

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

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

**v.**

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

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

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**PROOF BRIEF OF APPELLEE**

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**DISCLOSURE OF CORPORATE AFFILIATIONS  
AND FINANCIAL INTEREST**

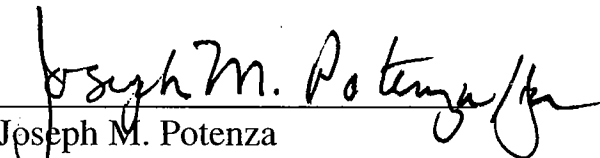
Pursuant to Sixth Circuit Rule 26.1, Appellee Lexmark International, Inc.,  
makes the following disclosure:

1. Is said party a subsidiary or affiliate of a publicly owned corporation? NO

If the answer is YES, list below the identity of the parent corporation or affiliate and the relationship between it and the named party:

2. Is there a publicly owned corporation, not a party to the appeal, that has a financial interest in the outcome? NO

If the answer is YES, list the identity of such corporation and the nature of the financial interest:

  
\_\_\_\_\_  
Joseph M. Potenza

\_\_\_\_\_  
July 23, 2003  
Date

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## **STATEMENT OF ORAL ARGUMENT**

Appellee Lexmark International, Inc. requests that oral argument be scheduled because of the overriding importance of the issues in the case.

## STATEMENT OF THE ISSUES FOR REVIEW

### 1. Copyrightable Expression

After reviewing evidence that Lexmark's Toner Loading Programs (TLPs) embodied numerous design choices including the selection and arrangement of formulas, constants, and computer instructions, and evidence that there were many different ways in which the TLPs could have been written, did the district court correctly find that the TLPs contained the minimal level of creativity required to support a copyright?

### 2. Substantial Similarity – Literal Copying

Given that SCC admitted to copying exactly all of the computer instructions (including Lexmark's non-functional fingerprint, or infringement marker – "LXK") contained in Lexmark's TLPs, did the district court correctly apply the law in rejecting SCC's attempts to "filter out" all of the computer instructions? Even under SCC's proposed "filtration" test, did the district court correctly reach the same result?

### 3. No Fair Use

Did the district court correctly conclude, based on evidence that Lexmark's TLPs are not "lock-out codes" and evidence that SCC did not need to copy the TLPs for compatibility, that SCC's admitted wholesale copying of the TLPs was not "fair use" as defined in the copyright statute?

#### 4. DMCA Violations

After finding that Lexmark's TLPs and Printer Engine Programs (PEPs) contain copyrightable expression to which access is effectively controlled by an authentication sequence, did the district court correctly conclude that SCC had violated 17 U.S.C. § 1201(a), which prohibits circumventing a technological measure that controls access to copyrighted works? Did the district court also correctly reject SCC's attempt to invoke an inapplicable exception to the anti-circumvention provision?

## **STATEMENT OF THE FACTS**

### **I. BACKGROUND**

Appellee Lexmark develops, manufactures, and sells laser printers and toner cartridges. (R.92 FF/CL, p.1, ¶1, Apx.\_\_\_\_). Lexmark is also one of the largest remanufacturers of used toner cartridges in the world. (R.65 Yaro Decl., p.3, ¶6, Apx.\_\_\_\_). The products at issue are Lexmark's T520/522 and T620/622 ("T-Series") laser printers for business use. (R.92 FF/CL, p.1, ¶2, Apx. \_\_\_\_). Two computer programs – a TLP and a PEP – are used in the printers along with a separate "authentication sequence" that must be performed before the printers will execute the programs.

Appellant SCC manufactures and sells components for remanufactured toner cartridges. (R.92 FF/CL, p.1, ¶3, Apx. \_\_\_\_). SCC specifically designed its SMARTEK microchips for remanufacturing Lexmark's Prebate toner cartridges. SCC admits that each SMARTEK microchip contains an identical copy of Lexmark's TLP. When used with Lexmark's printers, SCC's microchips circumvent Lexmark's authentication sequence to gain unauthorized access to Lexmark's TLP and PEP.

### **II. LEXMARK'S T-SERIES PRINTERS AND TONER CARTRIDGES**

Before addressing the issues raised by SCC, a review of the technology employed by Lexmark's printers is warranted.

## **A. LEXMARK'S PRINTERS USE TWO COPYRIGHTED COMPUTER PROGRAMS**

Lexmark's TLP is stored on a microchip on Lexmark's toner cartridges, while the PEP is stored in a memory in the printer itself.<sup>1</sup> (R.92 FF/CL, p.4, ¶22, Apx. \_\_; p.11, ¶58, Apx. \_\_). Lexmark obtained certificates of registration for both the TLP and PEP from the Register of Copyrights. (R.92 FF/CL, p.5 ¶26, p.7, ¶37, Apx.\_\_).

### **1. Lexmark's Copyrighted TLPs Approximate Toner Level**

The TLP calculates the amount of toner remaining in the toner cartridge. (R.92 FF/CL, p.6, ¶33, Apx. \_\_). The PEP uses this calculation to determine when to display toner status conditions, such as "toner low," on the printer. (R.92 FF/CL, p.6, ¶33, Apx. \_\_). Although SCC concedes that the TLP performs this function, it alleges, without any supporting evidence, that the purpose of this toner calculation function "is to disable a cartridge that has been used or refilled." (Appellant's Brief at 13).

Lexmark stores the TLP on a microchip in the toner cartridge, rather than in the printer engine, to allow for changes in toner and cartridge characteristics. (R.92 FF/CL, p.7, ¶34, Apx. \_\_; TR 124, Apx. \_\_). For example, as Lexmark introduces new cartridge designs or toner having different properties, Lexmark can

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<sup>1</sup> The T520/522 laser printers use one TLP and the T620/622 laser printers use a different TLP dictated by different cartridge and toner characteristics. (R.92 FF/CL, p.7, ¶35, Apx. \_\_).

revise the TLP to account for these changes. (TR 124, Apx. \_\_\_\_). By having the TLP in the toner cartridge rather than in the printer, Lexmark can easily provide updated versions of the TLP.

Because the TLP resides on a microchip in the toner cartridge, the printer must retrieve the program before executing the TLP. After a successful authentication sequence (discussed below), the printer retrieves a copy of the TLP from the toner cartridge microchip. (R.92 FF/CL, p.14, ¶75, Apx. \_\_\_\_). The printer then performs a “checksum” calculation to verify the integrity of the TLP transferred from the cartridge to the printer. (R.92 FF/CL, p.14, ¶76, Apx. \_\_\_\_). Checksum calculations are commonly used techniques for verifying data integrity when transmitting data from one location to another. (R.92 FF/CL, p.14, ¶77, Apx.\_\_\_\_). After verifying the checksum, the printer executes the TLP and calculates the toner level in the cartridge. (R.92 FF/CL, p.15, ¶80, Apx. \_\_\_\_). If the checksum is not valid, the printer concludes that the integrity of the TLP has been compromised and enters an error state. (R.92 FF/CL, p.15, ¶81, Apx. \_\_\_\_).

The checksum calculation operates as follows. When the TLP is transmitted from the toner cartridge to the printer engine, a simple numerical checksum in the toner cartridge microchip is also transmitted. (R.92 FF/CL, p.14, ¶78, Apx. \_\_\_\_). This checksum represents the result of a mathematical computation performed on the data bits in the transmitted TLP. (R.92 FF/CL, p.15, ¶78, Apx. \_\_\_\_). After receiving the transmitted TLP, the printer performs the same checksum



computation on the transmitted TLP and compares its computed result with the checksum received from the toner cartridge. (R.92 FF/CL, p.15, ¶78, Apx. \_\_\_\_). If the result is the same, then the printer has some assurance that the transmitted TLP is accurate. (R.92 FF/CL, p.15, ¶78, Apx. \_\_\_\_). Otherwise, it concludes that the transmitted TLP was corrupted during transmission. (R.92 FF/CL, p.15, ¶78, Apx. \_\_\_\_; R.66 Maggs Decl., p.6, ¶16, Apx.\_\_\_\_; TR 94-95, Apx.\_\_\_\_).

**(a) The TLP Is Not A “Lockout Code”**

Because the TLP is not needed for compatibility, it is not a lock-out code. Lexmark’s printer can operate without the TLP. (R.92 FF/CL, p. 8, ¶¶39, 42, p.16, ¶83, Apx. \_\_\_\_). In particular, the microchip on the toner cartridge can specify to the printer that the TLP should not be copied to the printer. (R.66 Maggs Decl., p.8, ¶¶19-20, Apx.\_\_\_\_; TR 120, Apx. \_\_\_\_). In that situation, following a valid authentication sequence, the printer will not transmit a copy of the TLP from the toner cartridge but will instead operate in a default mode. Because the TLP is not copied, the printer will not perform a checksum operation. (R.66 Maggs Decl., p.8, ¶20, Apx. \_\_\_\_; TR 120, Apx. \_\_\_\_). The printer will operate without the TLP and will determine toner level by executing a portion of the PEP that performs this function when in this default mode.

The printer can operate with toner loading programs that differ from Lexmark’s TLPs. (R.66 Maggs Decl., p.7, ¶18, Apx. \_\_\_\_; TR 125, Apx. \_\_\_\_). The only requirement is that the microchip store the correct checksum value for the

particular toner loading program being used. (R.66 Maggs Decl., p.7, ¶18, Apx. \_\_; TR 125, Apx. \_\_). Knowledge of the particular mathematical computation performed in Lexmark's checksum is not needed in order to use a different toner loading program. (R.92 FF/CL, p.16, ¶85, Apx. \_\_; TR 148, Apx. \_\_). Because the checksum used in Lexmark's microchip is only 1 byte (8 bits) long, there are only a total of 256 possible values for the checksum. (R.92 FF/CL, p.17, ¶88, Apx. \_\_; TR 121, Apx. \_\_). Consequently, if one wanted to use a different toner loading program, the checksum value for that program could be easily determined by simple trial and error and without knowledge of the method used to calculate the checksum. (R.92 FF/CL, p.17, ¶88, Apx. \_\_; TR 121, Apx. \_\_). The TLP therefore cannot be considered a "lock out" code for the printer as alleged by SCC. SCC's claim to the contrary is premised on its faulty analysis of Lexmark's TLP. SCC failed to recognize that the printer performed a checksum calculation even though SCC determined that, after the authentication sequence was successfully performed, the TLP would not execute if SCC changed a single byte in the TLP (a fundamental indication that the printer utilizes a checksum).

