

**UNITED STATES COURT OF APPEALS
FOR THE SIXTH CIRCUIT**

**LEXMARK INTERNATIONAL, INC.,
Plaintiff-Appellee,**

v.

**STATIC CONTROL COMPONENTS, INC.,
Defendant-Appellant.**

**Appeal from the United States District Court
for the Eastern District of Kentucky
(Civil Action No. 02-571-KSF)**

PROOF BRIEF OF APPELLANT

**W. Craig Robertson III
E. Christine Lewis
WYATT, TARRANT
& COMBS, LLP
250 West Main Street, Suite 1600
Lexington, KY 40507
(859) 233-2012**

**Skip London
Static Control Components, Inc.
3010 Lee Avenue
Post Office Box 152
Sanford, NC 27331
(919) 774-3808**

**Seth D. Greenstein
Melise R. Blakeslee
M. Miller Baker
Carrie A. Shufflebarger
MCDERMOTT, WILL
& EMERY
600 13th Street NW
Washington, D.C. 20005
(202) 756-8000**

Attorneys for Appellant Static Control Components, Inc.

**DISCLOSURE OF CORPORATE AFFILIATIONS
AND FINANCIAL INTERESTS**

Pursuant to Sixth Circuit Rule 26.1, Appellant makes the following disclosure:

1. Appellant is not a subsidiary or affiliate of a publicly-owned corporation not named in this appeal.

2. No publicly-owned corporation that is not a party to the appeal has a financial interest in the outcome of this appeal.

Seth D. Greenstein

Date

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**STATEMENT OF REASONS
WHY ORAL ARGUMENT SHOULD BE HEARD**

This appeal involves a novel and unprecedented application of the Digital Millennium Copyright Act of 1998 (“DMCA”). The district court’s decision is the first to hold that an original equipment manufacturer can wield the DMCA (a copyright law) against makers of replacement parts that perform noncopyrightable functions. The district court’s decision has powerful public policy implications for a multitude of industries, and for consumers who rely upon competitive choices for consumable and replacement parts. This appeal also presents issues implicated by the “abstraction-filtration-comparison” infringement analysis adopted in this Court’s recent decision in *Kohus v. Mariol*, 328 F.3d 848 (6th Cir. 2003). Oral argument will enable the Court to address questions concerning the nuances of the case and the impact of these and other issues upon the interpretation of the DMCA and the future of copyright.

JURISDICTIONAL STATEMENT

(a) The district court had subject-matter jurisdiction in this matter under 28 U.S.C. § 1331.

(b) This Court has appellate jurisdiction under 28 U.S.C. § 1292(a)(1).

(c) The district court entered the order appealed from on February 27, 2003. Static Control Components timely filed a Notice of Appeal on March 25, 2003.

STATEMENT OF ISSUES PRESENTED FOR REVIEW

1. A. Whether the district court erred by applying § 1201(a)(2) of the Digital Millennium Copyright Act (DMCA) so as to protect noncopyrightable software functions and toner cartridges.

B. Whether a measure “effectively controls access to a work” under § 1201(a) of the DMCA where, without circumvention, the measure does not prevent unfettered access to obtain, read and copy the works.

C. Whether the district court erred as a matter of law and fact when it failed to exempt Appellant's “SMARTEK” software from DMCA liability even though Appellant's SMARTEK software meets the requirements for an exemption under § 1201 (f)(3) of the DMCA.

2. A. Whether the district court erroneously held that Appellee is likely to prevail on its copyright claim by holding inapplicable the filtration-comparison test and, thereby, finding infringement based on the copying of noncopyrightable elements.

B. Whether the district court misconstrued the fair use defense by holding that Appellee is likely to prevail on its copyright claim although the Appellee’s “work” is fundamentally functional and the functional aspects are necessary for others to use in order to compete in the market for repaired and replacement toner cartridges.

3. Whether the district court erroneously entered a preliminary injunction where there is no actual irreparable harm to Appellee and any potential harm is fully compensable by damages, and where the actual harm caused to Appellant, third parties, and public interests outweighs any potential harm to Appellee.

