to enable compatibility between *Lexmark* printers and non-copyrighted refilled prebate cartridges.

The second approach is better because neither consumers who used the microchips nor SCC was interested in circumventing the authentication sequence in order to gain access to the Printer Engine and Toner Loading System. SCC did not want to learn about the internal components so as to implement such components into its own products or make a commercial use of the internal components. Rather, SCC had an interest in circumventing a technological measure that controlled access to functional components *of the printer* in order to create compatibility between printers and non-copyrighted refilled prebate printer cartridges.

⁶² See *Lexmark Int'l, Inc. v. Static Control Components*, 253 F. Supp. 2d 943, 970 (E.D. Ky. 2003).

⁶³ See *id.*

⁶⁴ *Id.* at 947 n.1.

2. Novelty of the Lexmark Claim

The *Lexmark* court also erred when it decided that the DMCA claim was not novel.⁶⁵ This decision was based on the court's unique interpretation of the *Gamemasters* decision. There are, however, two ways to look at *Gamemasters*, and the preliminary injunction order⁶⁶ makes it unclear which of the two analyses the *Gamemasters* court applied.

The first interpretation of the case favors a finding that the issue in *Lexmark* was not novel because the facts were similar to those in *Gamemasters*. The second, more preferable, interpretation favors a finding that the *Lexmark* claims were indeed novel.

i. One Interpretation of *Gamemasters*

The first method of interpreting *Gamemasters* finds that the Game Enhancer was used to circumvent an authentication process within the PlayStation console to gain access to purely functional, not independently marketed components inside the console. This seems to be the way the *Lexmark* court viewed the case since it described *Gamemasters* as “enjoining sale of [a] device that circumvented [a] technological measure that *prevented access to software embedded in Sony's PlayStation console*, even though the device did not facilitate piracy.”⁶⁷ Under this approach, *Lexmark* does look quite similar to *Gamemasters* because, using *Lexmark*'s construction of the facts,⁶⁸ the SCC microchip circumvented an authentication process and gave SCC and consumers access to functional components of the printer, the Printer Engine Program, and the Toner Loading System.

⁶⁵ *Id.* at 970.

⁶⁶ *See Gamemasters*, 87 F. Supp. 2d at 989–90.

⁶⁷ *See Lexmark*, 253 F. Supp. 2d at 969 (emphasis added).

⁶⁸ *See id.* at 968–69.

ii. A Better Interpretation of *Gamemasters*

The better interpretation of *Gamemasters*, however, focuses on *protection of the CD-ROM* rather than protection of the functional aspects of the console. According to this interpretation, the defendant used the Game Enhancer to circumvent an authentication measure to gain access to non-territorial PlayStation CD-ROMs, which are protected by copyright. Such use, involving circumvention of a protection measure to gain access to an independently marketed, not purely functional, copyrighted work is the typical scenario in which courts have allowed the anti-circumvention provisions to be applied.⁶⁹ This interpretation of *Gamemasters* shows that it *involves protection of independently marketed, not purely functional copyrighted goods*, i.e. PlayStation CD-ROMs. *Lexmark*, on the other hand, involves protection of purely functional, not independently marketed, internal components of the Lexmark printer. Thus, the *Lexmark* claim was novel.

Despite the novelty of the *Lexmark* claim, it seems that the court was correct in applying the DMCA's anti-circumvention provisions, given their broad language. But, as explained below in Part 3, to expand the DMCA's anti-circumvention provisions to cover purely functional, not independently marketed components of electronics raises other important concerns and could result in dire public policy consequences.

3. Application of the Anti-Circumvention Provisions and Public Policy

i. Applying the DMCA

The court in *Lexmark* erred by failing to fully assess the various policy concerns surrounding its holding. Furthermore, the court failed to consider the implications of allowing the anti-circumvention provisions to be applied on the *Lexmark* facts.

⁶⁹ See, e.g., *Lexmark* Amicus Brief, *supra* note 8, at 6.

Lexmark's attempt to prohibit the refill and reuse of their printer cartridges is a clear indication of their desire to gain a quasi-monopoly in the resale market of printer cartridges. Public policy concerns regarding anti-competitive behavior should have prevented the court from allowing Lexmark from doing so. SCC does not supply chips to facilitate the theft of Toner Loading Programs and Printer Engine Programs. Rather, SCC supplies chips to dodge Lexmark's anti-competitive behavior.⁷⁰

Even the trial judge recognized that there were some anti-competitive reasons for Lexmark's use of an authentication sequence. In his order for the preliminary injunction, the trial judge said the following:

To protect the Printer Engine Programs and Toner Loading Programs *and to prevent unauthorized toner cartridges from being used with Lexmark's T-Series printers*, Lexmark uses an authentication sequence that runs each time a toner cartridge is inserted into a Lexmark printer, the printer is powered on, or whenever the printer is opened and closed.⁷¹

Despite its ulterior motives, Lexmark persuaded the court to apply the anti-circumvention provisions to protect "noncopyrighted consumable goods."⁷² This decision will most likely carry significant repercussions for other markets: "[e]mploying copyright law or the DMCA to sanction lock-out methods that protect markets for consumable goods (as opposed to markets for the copyrighted works themselves) could induce OEMs in other industries to follow Lexmark's lead, including 'aftermarket' manufacturers of parts for automobiles, computer, consumer electronics and telecommunications equipment."⁷³

⁷⁰ Mem. In Opp'n to Motion for Preliminary Inj., Non-Confidential Version, 6, *Lexmark* (No. 02-571-KSF), available at http://www.scc-inc.com/special/oemwarfare/lexmark_vsscc.htm (Jan. 30, 2003) (on file with the North Carolina Journal of Law & Technology) [hereinafter Static Control Opp'n Brief].