#### **(b) Creative Expression In The TLP**

The fundamental idea behind the TLP is to approximate the amount of toner in a cartridge. Each of Lexmark's TLPs contain a set of statements, symbols, and computer instructions that calculate the approximate amount of toner remaining in a cartridge. (TR 88-89, Apx. \_\_). Any number of different approximation

methods could have been used to create the TLPs. The particular approximation technique used in Lexmark's TLPs is as follows. The TLP receives a torque value from the toner cartridge. (TR 89-90, 92, 94, Apx. \_\_\_\_). The TLP applies this torque value to linear and quadratic formulas having custom mathematical constants, and generates an approximation of the amount of toner remaining in the toner cartridge. (TR 89-90, 92, 94, Apx. \_\_\_\_).

Lexmark made a series of design choices when creating its TLPs including, for example:

- A choice in selecting the particular approximation technique for determining the remaining toner. A number of approximation techniques were available to Lexmark engineers, including a formulaic approach; a look-up table; counting printed pages; counting of printed toner dots; etc. (TR 89-90, Apx. \_\_\_\_; R.66 Maggs Decl., pp.9-10, ¶¶26-28, Apx. \_\_\_\_).
- A choice in selecting the particular constants, variables, and threshold values for the chosen approximation technique. (R.66 Maggs Decl., p.9, ¶26, Apx. \_\_\_\_).
- A choice in the expression of its TLP including the particular sequence and arrangement of each computer instruction in the TLP program. (R.66 Maggs Decl., p.10, ¶29, Apx. \_\_\_\_).
- A choice to use a nonfunctional fingerprint – “LXK” – in a particular location in the TPL to aid in detecting copyright infringers. (R.3 Able Decl., p.6, ¶14, Apx. \_\_\_\_).

This evidence showed that the idea of estimating the toner remaining in the cartridge could have been expressed in many different ways and resulted in many different possible computer programs. (R.66 Maggs Decl., pp.9-10, ¶24-31, Apx. \_\_\_\_).

\_\_\_). Instead of developing its own TLP, SCC blatantly copied Lexmark's TLPs, down to the exact placement of the non-functional "LXK" fingerprint.

## **2. The Printer Engine Program**

The PEP is a lengthy program that controls a number of operations in Lexmark's printers. (R.92 FF/CL, p.5, ¶24, Apx. \_\_\_). Such operations include, for example, paper feed; paper movement; motor control; and others. (R.92 FF/CL, p.5, ¶24, Apx. \_\_\_). SCC has not disputed the copyrightability of the PEP. (R.92 FF/CL, p.5, ¶28, Apx. \_\_\_).

### **B. THE PRINTERS PERFORM AN AUTHENTICATION SEQUENCE BEFORE EXECUTING THE PROGRAMS**

Lexmark's printers use an authentication sequence to prevent unauthorized access to its TLPs and PEPs. (R.92 FF/CL, p.11, ¶58, Apx. \_\_\_). The printer runs this authentication sequence each time a toner cartridge is inserted into the printer; the printer is powered on; or whenever the printer is opened and closed. (R.92 FF/CL, p.12, ¶59, Apx. \_\_\_).

The authentication sequence is a 3-step process. First, the printer and microchip on the toner cartridge each calculate a Message Authentication Code ("MAC") using a publicly available encryption algorithm known as Secure Hash Algorithm-1 ("SHA-1"). (R.92 FF/CL, p.7, ¶38; p.12, ¶60, Apx. \_\_\_). Next, the microchip transmits its MAC to the printer. (R.92 FF/CL, p.12, ¶61, Apx. \_\_\_). Finally, the printer compares the MAC that it calculated with the MAC received

from the toner cartridge. (R.92 FF/CL, p.12, ¶62, Apx. \_\_\_\_). The authentication sequence succeeds if the MAC calculated by the printer matches the MAC calculated by the microchip. (R.92 FF/CL, p.12, ¶63, Apx. \_\_\_\_).

If the authentication sequence succeeds, the printer will have full access to the TLP and the PEP. (R.92 FF/CL, p.13, ¶69, Apx. \_\_\_\_). If the authentication sequence fails, the printer will be unable to access the TLP to monitor toner status and the PEP to print. (R.92 FF/CL, p.13, ¶70-71, Apx. \_\_\_\_).

**C. LEXMARK OFFERS PREBATE AND NON-PREBATE TONER CARTRIDGES FOR USE WITH ITS PRINTERS**

Customers of Lexmark's printers have a choice between two types of toner cartridges: (1) a Prebate cartridge; and (2) a regular non-Prebate cartridge. (R.92 FF/CL, p.3, ¶10, Apx. \_\_\_\_). Both cartridges are identical in all respects except one – the Prebate cartridge cannot be re-filled after it has been used, whereas the regular cartridge may be refilled any number of times. (R.65 Yaro Decl., p.2, ¶4, Apx. \_\_\_\_).

Lexmark's Prebate cartridges are discounted below the regular cartridges. (R.92 FF/CL, p.3, ¶12, Apx. \_\_\_\_). In return for this upfront discount, the customer agrees to use the Prebate cartridge only once and to return it only to Lexmark as part of its substantial remanufacturing and

recycling operation.<sup>2</sup> (R.92 FF/CL, p. 3, ¶13, Apx. \_\_\_\_). Lexmark provides its customers with a pre-paid return box to facilitate the return of cartridges. (TR 12, Apx. \_\_\_\_). This Prebate agreement is specifically set forth in the shrink-wrap agreement on the Prebate cartridge packaging. (R.92 FF/CL, p.3, ¶14, n 1, Apx.\_\_\_\_).

To ensure that customers return used Prebate cartridges to Lexmark, Lexmark's authentication sequence (discussed above) prevents the printer from accessing the TLP to determine toner status and the PEP to print. (R.92 FF/CL, pp.36-37, ¶¶69, 72, Apx. \_\_\_\_). As a result, the printer will not function with a used or refilled Prebate cartridge. (R.92 FF/CL, pp. 13,-14 ¶¶71, 74, Apx. \_\_\_\_).

Because regular cartridges can be refilled an unlimited number of times, regular cartridges do not come with the "use and return" conditions that accompany Prebate cartridges. (R.92 FF/CL, p.4, ¶16, Apx. \_\_\_\_). Remanufacturers are therefore free to refill regular cartridges without violating any agreement between Lexmark and its customers. (R.92 FF/CL, p.4, ¶18, Apx. \_\_\_\_). Moreover, the printer will continue to function with used or remanufactured regular cartridges. (R.92 FF/CL, p.4, ¶21, Apx. \_\_\_\_). In particular, Lexmark's

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<sup>2</sup> Since 1997, Lexmark has received over 2 million cartridges in the U.S. for remanufacturing and recycling. Lexmark reuses or recycles every component of used Prebate cartridges that it receives. (R.65 Yaro Decl., p. 3, ¶6, Apx. \_\_\_\_).

authentication sequence will not prevent the printer from accessing the TLPs to monitor toner level and the PEP to print.

### **III. SCC'S SMARTEK CHIPS INDUCE VIOLATION OF LEXMARK'S "USE AND RETURN" AGREEMENT**

SCC sells its SMARTEK microchip for remanufacturing single-use Prebate cartridges and re-using those cartridges with Lexmark's printers. (R.92 FF/CL, p. 17, ¶90, Apx. \_\_\_\_). SCC's SMARTEK microchips replace the original Lexmark microchips on Prebate cartridges, (R.92 FF/CL, p. 17, ¶90, Apx. \_\_\_\_), thereby allowing a customer to reuse a depleted Prebate cartridge. This use violates Lexmark's "use and return" agreement and permits unauthorized access to Lexmark's copyrighted computer programs.

SCC's conduct is largely undisputed. SCC admits that its SMARTEK microchips contain identical copies of Lexmark's TLPs and that it "slavishly copied" those programs. (R.53 SCC Opp., pp.4,19, Apx. \_\_\_\_; TR 196-97. Apx. \_\_\_\_). SCC even copied Lexmark's fingerprint – "LXK" – that is part of Lexmark's TLP. (R.3 Able Decl., p.4, ¶12, Apx. \_\_\_\_).

As to Lexmark's DMCA claims, SCC admits that it designed its SMARTEK microchip to circumvent or bypass Lexmark's authentication sequence. (R.3 SCC Opp., pp.2-4, Apx. \_\_\_\_). SCC's SMARTEK microchip mimics Lexmark's authentication sequence that would normally be performed by a Lexmark microchip and thereby fools the printer into accessing Lexmark's copyrighted

computer programs. (R.3 SCC Opp., pp.2-4, Apx. \_\_; R.82 TR 90-91, Apx. \_\_).

SCC also admits that its SMARTEK microchip has no other commercial purpose other than to circumvent Lexmark's technological measure. (R.3 SCC Opp., pp.2-4, Apx. \_\_).



## **SUMMARY OF THE ARGUMENT**

The district court properly exercised its discretion in granting a preliminary injunction to stop SCC's sales of SMARTEK microchips containing an exact copy of Lexmark's computer programs.

First, the district court correctly determined that Lexmark established a likelihood of success on its copyright infringement claim. The fact that SCC copied Lexmark's copyrighted TLPs was not at issue, because SCC admitted that it "slavishly copied" Lexmark's TLPs. The district court properly evaluated the validity of Lexmark's copyrights after reviewing evidence (including witness testimony and documents) of the idea behind the program and Lexmark's creative choices in creating its expression of that idea; the presumption of validity provided by statute; and the generally low standard required for copyrightability. The district court also properly rejected SCC's attempt to "filter out" all of the computer instructions as unprotectable under a myriad of theories offered by SCC. After carefully reviewing testimony and documents describing the operation of Lexmark's printers, the district court also rejected SCC's argument that Lexmark's TLPs were nothing more than a "lockout code."

Second, the district court correctly determined that Lexmark showed that it was likely to succeed on its DMCA claims. Contrary to its arguments raised for the first time in this Court, SCC never disputed that the literal language of 17 U.S.C. § 1201(a) covers SCC's illegal activities. SCC admitted that: (1) it

specifically designed its SMARTEK microchip to circumvent Lexmark's technological measure; (2) its SMARTEK microchip has no commercial purpose other than to circumvent Lexmark's technological measure; and (3) it markets its SMARTEK microchip for use in circumventing Lexmark's technological measure.

Instead, SCC argued to the district court that the DMCA should not apply because the literal application of the statute would be contrary to the legislative history, and that its illegal activities fall under the limited "reverse engineering" exemption of 17 U.S.C. § 1201(f). SCC, however, failed to cite to any portion of the legislative history to support its conclusory statements and failed to provide any evidence to support its argument that its SMARTEK microchip qualified for the exemption under Section 1201(f).

Finally, Chief Judge Carl S. Forrester properly presumed irreparable harm under established law based on Lexmark's strong showing of likelihood of success on its copyright and DMCA claims. Even without the presumption, SCC failed to rebut Lexmark's evidence of irreparable injury, including fewer customer orders, reduced margins, potential market share loss, damage to the reputation of Lexmark's products, and damage to Lexmark's customer relationships.