4. Whether the district court abused its discretion by failing to increase the amount of Appellee's bond.

STATEMENT OF THE CASE

On December 30, 2002, plaintiff Lexmark International, Inc. (“Lexmark” or “Appellee”), a manufacturer of computer laser printers and toner cartridges, sued defendant Static Control Components, Inc. (“SCC” or “Appellant”), in the United States District Court for the Eastern District of Kentucky. SCC manufactures parts which others use to repair and refill printer toner cartridges, including Lexmark cartridges. Lexmark asserted that SCC-manufactured semiconductor “microchips” (or “chips”), known as “SMARTEK” chips, should be preliminarily and permanently enjoined, asserting the chips infringed copyright in Lexmark’s “Toner Loading Programs” (Count One), and that the SCC chip circumvented a technological measure applied by Lexmark with respect to its Toner Loading Programs (Count Two) and Printer Engine Program (Count Three), in violation of Section 1201(a)(2) of the Digital Millennium Copyright Act.¹

¹ Separately, on January 19, 2003, SCC petitioned the United States Copyright Office to exempt the circumvention of the Lexmark technological measure from § 1201(a)(1). SCC’s petition, reply comments, and the hearing transcript are available online at the Copyright Office website, <http://www.copyright.gov/1201/>. The Copyright Office will issue any regulations concerning the requested exemption on or before October 28, 2003.

Lexmark moved for a preliminary injunction. Following a hearing on February 7, 2003,² the district court issued a preliminary injunction on February 27, 2003, finding that Lexmark was likely to succeed on the merits of each count. On March 6, 2003, SCC filed a Motion for Clarification of the scope of the preliminary injunction. The district court granted this motion on April 21, 2003, and clarified the scope of the injunction. This appeal of the preliminary injunction followed.

² Eight Amicus Curiae submitted briefs to the district court, all in opposition to Lexmark's Motion; six were admitted after the court had already entered its preliminary injunction. (R. 115–20, Amicus Briefs, Apx. pg. __).

STATEMENT OF FACTS

I. BUSINESS OF STATIC CONTROL

Appellant SCC manufactures and supplies products, including replacement chips and other component parts, to businesses that repair, remanufacture, and refill used printer toner cartridges. (R. 67 Affidavit of William K. Swartz, pg. 2, ¶ 4, Apx. pg. __). SCC employs approximately 1,000 people at its Sanford, North Carolina, headquarters. (*Id.* at pg. 2, ¶ 5, Apx. pg. __; R. 92 Order Stating Findings of Fact and Conclusions of Law, pg. 1, ¶ 3, Apx. pg. __).

II. BUSINESS OF LEXMARK

Headquartered in Lexington, Kentucky, Appellee Lexmark is an Original Equipment Manufacturer (“OEM”) of laser printers and toner cartridges. (R. 92 FF/CL, pg. 1, ¶ 1, Apx. pg. __). At issue in this dispute are Lexmark’s T520/522 and T620/622 printers and toner cartridges, and, in particular, a small amount of data embedded in chips on Lexmark’s cartridges. (*Id.* at pg. 1, ¶ 2, Apx. pg. __).

Recognizing that it can earn higher profits over the life of the printer by controlling the market for high-priced replacement consumables, including toner cartridges, Lexmark sells printers to consumers virtually at cost. (R. 53 Def. Opp. PI, Apx. 3, Affidavit of Lester Cornelius, pg. 3, ¶ 8, Apx. pg. __; R. 1 Complaint, pg. 4, ¶ 12, Apx. pg. __). Lexmark’s replacement cartridges are priced from \$325-

\$414. (R. 3 Plaintiff's Memorandum in Support of Motion for Preliminary Injunction, Ex. B, Declaration of Michael Yaro, pg. 4, ¶ 11, Apx. pg. __).³

III. COMPETITIVE TENSION BETWEEN LEXMARK AND THE REMANUFACTURING INDUSTRY

Toner cartridge remanufacturers repair, recondition, and refill used cartridges to create a less-expensive, environmentally sound alternative to buying an all-new cartridge. (R. 53 Def. Opp. PI, Apx. 3, Cornelius Aff., pg. 3, ¶¶ 5–7, Apx. pg. __). SCC is a supplier to this industry. Aftermarket cartridges provide the only competition to OEMs such as Lexmark, and thereby constrain OEM increases in price. (R. 63 Affidavit of Tricia Judge, pg. 2, ¶ 5, Apx. pg. __).