⁷¹ *Lexmark*, 253 F. Supp. 2d at 952 (emphasis added).

⁷² *Lexmark* Amicus Brief, *supra* note 8, at 6.

⁷³ Static Control Opp'n Brief, *supra* note 69, at 20.

In *Lexmark*, the copyrighted functional components were lock-out devices. If other companies follow Lexmark's example by installing and copyrighting similar devices, they can ensure that only their secondary products will be used. If a company copyrights internal components of its works and uses the same authentication sequence to prevent access to those copyrighted works and to prevent compatibility, it can control a resale market; competitors cannot compete without violating the anti-circumvention provisions. In effect, manufacturers can use the DMCA to behave anti-competitively. Such behavior will lead to great inefficiency in the replacement parts market and, in turn, will create higher prices for consumers.

An amicus brief⁷⁴ offered by law professors in *Lexmark* clearly states what is at risk when using the DMCA in this manner:

If [§] 1201(a) could be applied to such functional software, [§] 1201(a) could be susceptible to widespread abuses across a plethora of industries. For example, could not [§] 1201(a), so interpreted, enable automobile manufacturers to prevent competitors from selling replacement oil filters, or tires that did not have a compatible semiconductor chip? Or photocopy machine manufacturers to prevent use of paper that does not bear the correct watermark? Or computer floppy disks that do not have an authenticating chip indicating that it was made by the manufacturer of the floppy drive?⁷⁵

The *Lexmark* court erred in failing to consider the public policy implications⁷⁶ of its decision. If courts allow the anti-

⁷⁴ *Lexmark* Amicus Brief, *supra* note 8.

⁷⁵ *Id.* at 6.

⁷⁶ It is also an interesting aside that there are policy concerns related to the environment, which have led the European Union and North Carolina to disallow use of prebates on printer cartridges; these environmental concerns were not discussed in the preliminary injunction order. See DIRECTIVE 2002/96/EC OF THE EUROPEAN PARLIAMENT AND THE COUNCIL OF 27 JANUARY 2003 ON WASTE ELECTRICAL AND ELECTRONIC EQUIP. ("WEEE") ART. 4, available at http://europa.eu.int/eurllex/pri/en/oj/dat/2003/1_037/1_03720030213en00240038.pdf (on file with the North Carolina Journal of Law & Technology); see H.B. 999, 2003 Leg., 386th Sess. (N.C. 2003).

circumvention provisions to be used in this manner, a grave precedent will be set. Many corporations will engage in this anti-competitive behavior, and consumers and resale product manufacturers will lose in the process.

ii. Application of the Anti-Circumvention When Circumvention Occurs to Establish Compatibility

Because of the way the *Lexmark* court viewed the case, it failed to see that there were different policy considerations in this case than in other cases in which the DMCA's anti-circumvention provisions have been applied. Users of the SCC microchip are not using the technology to gain access to something that they do not own. Rather, they are using the microchips to put their own printers to their full use.⁷⁷ The SCC microchip affects only the way that the printer processes. Printer owners are not implementing chips to get secret access to a good that they do not own; rather, printer owners are merely trying to get access to their own printers.

SCC's brief in opposition to *Lexmark*'s motion for a preliminary injunction differentiated the *Lexmark* fact scenario from an example found in a report from the House Committee on the Judiciary: "The act of circumventing a technological protection measure put in place by a copyright owner to control access to a copyrighted work is the electronic equivalent of breaking into a locked room in order to obtain a copy of a book."⁷⁸ SCC's opposition brief argued that, unlike breaking into a room for a book, "Lexmark's DMCA claim seeks to prevent the owner of a printer from using the printer—the electronic equivalent of breaking into a locked room in your own house."⁷⁹

For purposes of public policy, the court should have found that the DMCA anti-circumvention provisions are inapplicable when a person breaks into his or her own electronic device in order to gain access to a not independently marketed, functional

⁷⁷ See Static Control Opp'n Brief, *supra* note 69, at 24.

⁷⁸ H.R. REP. NO. 105-551, pt. I, 1, at 17 (1998).

⁷⁹ Static Control Opp'n Brief, *supra* note 69, at 24.

component of that device in order to make a non-copyrighted device compatible with it. The anti-circumvention provisions should only be used when circumvention of a protection measure takes place *for the purpose* of enabling a person to gain access to copyrighted material. In *Lexmark*, the circumvention took place to facilitate compatibility between a person's property and a non-copyrighted work. Public policy against anti-competitive behavior favors disallowing the DMCA to be used in this manner.