After full and careful consideration of each issue, Chief Judge Forrester rendered detailed findings of fact and conclusions of law in a well-reasoned 53-page opinion. Consequently, SCC has failed to establish that the district court abused its discretion in issuing a preliminary injunction.

## ARGUMENT OF LAW

### I. THE DISTRICT COURT DID NOT ABUSE ITS DISCRETION IN GRANTING A PRELIMINARY INJUNCTION ON LEXMARK'S COPYRIGHT INFRINGEMENT CLAIMS

The standard of review on appeal from the grant of a preliminary injunction is whether the district court abused its discretion. *Forry, Inc. v. Neundorfer, Inc.*, 837 F.2d 259, 262 (6<sup>th</sup> Cir. 1988). A district court abuses its discretion when it applies the wrong legal standard, misapplies the correct legal standard, or relies on clearly erroneous findings of fact. *Miami University Wrestling Club v. Miami University*, 302 F.3d 608, 613 (6th Cir. 2002). Moreover, “[a]ppellate courts review judgments, not statements in an opinion.” *Asarco, Inc. v. Secretary of Labor*, 206 F.3d 720, 722, (6th Cir. 2000). “[I]f the judgment of the District Court is correct for any reason, that judgment must be affirmed.” *Linton v. Commissioner of Health and Environment, State of Tennessee*, 65 F.3d 508, 514 (6th Cir. 1995).

The district court properly applied the law and – after considering extensive evidence including documents and witnesses – made fully supported and correct factual findings. Consequently, there was no abuse of discretion in issuing a preliminary injunction on the copyright infringement claim.

**A. THE DISTRICT COURT'S FINDING THAT THE TONER LOADING PROGRAMS CONTAIN COPYRIGHTABLE EXPRESSION WAS NOT CLEARLY ERRONEOUS**

**1. The Copyrights Are Presumed Valid**

Lexmark obtained certificates of registration from the Register of Copyrights for the TLPs. (R.92 FF/CL, p.7, ¶ 37, Apx. \_\_\_\_). Pursuant to Section 410(c) of the copyright statute, the registration certificates constitute *prima facie* evidence of the validity of the copyrights. 17 U.S.C. § 410(c); *Eckes v. Card Prices Update*, 736 F.2d 859, 861 (2d Cir. 1984); *Service & Training, Inc. v. Data General Corp.*, 963 F.2d 680, 688 (4th Cir. 1992) (defendant failed to carry burden of rebutting presumption of validity of registered copyrights in computer software). It is therefore undisputed that SCC had the burden of showing that the validly obtained copyrights were invalid and, as discussed below, SCC failed to make this showing.

**2. Even Without The Presumption, The Evidence Supports The District Court's Identification Of Protectable Expression**

SCC contends that the TLPs are not entitled to any copyright protection because they are merely “ideas, methods, mathematical equations, and constants.” (Appellant’s Brief at 34). Under that sweeping and untenable characterization, most computer programs would not be copyrightable. That, however, is not the law.

SCC also suggests that because the computer programs are short – consisting of no more than 55 bytes – the “length and arrangement of the program, as well as

the eight bytes of the derived secret, would have to be filtered out as constrained by the chip.” (Appellant’s Brief at 37). Using SCC’s logic, short computer programs would be entitled to no copyright protection, while longer programs would apparently be entitled to copyright protection. SCC cites no court decision in support of this proposition, nor can it. Computer programs must always fit within the available memory size of the particular computer in which they reside, and SCC offers no size limit below which copyright protection would suddenly disappear. Computer programs embedded in microchips are entitled to no less protection than other copyrightable works. *See, e.g., Apple Computer, Inc. v. Franklin Computer Corp.*, 714 F.2d 1240, 1249 (3d Cir. 1983) (“we reaffirm that a computer program in object code embedded in a ROM chip is an appropriate subject of copyright.”); *Superchips, Inc. v. Street & Performance Elecs., Inc.*, No. 6:00-CV-896-ORL-31 KRS, 2001 U.S. Dist. LEXIS 23595 (M.D. Fla. 2001).

The Supreme Court has set a very low threshold for protectable expression in copyrighted works. “To be sure, the requisite level of creativity is extremely low; even a slight amount will suffice. The vast majority of works make the grade quite easily, as they possess some creative spark, ‘no matter how crude, humble or obvious’ it might be.” *Feist Publications, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 345 (1991). As the Second Circuit has noted, “Originality in this context means little more than a prohibition of actual copying [of a prior work].” *Alfred Bell & Co. v. Catalda Fine Arts, Inc.*, 191 F.2d 99, 103 (2d Cir. 1950); *see also*

*Original Appalachian Artworks, Inc. v. The Toy Loft, Inc.*, 684 F.2d 821, 824-25 (11th Cir. 1982). Even the mere arrangement of alphabetical letters on a quilt represents sufficient creativity to warrant copyright protection. *Boisson v. Banian, Ltd.*, 273 F.3d 262 (2d Cir. 2001).

The district court properly considered the evidence in finding sufficient creativity and upholding the validity of the copyrights in the TLPs, including:

- The various design choices made, including the selection, arrangement, and ordering of formulas and constants used in the TLPs;
- The selection, arrangement, and ordering of the specific computer commands contained in the TLPs;
- Evidence that the TLPs could have been written in many different ways while achieving the same result; and
- The selection and placement of Lexmark's non-functional fingerprint (*i.e.*, stock ticker symbol) – LXX – in the TLP.

The district court properly considered evidence that the TLPs in their entirety contained creative expression because of the various design choices made by the programmers in creating the programs. (TR 89, Apx. \_\_; R.66 Maggs Decl., p.9-10, ¶23, 31, Apx. \_\_). Dr. Maggs testified that the programs contained one of a number of different equations that could have been selected to carry out the function of calculating the toner level. *Id.* For example, Lexmark could have decided to use one or more quadratic equations, one or more linear equations, other types of equations, or any combination thereof. (R.66 Maggs Decl. p.9, ¶26, Apx. \_\_).

Dr. Maggs testified that, instead of using equations, the programmer could have used a simple look-up table relating each different torque reading or an interval of torque readings to a toner level. *Id.*; (TR 126-27, Apx. \_\_\_\_). Dr. Maggs further testified that other approaches could have been used than the ones selected by Lexmark's programmer. (TR 89-90, Apx. \_\_\_\_). Moreover, because the TLP is not required to produce a precise estimate of toner level, many different choices for constants could have been made. (TR 104-05, Apx. \_\_\_\_).

Even SCC's computer programming expert, Dr. Benjamin Goldberg, agreed that the TLPs could have been expressed differently by writing them in a different programming language. (TR 209, Apx. \_\_\_\_). The choices of specific equations, constants, and variables represent sufficient creative expression to meet the "extremely low" level of creativity dictated by the Supreme Court for copyright protection.

Contrary to SCC's contention, the TLPs do not constitute a copyright on the formulas themselves. Courts have concluded that the selection of formulas and constants used with formulas in a computer program are protectable forms of creativity. *Compaq Computer Corp. v. Procom Tech., Inc.*, 908 F. Supp. 1409 (S.D. Tex. 1995) (selection of five threshold values for use in computer hard drive monitor met the requisite degree of creativity); *Allen-Myland, Inc. v. Int'l Bus. Machs. Corp.*, 770 F. Supp. 1004, 1011-12 (E.D. Pa. 1991) ("choices as to whether and how to use a table structure, how to arrange the instructions and other

information within the tables and within the entries in the tables were all” copyrightable expression); *SAS Inst., Inc. v. S&H Computer Sys., Inc.*, 605 F. Supp. 816, 825 (M.D. Tenn. 1985) (“[e]ven in the case of simple statistical calculations, there is room for variation, such as the order in which arithmetic operations are performed.”). Importantly, the Copyright Office will register a computer program that implements a mathematical formula or algorithm. For example, the Copyright Office will register a program that calculates the orbit of a rocket or a program that computes wages and salaries for a payroll, even if the program uses a formula or algorithm to perform these calculations. (R.65, Ex. C, Compendium of Copyright Office Practices § 321 at 300-16, Apx. \_\_; R.82 TR 75-76, Apx. \_\_.)

The evidence before the district court also revealed that the arrangement of the computer commands contained in the TLPs was original (*i.e.*, arranged by the programmer) and was not dictated by external factors as contended by SCC. For example, as explained above, SCC’s expert, Dr. Goldberg, testified that the TLPs could have been written differently using a different computer programming language. He boasted that he could have rewritten the programs in the “C” programming language using only five lines of code or seven lines of code, depending on the printer model. (TR 209, Apx. \_\_). SCC’s expert also admitted that the order of instructions could be changed without affecting the outcome of the program. (TR 206, Apx. \_\_). This evidence shows that the selection and ordering



of programming commands in the TLPs represents at least the “extremely low” level of creativity required by the Supreme Court to merit copyright protection. *Apple Computer v. Formula Int’l*, 725 F.2d 521, 525 (9th Cir. 1984) (plaintiff “seeks to copyright only its particular set of instructions, not the underlying computer process”).

Even if Lexmark’s TLPs were considered to be “lock out” codes, which they are not, the TLPs are still protected under the copyright laws because the TLPs contain copyrightable expression. The Federal Circuit’s decision in *Atari Games Corp. v. Nintendo of America Co.*, 975 F.2d 832, 840 (Fed. Cir. 1992), is particularly instructive in this regard. In *Atari*, Nintendo had developed a program – known as the 10NES program – that prevented its video game console from accepting unauthorized game cartridges. The game console contained a “master chip” that communicated with a “slave chip” in authorized game cartridges containing the 10NES computer program. When a user inserted an authorized game cartridge into the console, the 10NES program in the game cartridge communicated with a computer program in the console to detect whether the cartridge was authorized. If the console determined that the game cartridge was unauthorized, it refused to operate the game. *Id.* at 836.

In upholding the copyrightability of the 10NES computer program, the Federal Circuit explained:

Nintendo's 10NES program contains more than an idea or expression necessarily incident to an idea. Nintendo incorporated within the 10NES program creative organization and sequencing unnecessary to the lock and key function. Nintendo chose arbitrary programming instructions and arranged them in a unique sequence to create a purely arbitrary data stream. This data stream serves as the key to unlock the NES. Nintendo may protect this creative element of the 10NES under copyright. . . . The unique arrangement of computer program expression which generates that data stream does not merge with the process so long as alternate expressions are available.

*Id.* at 840. The Federal Circuit upheld the lower court's grant of a preliminary injunction given Nintendo's likelihood of success on showing that Atari infringed the copyright in the 10NES program.