Lexmark continually changes elements of its toner cartridges in an effort to stifle legitimate aftermarket competition. (R. 58 Affidavit of Lynton Burchette, pg. 2–3, ¶ 5, Apx. pg. __; R. 3 Pltf. Sup. PI, Ex. B, Yaro Decl., pg. 5, ¶ 15, Apx. pg. __). Around 1997–98, Lexmark began placing a small semiconductor chip in its toner cartridges that rendered refilled cartridges unusable, thus preventing repair or remanufacture by Lexmark's competitors. (R. 58 Burchette Aff., pg. 2–3, ¶ 5,

³ Lexmark has a two-tier pricing scheme for its toner cartridges: “Prebate” cartridges, more expensive than competitive comparables (William K. Swartz at TR 157–60, Apx. pg. __); and non-prebate cartridges, priced \$50 higher. (*Id.*; R. 92 FF/CL, pg. 3, ¶ 12, Apx. pg. __; R. 3 Pltf. Sup. PI, Ex. B, Yaro Decl., pg. 2, 4, ¶¶ 5, 11, Apx. pg. __). Lexmark contends that it “licenses” prebate cartridges to

Apx. pg. __). Once companies such as SCC designed around such barriers, Lexmark redoubled its efforts to inhibit competition from remanufacturers, relying on a novel and unforeseen application of intellectual property laws to do so.

IV. LEXMARK'S CURRENT CHIPS ALLEGEDLY USE A "TECHNOLOGICAL MEASURE"

In 2001, Lexmark introduced printer toner cartridges for its T520/522 and T620/622 printers containing a more advanced generation of "disabling chips." These new chips, manufactured and supplied to Lexmark by Dallas Semiconductor ("Dallas"), incorporated a mechanism that enable the Lexmark printer to verify that the toner cartridge came from Lexmark. (R. 66 Declaration of Bruce Macdowell Maggs, pg. 2–3, ¶¶ 6–8, Apx. pg. __; Maggs at TR 90, Apx. pg. __). Whenever a toner cartridge is inserted into a Lexmark printer, the printer is powered on, or the printer is opened and closed, a "handshake" is performed between a computer program in the printer (the "Printer Engine Program" or "PEP") and the disabling chip to verify that only toner cartridges authorized by Lexmark are used. (R. 92 FF/CL, pg. 12, ¶¶ 59–63, Apx. pg. __; R. 3 Pltf. Sup. PI, Ex. C, Declaration of Douglas A. Able, pg. 2–3, ¶¶ 8–9, Apx. pg. __). If this

consumers who must return used toner cartridges to Lexmark. (R. 3 Pltf. Sup. PI, Ex. B, Yaro Decl., pg. 3–4, ¶ 9, Apx. pg. __).

“handshake” does not occur, the printer will not print. (*Id.*; R. 66 Maggs Decl., pg. 2–3, ¶ 6, Exs. B–C, Apx. pg. __).

The “handshake” requires the printer and the chip on the toner cartridge each to calculate a value, known generally as a “hash” or a “Message Authentication Code” (“MAC”). (R. 53 Def. Opp. PI, Apx. 7, Glossary of Relevant Technical Terms, pg. 3, ¶ 10, Apx. pg. __; R. 66 Maggs Decl., pg. 2–3, ¶¶ 6–7, Ex. B, Apx. pg. __; R. 92 FF/CL, pg. 12, ¶ 60, Apx. pg. __; Maggs at TR 107, Apx. pg. __).⁴ The printer reads the disabling chip’s hash value and compares it to the hash value calculated by the PEP. (R. 92 FF/CL, pg. 12, ¶ 62, Apx. pg. __). If these two calculations do not match, the printer will issue an error message, and the printer will stop. (*Id.* at pg. 13, ¶ 70, Apx. pg. __). This authentication process is what Lexmark refers to as the “technological measure” at issue in Counts Two and Three of this case. Lexmark admits that the purpose of its technological measure is to protect its aftermarket for toner cartridges—“to prevent unauthorized toner cartridges from being used with Lexmark’s T520/522 and T620/622 laser