B. Proper Application—*Real Networks Inc. v. Streambox, Inc.*⁸⁰

The *Lexmark* court failed to consider public policy concerns when it decided to apply the DMCA. *Real Networks* is a case that shows a scenario in which applying the anti-circumvention provisions is proper in light of public policy. In *Real Networks*, a district court granted a preliminary injunction against Streambox, Inc., preventing it from “manufacturing, importing, licensing, offering to the public or offering for sale”⁸¹ a circumvention device known as the Streambox VCR. The Streambox VCR allowed users to “access and copy RealMedia files located on RealServers,”⁸² circumventing the protections that Real Networks had put in place.

In *Real Networks*, the anti-circumvention provisions were used to protect copyrighted works in the electronic marketplace,⁸³ and the Streambox VCR is a device that was primarily designed to circumvent protections that Real Networks used to effectively control access to its client's artistic works.⁸⁴ The Streambox VCR had “only a limited commercially significant purpose or use other than to circumvent a technological measure that effectively controls access to a protected work.”⁸⁵ In addition, the devices

⁸⁰ No. 2:99LV02070, 2000 WL 127311 (W.D. Wash. Jan. 18, 2000).

⁸¹ *Id.* at *12.

⁸² *Id.* at *4.

⁸³ See *supra* notes 17–20.

⁸⁴ *Real Networks*, 2000 WL 127311, at *8.

⁸⁵ *Id.* at *8.

were marketed for the purpose of circumvention,⁸⁶ and the artistic works, such as song recordings, were tangible works that were protected by copyrights.⁸⁷

In *Real Networks* there are no public policy concerns that weigh against application of the anti-circumvention provisions. Congress included the DMCA's anti-circumvention provisions to protect manufacturers of goods in an emerging medium where goods are easily stolen and where theft is rarely detected. *Real Networks* embodies the ideal scenario in which Congress intended the anti-circumvention provisions to be used. In *Real Networks*, devices were created for the sole purpose of circumventing technological measures in order to gain access to copyrighted material. There are no public policy concerns because those who used the Streambox devices did so solely to gain access to and steal copyrighted works. In *Lexmark*, however, those who used the SCC microchip were not trying to gain access to copyrighted materials. Rather, printer owners were trying to bypass lock-out mechanisms in devices they already owned in order to use non-copyrighted, refilled, prebate printer cartridges.

VII. Future Uses of the Anti-Circumvention Provisions

When Congress was considering the anti-circumvention provisions, some members were concerned that the provisions would be used in ways Congress had not intended.⁸⁸ Congress added § 1201(a)(1)(B) and (a)(1)(C) to the DMCA to allay these fears. These provisions allow the Register of Copyrights to decide whether to exempt certain activities from § 1201(a). According to the provisions, the Register of Copyrights "shall make the determination . . . of whether persons who are users of a copyrighted work are . . . adversely affected by the prohibition under subparagraph (A) in their ability to make noninfringing uses under this title of a particular class of copyrighted works."⁸⁹

⁸⁶ *Id.* at *8.

⁸⁷ *Id.* at *2.

⁸⁸ Static Control Opp'n Brief, *supra* note 69, at 25.

⁸⁹ 17 U.S.C. § 1201(a)(1)(B)–(C) (1998).

As indicated by § 1201(a)(1)(B), Congress realized the potential for misuse of the DMCA's anti-circumvention provisions. *Lexmark* is exactly the type of case over which Congress would likely have been concerned. Under § 1201(a)(1)(C), the Register of Copyrights should exempt cases like *Lexmark* because "user[s] of copyrighted works," i.e. the consumers, "are likely to be . . . adversely affected by the prohibition . . . in their ability to make noninfringing uses . . . of a particular class of copyrighted works."⁹⁰ In other words, when consumers want to refill their prebate printer cartridges, they cannot do so without infringing⁹¹ on Lexmark's copyrighted functional printer components. Thus, if courts allow the anti-circumvention provisions to be used in this way, monopolistic schemes similar to those used in *Lexmark* will continually succeed. The Register of Copyrights should create an exception for cases like this one under § 1201(a)(1)(B).

Even in the absence of such affirmative conduct by the Register of Copyrights, because public policy discourages outcomes which lead to anti-competitive behavior, courts should draw distinctions between cases in which circumvention occurs in order to gain access to a copyrighted work and cases in which circumvention occurs in order to effect compatibility.

VIII. Conclusion

The confusion surrounding the application of the anti-circumvention provisions is understandable. Congress wrote the provisions in broad terms and failed to narrow the scope of the provisions to protect only independently marketed, not purely functional, copyrighted works.⁹² It is highly unlikely, however, that Congress intended to allow corporations such as Lexmark, through use of the anti-circumvention provisions, to gain quasi-monopoly power. As such, courts should consider public policy and should not apply the anti-circumvention provisions when doing so would encourage anti-competitive behavior.

⁹⁰ *Id.*

⁹¹ *Lexmark Int'l, Inc. v. Static Control Components*, 253 F. Supp. 2d 943, 957–58 (E.D. Ky. 2003).

⁹² *See id.*