Copyright's leading treatise cautions that, "computer programming is a highly creative and individualistic endeavor. A court should not be led . . . to believe that complex programs consist only of commonly known techniques and materials strung together without significant originality or skill." 4 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT (1997) § 13.03[F][3][e] at 13-137.

The district court also properly considered evidence that there were many different ways of writing the TLPs that would have worked with the Lexmark printers instead of "slavishly" copying Lexmark's copyrighted programs. (TR 88-90, Apx. \_\_). This evidence rebutted SCC's contention that it was forced to copy Lexmark's programs because the structure and contents of the programs were dictated solely by "external factors" and other requirements. *See, e.g., Franklin*

*Computer Corp.*, 714 F.2d at 1253 (“If other programs can be written or created which perform the same function as [plaintiff’s] operating system program, then [plaintiff’s] program is an expression of the idea and hence copyrightable.”); *Atari Games Corp.*, 975 F.2d at 840 (“The unique arrangement of computer program expression which generates that data stream does not merge with the process so long as alternate expressions are available . . . Nintendo has produced expert testimony showing a multitude of different ways to generate a data stream which unlocks the NES console”). Although SCC contends that the existence of alternative approaches for expressing the TLP provides no evidence of any creativity, SCC cites no authority for that proposition, while Lexmark has cited ample authority to the contrary. *Id.*

Finally, the evidence also showed that Lexmark had creatively inserted its own non-functional fingerprint – “LXK” – in the T520/522 TLP. The district court concluded that this symbol was not dictated by any functions of the TLP. (R.92 FF/CL p.7, ¶36, Apx. \_\_\_\_). Instead of omitting or changing this creative addition to the program, SCC blatantly copied it. (R.92 FF/CL p.18, ¶94, Apx. \_\_\_\_).

### **3. The District Court Properly Considered the Fact That The Copyright Office Already Considered The Issues Raised by SCC**

SCC argues that the TLPs are nothing more than unprotectible algorithms, and that the certificates of registration are entitled to little deference because the

Copyright Office applied a “cursory administrative process” when examining them. (Appellant's Brief, p.12).

Contrary to SCC’s assertion, the Copyright Office asked detailed questions and requested additional information from Lexmark before deciding to issue the registrations. (R.53, App. 6, Ex. A, November 7, 2002 telephone memo of Examiner Susan Harley-Todd, Apx. \_\_); (R.53, App. 6, Ex. B, November 12, 2002 memo to Susan Todd, Library of Congress, Apx. \_\_). For example, the copyright examiner requested evidence that the computer instructions were not “predetermined by the nature of the demands for the printer.” (R.53 App. 6, Ex. A, November 7, 2002 telephone phone memo, Apx. \_\_; R.65 Oman Decl. p.25-26, ¶ 62, Apx.\_\_). The examiner also requested evidence that the computer instructions comprised more than formulas, which are not *per se* copyrightable. *Id.* Lexmark responded with a detailed memo explaining how the TLPs contain different symbol tables containing variables used in the two different programs, and computer instructions for carrying out the print speed determination. (R.53 App. 6, Ex. B, November 12, 2002 memo to Susan Todd, at p. 4). The memo and a subsequent e-mail also explained how the process for determining toner levels could be performed in any number of ways different from the code used in the copyright registration. *Id.* at pp. 4-5; (R.53 App. 6, Ex. C, November 19, 2002 e-mail to Susan Todd, Apx. \_\_). The Copyright Office reviewed the information submitted by Lexmark and determined that both TLPs contained a sufficient amount of

original expression, and that the expression did not merge with the ideas, procedures, processes, systems, or methods of operation that were expressed. (TR 76-77, Apx. \_\_; R.65 Oman Decl., p.27, ¶65, Apx. \_\_). Indeed, the Copyright Office considered the two TLPs to be independently copyrightable. (TR 70, Apx. \_\_; R.65 Oman Decl., pp.23-24, ¶58, Apx. \_\_).

The district court also heard testimony from Ralph Oman, former Register of Copyrights – the head of the Copyright Office – in which he explained the nature of the process under which the copyright certificates were issued. (TR 69-77, Apx. \_\_). He noted that the application record was “more voluminous than many registrations, but it reflects the complexity of the issues and the sincere efforts of the examiner to fully explore the details of the registration.” (TR 69, Apx. \_\_). Mr. Oman also testified that in this particular case, the copyright examiner had involved her supervisors in examining the application and in deciding to issue the registration. (TR 70-71, Apx. \_\_). Mr. Oman also concluded that the issues being raised by SCC were thoroughly considered by the Copyright Office. (TR 75-76, Apx. \_\_; R.65 Oman Decl., pp.7,21-22,25-26, ¶¶18; 53-54, 62, Apx. \_\_).

This evidence, along with other testimony elicited during the hearing before the district court, demonstrates that the Copyright Office did not give the certificates of registration the “cursory review” alleged by SCC. (TR 69-71; 75-76, Apx. \_\_; R.65 Oman Decl., pp.21-22,25-26, ¶¶18; 53-54, 62, Apx. \_\_).

**B. BY EXACTLY DUPLICATING LEXMARK'S PROGRAMS,  
SCC NECESSARILY COPIED PROTECTED EXPRESSION**

It is undisputed that SCC exactly duplicated all of the instructions in Lexmark's TLPs. (R.92, FF/CL p.18, ¶¶92-96; TR 196-197, Apx.\_\_\_\_). SCC admitted that it "slavishly copied" Lexmark's TLPs to allegedly "achieve compatibility" with Lexmark. (R.53, SCC's Opp., at 11-12, Apx. \_\_\_\_). A side-by-side comparison demonstrated that SCC's microchips contain exact copies of Lexmark's copyrighted TLPs. (R.3, Able Decl., p.4, ¶12, Table 2A and 2B, Apx. \_\_\_\_). SCC even copied the non-functional fingerprint, "LXK," placed in Lexmark's TLPs specifically to detect cases of infringement, as in this case. (R.92, FF/CL p.18, ¶94, Apx. \_\_\_\_).

Once the district court established that the TLPs contained protectable expression and that SCC copied exactly the TLPs, it followed necessarily that SCC copied that protectable expression.<sup>3</sup> Most telling, the presence of Lexmark's non-functional fingerprint, "LXK," in SCC's programs conclusively proves that SCC copied the entire program, including all of its protectable expression.

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<sup>3</sup> Even if idea and expression merges, there still is protection against literal copying. *See Homan v. Clinton*, No. 98-3844, 1999 U.S. App. LEXIS 13401, \*3 (June 14, 1999 6th Cir.)(“When an idea and expression coincide, there will be protection against nothing other than identical copying of the work.”).

### C. THE *KOHUS* TEST IS INAPPLICABLE IN CASES OF LITERAL COPYING

SCC's reliance on the filtration-comparison test of *Kohus v. Mariol*, 328 F.3d 848 (6th Cir. 2003), is misplaced, because the filtration-comparison test (a/k/a abstraction-filtration-comparison or "AFC" test) does not apply in cases of literal copying (i.e., verbatim copying). (R.92 FF/CL, pp.36-37, ¶53, Apx. \_\_\_, citing *Mitek Holdings, Inc. v. Arce Eng'g Co.*, 89 F.3d 1548, 1555-56 n.16 (11th Cir. 1996); *Lotus Dev. Corp. v. Borland Int'l, Inc.*, 49 F.3d 807, 815 (1st Cir. 1995), *aff'd by equally divided court*, 516 U.S. 233 (1996); *ILOG, Inc. v. Bell Logic, LLC*, 181 F. Supp.2d 3, 7 (D. Mass. 2002); *Data Gen. Corp. v. Grumman Sys. Support Corp.*, 803 F. Supp. 487, 490-91 (D. Mass. 1992), *aff'd*, 36 F.3d 1147 (1st Cir. 1994)). Stated differently, the AFC test is inapplicable because the accused programs are identical copies of Lexmark's TLPs.<sup>4</sup>

In *Kohus*, the plaintiff developed a portable children's playyard that included drawings for a latch for the playyard. *Id.* at 851. The defendants, who had access

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<sup>4</sup> Copyright infringement cases involving computer software use the terms "literal" and "non-literal" in two ways: (1) to describe different types of elements of software; and (2) to describe different types of copying. See *Mitek Holdings, Inc. v. Arce Eng'g Co.*, 89 F.3d 1548, 1555-56 n.16 (11th Cir. 1996). "The 'literal elements' of a computer program are its source and object code." *Id.* at 1555 n.15. The "non-literal elements" of a computer program "are the products that are generated by the code's interaction with the computer hardware and operating program(s)." *Id.* Examples of non-literal elements include "screen displays and the main menu and submenu command tree structure." *Id.* "Literal copying" means verbatim copying, whereas "non-literal copying" means non-verbatim copying. See *id.* at 1555-56 n.16.

to these materials, created their own drawings for a new latch. *Id.* at 852. Defendants' drawings allegedly were substantially similar to plaintiff's drawings. *Id.* Plaintiff therefore claimed that the defendants' drawings constituted derivative works, which violated plaintiff's rights under the Copyright Act. *Id.* at 858. Thus, the copyrighted and accused drawings were not identical.

The *Kohus* AFC test is not applicable in this case because SCC's programs are literal (*i.e.*, verbatim) copies of Lexmark's TLPs. This is the precise reason for the district court's statement that the AFC test was unnecessary in this case. (R.92 FF/CL, pp.36-37, ¶¶53-54, Apx. \_\_) The district court stated that this "test is either unnecessary or simply does not apply in cases of literal copying." (R.92 FF/CL, p.36, ¶53, Apx. \_\_).

Significantly, Chief Judge Forester was aware of *Kohus v. Mariol* at the time that he issued the preliminary injunction. Chief Judge Forester sat by designation on the Sixth Circuit panel that heard argument in *Kohus v. Mariol* on December 12, 2002. *Kohus*, 328 F.3d at 851. Chief Judge Forester later issued the preliminary injunction in this case on February 27, 2003. (R.92 FF/CL, p.53, Apx. \_\_). Thus, before issuing the preliminary injunction, the district court was well aware of *Kohus v. Mariol* and concluded that an AFC test was inapplicable because the present case involved literal copying, whereas *Kohus* did not. *Compare Kohus*, 328 F.3d at 851; (R.92 FF/CL, p.36, ¶53-54, Apx. \_\_).