⁴ These hash computations are calculated using an extremely powerful public domain cryptographic algorithm, known as the Secure Hash Algorithm (“SHA-1”). (R. 53 Def. Opp. PI, Apx. 7, Glossary, pg. 1, ¶ 1, Apx. pg. __; R. 66 Maggs Decl., pg. 3, ¶ 7, Apx. pg. __; R. 92 FF/CL, pg. 7, ¶ 38, Apx. pg. __; R. 58 Burchette Aff., pg. 3–4, ¶ 8, Apx. pg. __).

printers....” (R. 3 Pltf. Sup. PI, Ex. B, Yaro Decl., pg. 2–3, ¶ 7, Apx. pg. __; R. 66 Maggs Decl., Exs. B–C, Apx. pg. __).

Importantly, Lexmark’s “technological measure” does not prevent anyone from reading or copying the PEP code or the data on the toner cartridge chip. The PEP and the data on the chip are completely open and exposed in unencrypted form for a person to access. (Dr. Benjamin Goldberg at TR 195, Apx. pg. __). The technological measure only prevents the use of the printer with aftermarket cartridges.

V. SCC’S COMPATIBLE CHIP

Recognizing the need for the remanufacturing industry to have a replacement chip compatible with existing Lexmark printers, SCC lawfully “reverse engineered” the Lexmark chips in order to learn what portions of the data on those chips were necessary for SCC chips to interoperate with the PEP. (R. 58 Burchette Aff., pg. 3, ¶ 7, Apx. pg. __).

In addition to the first authentication sequence described above, SCC also discovered that the PEP performed a *second* authentication upon a small amount of data (55 bytes) on the Lexmark chip, using the same SHA-1 algorithm, *after* the first “handshake” was performed. (*Id.* at pg. 3–4, ¶ 8, Apx. pg. __; R. 66 Maggs Decl., pg. 6–8, ¶¶ 16–20, Ex. D, Apx. pg. __, Goldberg at TR 196–98, Apx. pg. __). After painstaking analysis, SCC learned that if any of these 55 bytes was

changed, the secondary authentication sequence would fail, and the printer would stop working—the same as upon failure of the initial authentication process using the MAC. (R. 58 Burchette Aff., pg. 5–6, ¶ 12, Apx. pg. __; R. 3 Pltf. Sup. PI, Ex. B, Yaro Decl., pg. 2–3, ¶ 7, Apx. pg. __; R. 66 Maggs Decl., pg. 7, ¶ 17, Ex. D, Apx. pg. __). SCC therefore determined that these 55 bytes constituted a second “lock-out” mechanism, in that to be compatible with the Lexmark printer, any replacement chip must include the entire 55-byte lock-out code sequence exactly as it appears on the chip from Lexmark’s toner cartridge. (R. 58 Burchette Aff., pg. 5–6, ¶ 12, Apx. pg. __; R. 60 Affidavit of Dr. Benjamin Goldberg, pg. 7–8, ¶¶ 16–18, Apx. pg. __).

Therefore, to enable its SMARTEK chip to interoperate with the Lexmark T520/522 and T620/622 printers, SCC integrated these 55 bytes into the SMARTEK chip, along with the public SHA-1 algorithm to perform the authentication function. (R. 58 Burchette Aff., pg. 5–6, ¶¶ 12–13, Apx. pg. __). SCC also wrote and incorporated on the SMARTEK chip a substantial amount of original software code to provide other functions to remanufacturers. (Goldberg at TR 208, Apx. pg. __; R. 58 Burchette Aff., pg. 3, ¶ 7, Apx. pg. __). The SMARTEK replacement chips went on the market in or around September 2002. (R. 58 Burchette Aff., pg. 7, ¶ 16, Apx. pg. __).