The district court's conclusion is consistent with the conclusions reached by other circuits. For example, in *Lotus Development Corp. v. Borland International, Inc.*, the First Circuit explained that “[w]hile the [AFC] test may provide a useful framework for assessing the alleged nonliteral copying of computer code, we find it to be of little help in assessing whether the literal copying of a menu command hierarchy constitutes copyright infringement.” *Lotus Dev. Corp.*, 49 F.3d at 815, *aff'd by equally divided court*, 516 U.S. 233 (1996). The Eleventh Circuit reached the same conclusion in *Mitek Holdings, Inc. v. Arce Engineering Co.*, when it held that the AFC test “was designed to help assess nonliteral copying of a nonliteral element, not nonliteral copying of computer code (a literal element).” *Mitek Holdings, Inc.*, 89 F.3d at 1555-56 n.16.

The district court's conclusion is also consistent with the conclusions reached by other district courts. For example, in *ILOG, Inc. v. Bell Logic, LLC*, the court held that literal copying is not governed by the AFC test. *ILOG, Inc.*, 181 F. Supp.2d at 7. In *Data General Corp. v. Grumman Systems Support Corp.*, the court held that “[t]he complex [AFC] test . . . and such a detailed code examination are not applicable to the case before this court. . . . Since [the accused infringer] has directly copied [the copyright holder's object code], there is no need to confront the more difficult issue of evaluating ‘non-literal’ elements of a program.” *Data Gen. Corp.*, 803 F. Supp. at 490-91, *aff'd*, 36 F.3d 1147 (1st Cir. 1994).

SCC incorrectly relies on the U.S. Supreme Court's decision in *Feist Publications, Inc. v. Rural Telephone Service Co., Inc.* in support of its position. The crux of SCC's argument is that in *Feist* "the defendant had copied the plaintiff's work **verbatim**," just like SCC made verbatim copies of Lexmark's programs. (Appellant's Brief at 36) (emphasis in original). Consequently, SCC argues that *Feist* requires a filtration test. However, in *Feist*, only "1,309 of the 46,878 listings in Feist's 1983 [telephone] directory were identical to listings in Rural's 1982-1983 white pages" (*i.e.*, less than 2.8% of the listings were the same and only 26.5% of the plaintiff's work was copied). *Feist Publications, Inc.*, 499 U.S. at 343-44. Moreover, the work in *Feist* comprised a routine and commonplace directory listing of names in alphabetical order as required by law. *Id.* at 362-63. Lexmark's TLPs are a far cry from the work at issue in *Feist*. Thus, SCC's argument is disingenuous. *Feist* is simply another example of a court applying a filtration test in a case of nonliteral (*i.e.*, non-verbatim) copying.

SCC's reliance on *Bateman* and *Gates Rubber* to support its contention that the AFC test should apply in a case involving literal copying of a computer program is also misplaced. Neither *Bateman* nor *Gates Rubber* dealt with verbatim copying of the copyrighted computer program. Moreover, the court in *Bateman* stated that it did not express any opinion on whether the AFC test should be applied to analyze literal infringement. *Bateman v. Mnemonics, Inc.*, 79 F.3d 1532, 1545 (11<sup>th</sup> Cir. 1996).

#### **D. APPLICATION OF THE *KOHUS* TEST COMPELS THE SAME CONCLUSION**

Although unnecessary, the district court applied the AFC test and reached the same conclusion – that SCC’s programs violated Lexmark’s copyrights. (R.92 FF/CL, p.37, ¶¶54-55, Apx. \_\_\_\_).

The district court concluded that application of the AFC test “would result in the same result.” (R.92 FF/CL, p.37, ¶55, Apx. \_\_\_\_). In the abstraction portion of its analysis, the district court explained that:

Each of the [TLPs] represents an expression (*i.e.*, the unique selection and arrangement of equations, variables, and constants which form the [TLPs] written in custom programming language created by Lexmark) of the idea (*i.e.*, approximating the amount of toner remaining in a toner cartridge based upon a sensed torque value).

(R.92 FF/CL, p.37, ¶55, Apx. \_\_\_\_). Consequently, the district court concluded, “each of the [TLPs], in its entirety, is a protectable expression for approximating toner level within a toner cartridge.” (R.92 FF/CL, p.37, ¶54, Apx. \_\_\_\_).

Since the TLPs in their entirety were protectable expression, there were no unprotectible elements in the programs to be filtered out. (R.92 FF/CL, p.37, ¶¶54-55, Apx. \_\_\_\_). Having completed the “filtration” portion of the test, the district court then proceeded to the comparison phase. (R.92 FF/CL, p.37, ¶¶54-55, Apx.\_\_\_\_).

When performing the comparison, the district court noted SCC’s admission that “it “slavishly copied” both TLPs in their entireties.” (R.92 FF/CL, p.37, ¶54,

Apx. \_\_\_\_). The district court therefore concluded, “SCC identically copied the entire protectable expression of each [TLP].” (R.92 FF/CL, p.37, ¶54, Apx. \_\_\_\_).

Since “SCC copied verbatim the protectable elements of both [TLPs],” the district court held that “[a]pplication of the AFC test would result in the same result.” (R.92 FF/CL, p.37, ¶55, Apx. \_\_\_\_). Thus, the district court applied the same type of AFC test used in *Kohus*, and determined that SCC’s conduct constituted copyright infringement. (See R.92 FF/CL, p.37, ¶¶54-55, Apx. \_\_\_\_).

**E. THE DISTRICT COURT CORRECTLY FOUND THAT SCC’S WHOLESALE COPYING WAS NOT A FAIR USE**

SCC’s fair use argument is based entirely on the flawed premise that Lexmark’s TLPs are “lock-out codes.” (Appellant’s Brief at 46). Among other reasons, SCC’s argument fails because the programs are not lockout codes and need not be copied – in whole or in part – for a valid authentication sequence and valid checksum to occur. Moreover, SCC’s attack on each and every one of the district court’s fair use findings is untenable. After evaluating the demeanor of the witnesses and weighing all of the evidence, the district court made numerous findings relevant to SCC’s fair use argument. (See, e.g., R.92 FF/CL, pp.7-8 and 11-17, ¶¶38-45 and ¶¶58-89, Apx. \_\_\_\_).

The fair use defense only “permits courts to avoid rigid application of the copyright statute when, on occasion, it would stifle the very creativity which that law is designed to foster.” *Dr. Seuss Enterprises, L.P. v. Penguin Books USA, Inc.*,

109 F.3d 1394, 1399 (9th Cir. 1997). SCC exercised no creativity but instead merely copied Lexmark's programs.

As explained above, there was no reason for SCC to knock-off Lexmark's programs, because Lexmark's TLPs are not lockout codes. Because SCC could have determined, through simple trial and error, the appropriate checksum for any toner loading program that it wanted to use, Lexmark's programs cannot be considered lockout codes. (R.92 FF/CL, p.16, ¶86, Apx. \_\_\_\_). Thus, contrary to SCC's argument, Lexmark's TLPs are not "needed for the purpose of allowing compatibility." (R.92 FF/CL, p.27, ¶27, Apx. \_\_\_\_).

The district court correctly applied the statute and case law in its detailed analysis of SCC's alleged fair use defense, applying the statutory factors to the facts of this case. (R.92 FF/CL, pp.28-29, ¶30, Apx. \_\_\_\_).

(1) The purpose and character of the use, including whether the use is of a commercial nature or is for nonprofit or educational purposes

SCC does not dispute that copying in a commercial context weighs against a finding of fair use. *Compare Sega Enters. Ltd. v. Accolade, Inc.*, 977 F.2d 1510, 1522 (9th Cir. 1992), *accord Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 585 (1994); Appellant's Brief at 47. *See also, Atari Games Corp.*, 975 F.2d at 844 ("Atari could not use reverse engineering as an excuse to exploit commercially or otherwise misappropriate protected expression."). Nor does SCC dispute the district court's conclusion that "[i]t is clear that SCC has copied Lexmark's TLPs

for the commercial purpose of developing its SMARTEK microchips for use with Lexmark's T-Series toner cartridges and printers.” (R.92 FF/CL, p.29, ¶31, Apx \_\_\_\_).

Instead, SCC argues that the district court should have looked to the “particular characteristics of a work,” namely, the expression embodied in the TLPs. However, the copyright statute identifies the relevant factor as “the purpose and character of the use, including whether the use is of a commercial nature or is for nonprofit or educational purposes.” The statute does not state that the factor is the “particular characteristics of a work.” Because of SCC's misconstruction of this factor, SCC merely reargues whether Lexmark's TLPs contain protectable expression.

SCC's reliance on *Kelly v. Arriba Soft Corp.*, No. 00-55521, 2003 WL 21518002, \*3 (9th Cir. 2003), is inapposite. When analyzing the first prong of the fair-use balancing test, the district court explained that the key question is “whether the new work merely supersede[s] the objects of the original creation, or instead adds something new, with a further purpose or different character, altering the first with new expression, meaning, or message . . . in other words, whether and to what extent the new work is transformative.” *Id.*, 2003 WL 21518002 at \*4.

Rather than transforming Lexmark's work, SCC blatantly copied the entire work, replacing Lexmark's TLP with SCC's copy of the TLP. Consequently, SCC's use of Lexmark's copyrighted program merely supersedes Lexmark's

program. *Campbell*, 510 U.S. at 569 (“the enquiry focuses on whether the new work merely supersedes the objects of the original creation, or whether and to what extent it is ‘transformative’”).

Thus, the district court’s finding that the purpose and character of the use weighs heavily in Lexmark’s favor was not clearly erroneous.

(2) The nature of the copyrighted work

The parties agree that not all copyrighted works are entitled to the same degree of protection. Lexmark agrees with the district court that “[w]hile computer programs are entitled to some copyright protection, the Court finds that this factor weighs slightly in SCC’s favor because of the lesser degree of protection frequently provided to computer programs.” (R.92 FF/CL, p.29, ¶32, Apx.\_\_\_\_). Thus, the district court’s conclusion that this factor slightly favors SCC was not clearly erroneous.

(3) The amount and substantiality of the portion used  
in relation to the copyrighted work as a whole

It is undisputed that SCC copied Lexmark’s TLPs in their entirety. Moreover, SCC’s argument regarding “copying [of] an entire work” was considered and rejected by the district court, because it was based on the flawed premise that Lexmark’s TLPs were lockout codes. (R.92 FF/CL, p.30, ¶33, Apx. \_\_\_\_). Consequently, the district court’s conclusion that “[t]his finding heavily favors Lexmark” was correct. (R.92 FF/CL, p.30, ¶33, Apx. \_\_\_\_).

(4) The effect of the use upon the potential market for  
or the value of the copyrighted work

SCC argues that the district court erroneously presumed that verbatim copying caused market harm. (Appellant's Brief at 49). The district court correctly applied the law. “Where, as here, a verbatim copy of a work is made with the intended purpose of commercial gain, a likelihood of significant market harm is presumed.” (R.92 FF/CL, p.30, ¶34, Apx. \_\_) (emphasis added), *citing Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 451 (1984); *Campbell*, 510 U.S. at 591 (presumption of likelihood of significant market harm is presumed for “mere duplication for commercial purposes.”).