VI. LEXMARK'S TONER LOADING PROGRAMS

Lexmark responded to this threat by filing copyright applications with the Copyright Office to register two programs that Lexmark knew were resident on its chips: a “Computer Program for Lexmark T520/522 Print Cartridge” and a “Computer Program for Lexmark T620/622 Print Cartridge” (collectively, the “Toner Loading Programs” or “TLP”). (R. 1 Compl., Exs. A–B, Apx. pg. __). Consistent with its non-adversarial and cursory administrative process, the Copyright Office issued certificates of registration for these programs. (Ralph Oman at TR 62, 81–82, Apx. pg. __).

On December 30, 2002, Lexmark filed this suit. Only after SCC received Lexmark’s Complaint did SCC learn that the unintelligible string of numbers comprising the 55-byte “lock-out code” was asserted to function also as a computer program (namely, the recently-registered TLPs).⁵ According to Lexmark, SCC’s inclusion of the 55-byte lock out code was copyright infringement. (R. 58 Burchette Aff., pg. 6–7, ¶¶ 14–15, Apx. pg. __).⁶

⁵ These 55 bytes of data on the Lexmark disabling chip appear as only a string of raw numbers. (R. 3 Plf. Sup. PI, Ex. C, Able Decl., Tabs 1–2, Apx. pg. __; Maggs at TR 137–40, Apx. __).

⁶ The T620/622 TLP consists solely of the 55 bytes of data; the T520/522 TLP consists solely of 37 bytes of data. (Maggs at TR 112, 115, Apx. pg. __). Prior to this, SCC had no way to know these “lock-out” bytes represented a “computer program,” or functioned other than input to the secondary authentication measure.

A. The Function of the Toner Loading Program

Although, ostensibly, the TLPs approximate the amount of toner remaining in a Lexmark toner cartridge, the purpose of that approximation is to disable a cartridge that has been used or refilled. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Despite these disabling functions, Lexmark’s expert conceded that both the printer and the toner cartridge will print without a TLP measuring toner (Maggs at

Prior versions of the Lexmark chip did not include a TLP. (R. 58 Burchette Aff., pg. 6–7, ¶¶ 13–15, Apx. pg. __). Lexmark did not mark the chips with any copyright notice. The purported shrink-wrap “license” that Lexmark includes with its prebate cartridges references only patents covering the cartridge itself—it does not reference any Lexmark copyrights. (R. 92 FF/CL, pg. 3, n.1, Apx. pg. __).

TR 118–21, Apx. pg. __).⁷ In other words, the TLP Lexmark claims as the important protected work in fact is not necessary for the printer or the cartridge to measure toner, but is needed only to prevent competitors from repairing or refilling Lexmark cartridges.

B. The Toner Loading Program Code

The code constituting the TLP was largely dictated by external factors: it had to be embedded on a pre-existing chip (with its own circuitry and code), had to work with the printer and its software, and had to satisfy other external elements. (R. 60 Goldberg Aff., pg. 14–15, ¶¶ 27–32, Apx. pg. __; Goldberg at TR 200, Apx. pg. __; R. 66 Maggs Decl., Ex. D, Apx. pg. __; Maggs at TR 101, Apx. pg. __). Within that context, Lexmark’s TLPs consist solely of straightforward elementary calculations and scientifically observed facts. Specifically, Lexmark’s claim of sufficient copyrightable expression allegedly resides in:

⁷ Lexmark itself was inconsistent on this point. Lexmark’s Motion for Preliminary Injunction claimed that the TLPs control critical functions, such that without those programs, Lexmark’s printers would not print. (R. 3 Pltf. Sup. PI, Ex. B, Yaro Decl., pg. 2, ¶ 6, Apx. pg. __). Lexmark’s expert contradicted this story.