SCC’s reliance on *American Direct Marketing, Inc. v. Ad International, Inc.* for the proposition that Lexmark is not entitled to a presumption of harm under the fourth factor of the fair use balancing test is misguided. Fair use was not raised as a defense in *American Direct*. Instead, *American Direct* discussed the presumption of irreparable injury in the context of the balancing test for a preliminary injunction motion (*e.g.*, irreparable injury absent injunctive relief).

The other cases on which SCC relies (Appellant's Brief at 49-50) are similarly inapposite. No court has held that there must be some independent demand and market value divorced from the intended use of the copyrighted work. The value of the copyrighted work lies in its intended use. *See Sony*, 464 U.S. at 451; *Campbell*, 510 U.S. at 591. This is the context in which the effect of the use



upon the potential market must be considered. Consequently, the district court's conclusion that the fourth factor of the balancing test weighs in Lexmark's favor was not clearly erroneous.

For the foregoing reasons, the district court properly concluded that SCC's wholesale copying of Lexmark's TLPs was not fair use.

## **II. THE DISTRICT COURT DID NOT ABUSE ITS DISCRETION IN GRANTING A PRELIMINARY INJUNCTION ON LEXMARK'S DMCA CLAIMS**

The district court applied the correct legal standard and supportable factual findings in upholding Lexmark's two DMCA counts (the first count involving the TLP and the second count involving the PEP). Consequently, there was no reversible abuse of discretion in granting a preliminary injunction.

### **A. SCC WAIVED ITS ARGUMENTS THAT ITS CONDUCT DID NOT SATISFY THE LITERAL LANGUAGE OF THE DMCA**

SCC argues for the first time on appeal that its conduct falls outside of the literal scope of the DMCA. In particular, SCC asserts the following new theories: (1) that the DMCA does not protect functions performed as a result of executing a computer program; and (2) that Lexmark's technological measure does not "effectively control access." (Appellant's Brief, at 20-22 and 25-27.) SCC, however, failed to pursue these theories with the district court and therefore waived these arguments for purposes of this appeal. *See Gencorp, Inc. v. Am. Int'l Underwriters*, 178 F.3d 804, 817 (6th Cir. 1999).

This Court generally will not decide issues or claims not litigated before the district court. *Chao v. Hall Holding Co.*, 285 F.3d 415, 427 (6th Cir. 2002). The waiver rule forces parties to marshal all of the relevant facts and issues before the district court prior to addressing them on appeal. *Advocacy Org. for Patients and Providers v. Auto Club Ins. Assn.*, 176 F.3d 315, 326, n.6 (6th Cir. 1999). SCC's two new DMCA arguments should not be considered because SCC failed to raise them in the district court. *See Gencorp, Inc.*, 178 F.3d at 817. The exceptions to this rule are narrow. *Chao*, 285 F.3d at 427. This Court may resolve these issues only if (1) the proper resolution of these issues is beyond any doubt or (2) injustice might otherwise result. *Enertech Elec., Inc. v. Mahoning County Commissioners*, 85 F.3d 257, 261 (6th Cir. 1996).

Here, SCC has not demonstrated that its new theories satisfy either of these circumstances. First, SCC cannot legitimately argue that proper resolution of these issues is beyond any doubt. No appellate court, including the Sixth Circuit, has squarely addressed the DMCA issues that SCC now raises on appeal. *See, e.g., Enertech Elec., Inc.*, 85 F.3d at 261 (relying on fact that the state supreme court declined to review issue). Moreover, allowing SCC to raise these issues for the first time would cause an injustice to Lexmark, because it could be faced with a final decision on these issues without having had an adequate opportunity to develop a proper evidentiary record. Accordingly, this Court should follow its

general rule and decline to consider these issues that SCC raises for the first time in this appeal.

**B. THE DMCA APPLIES TO DEVICES THAT EFFECTIVELY CONTROL ACCESS (*i.e.*, THE ABILITY TO MAKE USE OF) TO COPYRIGHTED COMPUTER PROGRAMS**

SCC presents an array of unsupported arguments in attacking the district court's interpretation of the DMCA, most of which are based on policy and speculation, not the unambiguous language of the statute.

For example, SCC erroneously suggests that the DMCA should not be applied to "functional machine code" that "has no independent economic value, and that is not susceptible to piratical redistribution via electronic commerce." (Appellant's Brief at 29) (Presumably, this would be an appropriate statutory exemption for SCC had Congress written the statute that way). Likewise, SCC erroneously concludes that if Lexmark's technological measure prevents the cartridge from operating even when the TLP is not there, the real object of the protection is the cartridge, not the TLP. (Appellant's Brief at 23) (This is akin to saying that if the lock on a house works even when nobody is home, then the lock is not really protecting the homeowners).

The district court properly construed the plain language of Section 1201(a)(2) to determine that a technological measure controls access to a copyrighted computer program if that technological measure controls the ability to make use of that computer program. The plain language of the DMCA provides

that a technological measure “effectively controls access” if that measure “requires the application of information, or a process . . . to gain access to the work.” 17 U.S.C. § 1201(a)(3)(B). Because the DMCA does not define the term “access,” the district court gave the term its ordinary, customary meaning in accordance with the rules of statutory construction. (R. 92 FF/CL, p. 41, ¶69, Apx. \_\_\_\_). The ordinary, customary meaning of the term “access” is the “ability to enter, to obtain, or to make use of.” Merriam-Webster’s Collegiate Dictionary 6 (10th ed. 1999) (emphasis added). In accordance with the rules of statutory interpretation, the district court determined that a technological measure controls “access” to a copyrighted work if the measure controls “the ability to make use of” that work. (R.92 FF/CL, p.41, ¶71, Apx. \_\_\_\_).

The few cases that have applied Section 1201(a)(2) fully support the district court’s interpretation of Section 1201(a). In one case, the technological measure controlled the customers’ ability to make use of or play copyrighted computer programs on Sony’s CD-ROMs. *Sony Computer Entm’t Am. Inc. v. Gamemasters*, 87 F. Supp.2d 976, 987 (N.D. Cal. 1999). In another case, the technological measure controlled customers’ ability to make use of copyrighted audio and video files. *RealNetworks, Inc. v. Streambox, Inc.*, No. C99-2070P, 2000 U.S. Dist. LEXIS 1889, at \* 5 (W.D. Wash. Jan. 18, 2000). In yet another case, the technological measure controlled customers’ ability to make use of or play

copyrighted motion pictures contained on DVDs. *Universal City Studios, Inc. v. Reimerdes*, 82 F. Supp.2d 211, 214 (S.D.N.Y. 2001).

SCC cites nothing in the record to support its position that the district court's interpretation of "control access" was erroneous. Instead, SCC repeatedly mischaracterizes the district court's findings and conclusions. SCC misrepresents that the district court "interpreted § 1201(a)(2) to protect the functions performed by the Lexmark software, rather than the software itself." (Appellant's Brief at 20). SCC also misrepresents that 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." *Id.* at 22. SCC cites to no part of the district court's findings of fact and conclusions of law to support these statements. Clearly, the district court did not interpret Section 1201(a)(2) as SCC contends.

In sum, the district court correctly determined that a technological measure controls access to a copyrighted computer program if it controls "the ability to make use of" that computer program.

**C. LEXMARK’S TECHNOLOGICAL MEASURE  
“EFFECTIVELY CONTROLS ACCESS” BECAUSE IT  
CONTROLS CUSTOMERS’ ABILITY TO MAKE USE OF  
LEXMARK’S COPYRIGHTED COMPUTER PROGRAMS**

Applying the plain language of Section 1201(a), the district court properly determined that Lexmark’s authentication sequence “effectively controls access” to its copyrighted TLPs and PEPs because it requires the application of information and a process to gain the ability to make use of those programs. 17 U.S.C. § 1201(a)(3)(B) (a technological measure “effectively controls access” if that measure “requires the application of information, or a process . . . to gain access to the work.”).

Lexmark’s printer and microchip on its toner cartridge each calculate a Message Authentication Code (“MAC”). (R.92 FF/CL, p.12, ¶¶60, Apx. \_\_\_\_). The microchip communicates its MAC to the printer, and the printer compares the MAC calculated by the microchip with the MAC calculated by the printer. (R.92 FF/CL, p.12, ¶¶60, 62 Apx. \_\_\_\_). If the MACs match, the printer is “capable of running the [PEP] to thereby print” and “accessing the [TLPs] to monitor the toner status.” (R.92 FF/CL, pp.13-14, ¶¶69, 70, 72, 73, Apx. \_\_\_\_). Without a successful authentication sequence, a customer cannot make use of the PEP to print and the TLPs to monitor toner status. (R.92 FF/CL, pp.13-14, ¶¶71, 74, Apx. \_\_\_\_).

The district court properly determined that Lexmark’s authentication sequence is like the technological measure used by Sony in *Gamemasters*. (R.92

FF/CL, pp.45-46, ¶¶89-90, Apx. \_\_\_\_). Sony's PlayStation console employs a technological measure that verifies whether a CD-ROM game inserted into the console is "an authorized, legitimate [Sony] product licensed for distribution in the same geographical territory of the console's sale." *Gamemasters*, 87 F. Supp.2d at 981. The console reads encrypted codes from the CD-ROM and compares those codes to the codes contained in the console. *Id.* If the codes match, then the console will operate and allow customers to play the game. *Id.* If the codes do not match, the console will not operate. *Id.* Like Sony's technological measure, Lexmark's authentication sequence falls within the plain language of Section 1201(a).

Nevertheless, SCC argues, for the first time on appeal, that Lexmark's authentication sequence does not "effectively" control access because it "does not impede anyone" from "obtaining, viewing, and copying" the object code for the copyrighted TLPs and PEPs.<sup>5</sup> (Appellant's Brief at 20-21, 26-27). In addition to having waived the right to argue this issue on appeal, SCC's argument fails for at least four reasons.

First, SCC relies on the fact its expert, Dr. Goldberg, used specialized equipment in a laboratory setting to crack into Lexmark's microchips and printers to copy the object code for Lexmark's programs. SCC wholly ignores the fact that

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<sup>5</sup> As explained above, this new argument has been waived.

Lexmark's authentication sequence, in the ordinary course of operation, restricts the ability of customers to make use of Lexmark's TLPs to monitor toner level and PEPs to print.<sup>6</sup> Applying SCC's flawed logic, once a computer hacker has penetrated a computer system that is protected by a technological measure, that measure would no longer be deemed to "effectively control access," and therefore the system would be free for anyone to access and copy. Surely that is not what Congress meant when it wrote the DMCA.

Second, it ignores the plain language of Section 1201(a)(2). As discussed above, "access" to a work means "the ability to make use of" a work. Although a person using specialized laboratory equipment and training might be able to crack into and copy the TLPs and PEP, that person cannot then use these programs to print and monitor toner status.

Third, under this strained interpretation of Section 1201(a), virtually no technological measure would qualify for protection under the DMCA. For example, in *Gamemasters*, the technological measure prevented individuals from accessing and playing videogames on Sony's console. *Gamemasters*, 87 F. Supp.2d at 981. The technological measure, however, did not prevent persons from using special analysis tools to view and copy the unencrypted object code of

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<sup>6</sup> Indeed, SCC's argument is akin to asserting that a padlock does not effectively control access to the contents of a wood shed because one can use a blow torch to remove it. Common sense belies this assertion.



the copyrighted videogames directly from the CD-ROMs.<sup>7</sup> Thus, according to SCC's erroneous interpretation, the technological measure in *Gamemasters* would not qualify for protection under the DMCA.

Fourth, other courts have rejected the argument that SCC now raises. In *RealNetworks*, the defendant claimed that technological measure did not "effectively" protect against unauthorized copying of the copyrighted work because "an enterprising end-user could potentially use other means to record" the copyrighted works. *RealNetworks*, 2000 U.S. Dist. LEXIS at \*23-24. The court rejected the argument and stated, "This argument fails because the [technological measure], in the ordinary course of its operation when it is on, restricts the ability of people to make perfect copies of a copyrighted work." *Id.* at \*24. Similarly, in *Reimerdes*, the defendants argued that the technological measure "which is based on a 40-bit encryption key, is a weak cipher that does not 'effectively control' access to plaintiffs' copyrighted works." *Universal City Studios, Inc. v. Reimerdes*, 111 F. Supp.2d 294, 317 (S.D.N.Y. 2000). The court rejected the argument and determined that a technological measure "effectively" controls

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<sup>7</sup> SCC mischaracterizes the nature of the copyrighted work in *Gamemasters*. Contrary to SCC's argument, the copyrighted videogames contained on Sony's CD-ROMs were not encrypted. Instead, only a portion of data used in the technological measure was encrypted. Thus, any computer programmer could "analyze" the CD-ROMs to view and copy the unencrypted data.

access if, in the ordinary course of its operation, the technological measure actually works in the defined ways to control access to a work. *Id.* at 317-18.

Thus, the district court correctly determined that Lexmark's authentication sequence "effectively controls access" to its copyrighted TLPs and PEPs.

**D. THE LEGISLATIVE HISTORY SUPPORTS THE DISTRICT COURT'S INTERPRETATION OF THE DMCA**

**1. The District Court Properly Decided Not To Review The Legislative History Of The DMCA**

Because the plain language of Section 1201(a) is clear and its application will not produce a result contrary to the intentions of the drafters of the DMCA, the district court properly determined that there is no need to look to the legislative history. If a statute is clear and unambiguous, a court's inquiry is at an end and the court "must enforce the [statute] according to its terms." *United States v. Ron Pair Enters., Inc.*, 489 U.S. 235, 241 (1989); *see also Koenig Sporting Goods*, 203 F.3d 986, 988 (6th Cir. 2000).

The plain language of Section 1201(a) is clear and unambiguous. Furthermore, SCC failed to cite to any legislative history to indicate that district court's literal application of Section 1201(a) produces a result "demonstrably at odds with the intentions of its drafters," *Koenig Sporting Goods*, 203 F.3d at 988. Thus, resort to the legislative history as an interpretive tool is unnecessary.

**2. Even If The Legislative History Had Been Considered, It Would Support The District Court's Interpretation Of The DMCA.**

Contrary to SCC's claim, the legislative history fully supports the district court's literal application of Section 1201(a). Rather than pointing to evidence that Congress intended to limit the scope of the DCMA, SCC merely argues in the negative, arguing that the legislative history lacks any indication that Congress considered the applicability of Section 1201(a) to Lexmark's TLPs and PEPs.

The legislative history makes clear that the DMCA applies to all types of works: "[t]he regulatory prohibition is presumed to apply to any and all kinds of works . . . ." H.R. Rep. No. 105-551 (Part II), at p. 37 (1998) (emphasis added). The legislative history specifically recognizes that such works include computer programs like Lexmark's TLPs and PEPs. For example, the House Report states that the statutory exemption for reverse engineering "applies to computer programs . . . regardless of their medium of fixation." H.R. Rep. No. 105-551, (Part II), at p. 43. SCC's argument – that when Congress afforded the protection of Section 1201(a) to "any and all" copyrighted works, it intended to exclude copyrighted software that runs machines – is further belied by the fact that copyright protection extends to programs that control the operation of machines, such as operating system programs that control the internal operation of computers, *Formula Int'l*, 725 F.2d at 525; transaction codes that instruct a computer how to act on a transaction, *CMAX/Cleveland, Inc. v. UCR, Inc.*, 804 F. Supp. 337, 355 (M.D. Ga.

1992); and even to programs that monitor operational characteristics of machines, such as input formats with utilitarian functions that “act like switches in the electrical circuits of [a] program,” *Engineering Dynamics, Inc. v. Structural Software, Inc.*, 26 F.3d 1335, 1346 (5th Cir. 1994).

The legislative history also confirms that Section 1201(a) applies to works that are available in the off-line environment. For example, Senator Hatch explained that “[the DMCA] will . . . encourage the continued growth of the existing off-line global marketplace for copyrighted works in digital format.” 144 Cong. Rec. S4884 (daily ed. May 14, 1998) (statement of Sen. Hatch) (emphasis added). The House Report cites several off-line technological measures that would be protected under Section 1201, such as password codes to control authorized access to computer programs, and encryption or scrambling of cable programming, videocassettes, and CD-ROMS. H.R. Rep. No. 105-551, (Part II), at p. 37.

SCC’s claim that Congress intended to limit the DMCA to apply only to works having some “independent economic value” is not supported by anything in the legislative history. The Supreme Court long ago warned that courts should not be put in the position of evaluating the value of copyrighted works. *Bleistein v. Donaldson Lithographing Co.*, 188 U.S. 239, 251 (1903) (courts should not analyze the value of copyrighted works). Nor has SCC pointed to any evidence that Lexmark’s programs lack independent economic value. Finally, SCC’s list of “absurd results” that allegedly will result from the district court’s literal application

of Section 1201(a) (Appellant's Brief at 29-30) are based on conjecture and speculation, and hence are wholly irrelevant to the present case.

**E. THE REVERSE ENGINEERING EXCEPTION UNDER SECTION 1201(F) DOES NOT APPLY TO SCC'S CONDUCT**

The district court was correct in rejecting SCC's reverse engineering argument. SCC failed to carry its burden of proving that its SMARTEK microchips are exempt under Section 1201(f)<sup>8</sup> because this very limited exemption only applies if, *inter alia*: (1) the reverse engineering is undertaken "for the sole purpose of identifying and analyzing those elements of the program that are necessary to achieve interoperability of an independently created computer program with other programs," (2) the means to circumvent "are necessary to achieve such interoperability," and (3) identifying and analyzing the elements of the other programs "do not constitute infringement" under the Copyright Act. 17 U.S.C. § 1201(f)(1)-(3) (emphasis added).

First, SCC did not and cannot demonstrate that its microchips enable interoperability between an "independently created" program and Lexmark's PEP or TLP. "Independently created" means that the program resulting from the reverse engineering must be an entirely "new and original work." H.R. Rep. No. 105-551, (Part II), at p. 42. The plain language of Section 1201(f) implies that a

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<sup>8</sup> (R.102 SCC's Amended Answer, p.7, Apx. \_\_) (§ 1201(f) exemption pleaded as an affirmative defense).

person engaging in reverse engineering must independently create a computer program without reverse engineering, and then turn to reverse engineering only to make that computer program interoperable. That is consistent with the holding in *Sega*, 977 F.2d at 1522 (“nor did [Accolade] simply copy Sega’s code . . . . Accolade’s ultimate purpose . . . was simply to study the functional requirements for Genesis compatibility so that it could modify existing games and make them usable with the Genesis console.”) (emphasis added).

In contrast, SCC provided no credible evidence that an “independently created” computer program ever existed on its SMARTEK microchips, much less prior to its alleged “reverse engineering” of Lexmark’s TLPs and PEPs. Instead, the record shows that SCC accessed Lexmark’s TLP to slavishly copy and incorporate that program into SCC’s SMARTEK microchips. (R.53 SCC Opp., pp. 4, 19, Apx. \_\_\_\_).

The flaws in SCC’s “reverse engineering” argument extend beyond mere timing problems. Here, SCC’s only evidence of “independent creation” is the conclusory declarations of Messrs. Goldberg and Burchette. There is absolutely nothing in the record to corroborate their *ipse dixit* conclusions. SCC did not produce its alleged independently created program at the hearing, and not a single witness testified about its purpose, structure, function or operation. This evidence, without corroboration, cannot carry SCC’s burden of showing that its activities fall under section 1201(f) as a matter of law. *See, e.g., A & M Records*,

*Inc. v. Napster, Inc.*, 54 U.S.P.Q.2d 1746, 1753 (N.D. Cal. 2000) (“Without further documentation, defendant’s argument that it has satisfied subsection 512(i) [of the DMCA] is merely conclusory and does not support summary adjudication in its favor.”).

Even if SCC were able to prove the existence of an independently created program on its microchips (which it did not), SCC must demonstrate that its microchips are “necessary” or “absolutely needed” to achieve interoperability between Lexmark’s PEP and any such independently created program. SCC failed to make this showing. Indeed, the record is devoid of any evidence that supports SCC’s suggestion that interoperability<sup>9</sup> between Lexmark’s PEP and any such independently created program cannot be achieved without circumventing Lexmark’s technological measure.

Third, as discussed above, SCC’s SMARTEK microchips contain an identical, infringing copy of Lexmark’s copyrighted TLP. Thus, SCC is not entitled to protection under Section 1201(f) because its acts “constitute infringement” under the Copyright Act. As a result, the district court did not abuse

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<sup>9</sup> Most telling, the testimony of SCC’s president reveals that SCC’s true motive for its circumvention activities is commercial profit, not interoperability. SCC’s president testified that SCC’s sole purpose for circumventing Lexmark’s technological measure was because “our customers needed a solution to be able to remanufacture 520/620 cartridges.” (TR 160, Apx. Pg. \_\_\_\_).

its discretion when it determined that section 1201(f) does not exempt SCC's SMARTEK microchips from liability under the DMCA.