- Eight computer instructions—“*add*,” “*sub*,” “*mul*,” “*pct*,” “*jump*,” “*if*,” “*load*,” and “*exit*”—Lexmark calls its “Remote Programming Language,” or “RPL,” also referred to as “commands”.⁸
- Numeric values or “constants,” which Lexmark observed by testing the toner as it interacted with other components.⁹
- The eight commands (above) implement a linear equation and a quadratic equation.¹⁰
- The TLP merely plugs the “constants” into the equations, in order to calculate the amount of remaining toner.
- Finally, three of the 37 bytes of the T520 Toner Loading Program spell “LXK”—Lexmark’s stock ticker symbol.¹¹

⁸ (R. 60 Goldberg Aff., pg. 10, ¶ 11, Exs. B–C, Apx. pg. __; R. 66 Maggs Decl., Ex. D, Apx. pg. __; R. 65 Pltf. Reply, Ex. H, Declaration of Wm. Keith Richardson, Exs. A–B, Apx. pg. __, Maggs at TR 94, Apx. pg. __). The commands “*mul*,” “*pct*,” and “*sub*” are abbreviations for “multiply,” “take a percent,” and “subtract.” (*Id.*)

⁹ (R. 60 Goldberg Aff., pg. 8–10, ¶ 19, Apx. pg. __; R. 65 Pltf. Reply, Ex. H, Richardson Decl., Exs. A–B, Apx. pg. __; R. 66 Maggs Decl., Ex. D, Apx. pg. __).

¹⁰ (*Id.*).

¹¹ (R. 60 Goldberg Aff., pg. 12–13, ¶ 25, Apx. pg. __; R. 65 Pltf. Reply, Ex. H, Richardson Decl., Exs. A–B, Apx. pg. __).

SUMMARY OF ARGUMENT

Section 1201(a)(2) of the DMCA prohibits devices that circumvent a “technological measure that effectively controls access *to a work protected under [the Copyright Act]*” (emphasis added). The district court erred by holding that § 1201(a) applies to the circumvention of a technological measure that controls the functioning of printer toner cartridges, which is *not* protected by copyright laws. The district court applied the DMCA to suppress the sale of *replacement parts*, which is a world removed from Congress’s goal of preventing the piracy of copyrighted *works* through digital means.

The district court erred further by holding that Appellee Lexmark’s measure is “effective” to “control access,” where the technological measure does not prevent entry to, viewing, or even copying of the allegedly-protected programs. This holding is inconsistent with all prior cases, in which courts have found that a measure “effectively controls access” if it prevents entry to systems on which the works are stored, or prevents the works from being read, displayed, or copied.

The district court committed these errors in large measure because it disregarded the policy underlying § 1201(a). As a result, the district court failed to recognize that its interpretation of § 1201(a)(2) creates absurd results, which contravene policies favoring competition and opposing the extension of copyright to noncopyrightable functions and goods.

Further, the district court erred by denying SCC's reverse engineering defense to Counts Two and Three under § 1201(f), where undisputed evidence demonstrated that the SCC chip incorporates independently-created programs that interoperate with a Lexmark program.

The district court committed two fundamental legal errors when it concluded that Lexmark is likely to prevail on the merits of its copyright claim. The district court failed to filter out the noncopyrightable elements of the TLP, in accordance with this Circuit's standard. Further, the court misconstrued and misapplied the test for fair use.

The district court compounded its legal errors by making erroneous findings of fact. Specifically, the district court failed to give appropriate weight to the evidence that the TLP consists merely of an unprotectable method and unprotectable elements used to estimate the amount of toner remaining in a print cartridge, the code for which is constrained by external factors. These elements, individually and collectively, are excluded from copyright protection.

The district court also failed to understand that the TLP performs a noncopyrightable function—that of a “lock-out” code. Under a correct fair use standard, a lock-out code can be copied to facilitate the interoperability of other programs without constituting infringement.

The district court's injunction also was erroneous because Lexmark failed to satisfy the other elements for a preliminary injunction. Because there is no market for the purportedly infringed work and because the infringement was completely innocent, the district court erred by presuming irreparable injury. Although the district court also found that Lexmark could incur economic injury, such injury is compensable by damages and is not irreparable. The injunction disserves the public interest by obstructing remanufacturing, an environmental policy objective expressly favored by federal law, and by reducing price competition. The injunction harms third parties because, as the district court expressly found, it has a depressing effect on the remanufacturing industry as a whole.

Finally, the district court erred by setting the injunction bond too low.

STANDARD OF REVIEW

A district court's order granting or denying a Motion for Preliminary Injunction is reviewed under the abuse of discretion standard. *Performance Unlimited, Inc. v. Questar Publishers, Inc.*, 52 F.3d 1373, 1378 (6th Cir. 1995). "A district court abuses its discretion when it relies on clearly erroneous findings of fact, or when it improperly applies the law or uses an erroneous legal standard." *Id.* (citations omitted).

A district court's findings of fact are reviewed under the clearly erroneous standard of review; its legal conclusions are reviewed *de novo*. *Id.* (citing *NAACP v. City of Mansfield, Ohio*, 866 F.2d 162, 166 (6th Cir. 1989)). A factual or legal error alone may be sufficient to establish that the court abused its discretion in granting a preliminary injunction. *Id.*

Whether a work is sufficiently original to merit copyright protection is a question of fact reviewed under the clearly erroneous standard. *Matthew Bender & Co. v. West Publ'g Co.*, 158 F.3d 674, 681 (2d Cir. 1998).

A district court's findings regarding fair use are a mixed question of law and fact, and are reviewed *de novo*. *Kelly v. Arriba Soft Corp.*, 280 F.3d 934, 939 (9th Cir. 2002).

ARGUMENT

I. THE COURT ERRED BY HOLDING THAT LEXMARK DEMONSTRATED A LIKELIHOOD OF SUCCESS ON ITS DMCA CLAIMS

A. The Court Erred by Applying § 1201(a)(2) to Protect Noncopyrightable Functions and Cartridges Rather Than Copyrightable Expression

In cases of statutory construction, the starting point is the language employed by Congress. *Appleton v. First Nat'l Bank of Ohio*, 62 F.3d 791, 801 (6th Cir. 1995). Section 1201(a)(2) of the Digital Millennium Copyright Act (“DMCA”), 17 U.S.C. § 1201(a)(2), proscribes the manufacture and sale of certain devices that “circumvent a technological measure that effectively controls access to a *work protected under this title* [*i.e.*, the Copyright Act]” (emphasis added). The district court ignored the plain language of the statute when it interpreted § 1201(a)(2) to protect the *functions* performed by the Lexmark software, rather than the software itself. Such functions are explicitly not protected by copyright,¹² and thus are not subject to protection under § 1201(a)(2).

Specifically, Lexmark’s technological measure does not protect any expressive aspects of the Lexmark programs, which (if any) would inhere in the literal text of the code. The technological measure at issue here does not impede

¹² See discussion of § 102(b) of the Copyright Act, *infra* at pg. 38–39.

anyone from entering the printer and the chip and obtaining, viewing, and copying the unencrypted, unprotected TLP on the Lexmark toner cartridge chips, and the PEP in the Lexmark printers. (Goldberg at TR 195, Apx. pg. __). The Lexmark measure only prevents the programs (more accurately, the printer) from functioning with a replacement cartridge. As such, the measure does not “control access” to any aspect of the programs that is protected under the Copyright Act. By erroneously interpreting § 1201(a)(2) to protect the noncopyrightable functional aspects of software, the court committed clear error.

Moreover, courts have applied § 1201(a) only where the ultimate object of protection was the copyrighted work. For example:

- Motion pictures distributed on DVD video discs, *Universal City Studios, Inc. v. Corley*, 273 F.3d 429, 453 (2d Cir. 2001);
- Software stored on a password-protected private computer network, *Pearl Inv., LLC v. Standard I/O, Inc.*, Civ. No. 02-050-P-H, 2003 U.S. Dist. LEXIS 5376, at *60 (D. Me. Apr. 2, 2003);
- Electronic text and books distributed electronically for secure display on personal computers, *United States v. Elcom, Ltd.*, 203 F. Supp. 2d 1111, 1120 (N.D. Cal. 2002);

- Television programming distributed by cable systems, *CSC Holdings, Inc. v. Greenleaf Electronics, Inc.*, No. 99 C 6376, 2000 U.S. Dist. LEXIS 7675, at *22 (N.D. Ill. June 2, 2000);
- Sound recordings and motion pictures distributed in real time via Internet transmissions, *RealNetworks, Inc. v. Streambox, Inc.*, No. C99-2070P, 2000 U.S. Dist. LEXIS 1889, at **18–19 (W.D. Wash. Jan. 18, 2000);
- Computer games distributed on CD-ROM, *Sony Computer Entm't Am. Inc. v. Gamemasters*, 87 F. Supp. 2d 976, 987 (N.D. Cal. 1999).

In contrast to these cases, the district court held that § 1201(a)(2) applies where the technological measure only ensures the market for Lexmark cartridges rather than prohibiting a person from accessing copyrighted works. This was clear error.

The Lexmark technological measure was designed solely to ensure that only “authentic” Lexmark toner cartridges can be used with Lexmark printers, so that Prebate cartridges can be repaired, refilled, and resold only by Lexmark and not by Lexmark’s competitors. That the indisputable object of protection is the cartridge market, and not the allegedly copyrighted software programs, is demonstrated by the facts:

1. Lexmark submitted a sworn declaration from the employee directly responsible for the marketing of toner cartridges and printers in support of its

Motion for Preliminary Injunction, openly conceding that Lexmark incorporated the technological measure in its toner cartridges “[t]o prevent unauthorized toner cartridges from being used with Lexmark’s T520/522 and T620/622 laser printers.” (R. 3 Pltf. Sup. Pl, Ex. B, Yaro Decl., pg. 2–3, ¶ 7, Apx. pg. ___).

2. The technological measure protects against unauthorized reuse of the Prebate cartridges, but does not prevent reuse of its higher priced non-Prebate cartridges. Plainly, Lexmark intends its technological measure to protect the business model for its Prebate toner cartridges, not the TLP (which is embedded on both Prebate and non-Prebate cartridges).

3. At the hearing on Lexmark’s Motion for Preliminary Injunction, Lexmark’s expert testified that the printer will work correctly without a TLP on the toner cartridge. *Supra* at 13-14. All that is critical to printer function is that the technological measure ascertains that the toner cartridge is an authorized Lexmark cartridge. Obviously, if the technological measure prevents the cartridge from working even when the TLP is not there, the real object of protection is the cartridge, not the TLP.¹³

¹³ Lexmark markets the cartridges without any copyright notice for the TLPs or any reference to copyright on its shrink-wrap “license.” *See supra* at n.6. There is no evidence that any license is included with the non-Prebate cartridges. (*Id.*)

4. The PEP and the TLPs are completely accessible without circumventing the technological measure. Neither program is encrypted. Using standard inexpensive software analysis tools, anyone can access, read, and copy these programs, without circumvention. (Goldberg at TR 195, Apx. pg. __). If the programs were the object of protection, Lexmark would have protected the software code against reading and copying, as was the case in every § 1201(a) case cited above.

5. Similarly instructive is that [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] This further demonstrates that the purpose of the technological measure within this overall system is to protect Lexmark’s market for noncopyrightable toner cartridges—not to protect copyrighted works. Indeed, the facts demonstrate that the TLP itself is part of the *real* technological measure at issue in this case—the measure designed by Lexmark to prevent consumers and competitors from refilling and remanufacturing used cartridges.

The district court failed to recognize these critical distinctions, and instead erroneously relied on *Gamemasters*. (R. 92 FF/CL, pg. 45–46, ¶ 89, Apx. pg. __). In *Gamemasters*, Sony applied a technological measure to its copyrighted video