Finally, Section 1201(f) prohibits making circumvention devices available to others, even if they contain independently created programs, to the extent doing so violates other "applicable laws." 17 U.S.C. § 1201(f)(3). SCC's trafficking of its SMARTEK microchips to induce Lexmark customers to breach their contractual obligation to Lexmark will violate a number of Kentucky state laws, including, but not limited to tortious interference with prospective economic relations and tortious interference with contractual relations. *CMI, Inc. v. Intoximeters, Inc.*, 918 F. Supp. 1068, 1079-80 (W.D. Ky. 1995) (determining that Kentucky recognizes the tort of intentional interference of prospective contractual relations and intentional interference with contractual relations as provided in the Restatement (Second) of Torts § 766).

### **III. THE DISTRICT COURT DID NOT ABUSE ITS DISCRETION IN BALANCING THE FOUR PRELIMINARY INJUNCTION FACTORS**

#### **A. LEXMARK'S LIKELIHOOD OF SUCCESS ON THE MERITS HEAVILY FAVORS THE PRELIMINARY INJUNCTION**

In cases involving copyright infringement and violations of the anti-trafficking provisions of the DMCA, the likelihood of success factor is ordinarily given the most weight. *Johnson Controls, Inc. v. Phoenix Control Systems, Inc.*, 886 F.2d 1173, 1174 (9th Cir. 1989); *Reimerdes*, 82 F. Supp.2d at 226 n.79. As explained above, the district court properly determined that Lexmark established a



strong likelihood of success on its copyright infringement and DMCA claims. In accordance with established federal case law, the district court properly determined that that factor weighed heavily in favor of an injunction against SCC.

**B. LEXMARK WILL BE IRREPARABLY HARMED WITHOUT AN INJUNCTION**

**1. Irreparable Injury To Lexmark Is Presumed**

Irreparable harm and inadequate remedies at law are presumed when a plaintiff establishes a likelihood of success in cases involving copyright infringement and violations of the anti-trafficking provisions of the DMCA. *See Forry*, 837 F.2d at 267 (irreparable injury presumed in copyright infringement cases when plaintiff establishes a infringement of a valid copyright); *Reimerdes*, 82 F.Supp.2d at 215 (irreparable injury presumed when plaintiff establishes likelihood of success on its DMCA claims). By their very nature, damages incurred from copyright infringement and violations of the DMCA are irreparable and not susceptible of monetary measurement, thus rendering any remedy at law inadequate. *See Atari, Inc. v. North Am. Philips Consumer Elecs. Corp.*, 672 F.2d 607, 620 (7th Cir. 1982). Therefore, after concluding that Lexmark was likely to succeed on its copyright infringement and DMCA claims, the district court properly presumed irreparable injury to Lexmark.

Nevertheless, SCC argues, for the first time on appeal, that the presumption of irreparable injury should not apply because no competition exists between

Lexmark's TLP and the infringing program contained on SCC's SMARTEK microchips.<sup>10</sup> (Appellant's Brief at 51-52). SCC's argument is belied by the fact that SCC distributes its SMARTEK microchips in direct competition with Lexmark's microchips that contain its TLPs. (R.53 SCC's Opp., pp.2-4, Apx. \_\_\_\_). SCC admitted that its SMARTEK microchips contain slavish copies of Lexmark's TLPs. (R.53 SCC's Opp., pp.4, 19, Apx. \_\_\_\_). SCC admitted that its SMARTEK microchips were designed to target, and specifically replace, Lexmark's microchips so that customers can circumvent Lexmark's technological measure. (R.53 SCC's Opp., pp.2-4, Apx. \_\_\_\_). SCC cannot now justifiably argue that no competition exists between (1) Lexmark's TLPs and SCC's infringing copies of those programs or (2) Lexmark's microchips that perform its technological measure and SCC's SMARTEK microchip that circumvents that technological measure.

SCC's claim that no presumption should apply because there is no independent market for Lexmark's TLPs is equally flawed. SCC has not cited a single case for the proposition that Lexmark must prove a market for the copyrighted work separate and apart from any non-copyrighted goods for irreparably injury to be presumed. Nor does this argument have any merit. For example, in *Lakedreams v. Taylor*, the Fifth Circuit affirmed grant of preliminary

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<sup>10</sup> Because SCC failed to raise this theory in the district court, it is waived for purposes of this appeal.

injunction precluding defendant from distributing “shirts and other tangible items” containing a design and text substantially similar to the plaintiff’s copyrighted design and text, without regard for whether a market for the designs existed separate and apart from the market for shirts or other tangible items that do not bear the copyrighted design. *Lakedreams v. Taylor*, 932 F.2d 1103, 1106 n.4, 1107-09 (5th Cir. 1991).

Finally, SCC argues, for the first time on appeal, that the presumption should not apply because any “purported infringement was completely innocent.”<sup>11</sup> (Appellant’s Brief at 53). SCC’s claim is belied by its admission that it (1) intentionally copied Lexmark’s TLPs and (2) specifically designed and distributed its SMARTEK microchips to allow customers to circumvent Lexmark’s technological measure. (R. 53 SCC’s Opp., pp.2-4, Apx.\_\_\_\_). SCC’s infringing activities and violations of the DMCA were far from “innocent.”

## **2. Even Without The Presumption, Lexmark Established Irreparable Harm Absent An Injunction**

The district court’s factual findings support the district court’s determination that SCC’s continued activities would result in harm to Lexmark. The district court determined that SCC’s continued trafficking of its SMARTEK microchips may (1) “significantly increase the cost of Lexmark’s remanufacturing process;”

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<sup>11</sup> Because SCC failed to raise this theory with the district court, it is waived for purposes of this appeal.

(2) “limit Lexmark’s ability to continue to compete for remanufactured toner cartridges;” (3) “allow third parties to sell reused Prebate cartridges . . . in direct competition with Lexmark’s authorized toner cartridges;” and (4) “result in fewer customer orders for authorized Lexmark remanufactured toner cartridges.” (R.92 FF/CL, p.20-21, ¶¶110-112, Apx. \_\_\_\_). These damages are not easily measurable or quantifiable.

**C. THIRD PARTIES CANNOT BE HARMED BY AN INJUNCTION BECAUSE THEY STILL HAVE A CHOICE IN SELECTION OF TONER CARTRIDGES**

SCC’s argument that an injunction will harm third parties is untenable and completely ignores the fact that Lexmark’s technological measure does not prevent customers and third party remanufacturers from using and remanufacturing non-Prebate cartridges. Lexmark sells two types of toner cartridges for use with its T-Series laser printers: non-Prebate cartridges and Prebate cartridges. (R.65 Yaro Decl., p.1, ¶2, Apx. \_\_\_\_). The Prebate cartridges are offered to customers at a discount. (R.3 Yaro Decl., pp.3-4, ¶9, Apx.\_\_\_\_). In return for this upfront discount, or “Prebate,” the customer agrees and is contractually obligated to send the used Prebate cartridge only to Lexmark for remanufacturing. (R.3 Yaro Decl., pp.3-4, ¶9, Apx. \_\_\_\_).

If the customer opts for the non-Prebate cartridge, however, the customer does not receive an up-front discount, and is not contractually obligated to return the non-Prebate cartridges to Lexmark for remanufacturing. (R.65 Yaro Decl., p.2,

¶4, Apx. \_\_\_\_). Moreover, after initial use of a non-Prebate cartridge, Lexmark's technological measure does not prevent access to the PEP and the TLP to thereby print and monitor toner status of the toner cartridge. (R.65 Yaro Decl., p.2, ¶5, Apx. \_\_\_\_). Thus, the technological measure used by the microchips on Lexmark's non-Prebate cartridges does not prevent the remanufacture and reuse of those non-Prebate cartridges. (R.65 Yaro Decl., p.2, ¶5, Apx. \_\_\_\_). As a result, customers and third-party remanufacturers can use and remanufacture non-Prebate cartridges. (R.65 Yaro Decl., p.2, ¶5, Apx. \_\_\_\_). Thus, the district court did not abuse its discretion when it determined that an injunction against SCC will not impact customers and third party remanufacturers.

#### **D. THE PUBLIC INTEREST FAVORS PROTECTION OF INTELLECTUAL PROPERTY RIGHTS**

##### **1. The Benefit To The Public Interest Is Presumed**

If the copyright holder establishes a likelihood of success on the merits, courts will generally presume that an injunction will serve the public interest. *Concrete Machinery Co., Inc. v. Classic Lawn Ornaments, Inc.*, 843 F.2d 600, 611-12 (1st Cir. 1988). Although no court has addressed this issue in the DMCA context, it should be presumed that an injunction similarly will serve the public interest. The public benefits served by upholding copyrights and the rights afforded under the anti-trafficking provision of the DMCA are virtually indistinguishable.

## **2. Even Without The Presumption, Lexmark Established The Public Interest Will Be Served By An Injunction**

Lexmark established that the public interest would be served by an injunction against SCC. First, Lexmark established that SCC's SMARTEK microchip eliminates customers' ability to detect third party refilled toner cartridges. (R.3 Yaro Decl., p.5, ¶14, Apx. \_\_\_\_). Second, Lexmark established that its technological measure lowers the cost of the cartridges that Lexmark offers to its customers. (R.3 Yaro Decl., p.3-4, ¶9, Apx. \_\_\_\_).

SCC's assertion that an injunction will not benefit the public interest because an injunction "misus[es] the copyright laws to protect the market for non-copyrightable goods" and "offends environmental considerations," (Appellant's Brief at 55) rings hollow. The fact that Judge Forester rejected SCC's "copyright misuse" argument, and SCC has not pursued misuse on appeal, demonstrate the frivolity of SCC's argument. *See also, Atari Games Corp.*, 975 F.2d at 845-47 (Fed. Cir. 1992) (rejecting copyright misuse due to defendant's "unclean hands"). Furthermore, the district court correctly found SCC's "environmental considerations" argument "to be largely unsubstantiated" and contradicted by the fact that Lexmark "has an extensive remanufacturing program for all of its used Prebate cartridges." (R.92 FF/CL, p.51, ¶106, Apx. \_\_\_\_). In fact, Lexmark's Prebate program has increased the number of returned cartridges to Lexmark, thereby keeping them out of landfills. (R.65 Yaro Decl. pp.2-3, ¶6, Apx.\_\_\_\_).

Lexmark recycles those returned cartridges that are not remanufacturable. (R. 65 Yaro Decl. pp.2-3, ¶6, Apx. \_\_\_\_).

SCC therefore has failed to establish that the district court abused its discretion in balancing the public interest factor in favor of Lexmark.

#### **IV. THE DISTRICT COURT DID NOT ABUSE ITS DISCRETION IN NOT INCREASING THE INJUNCTION BOND**

District courts in the Sixth Circuit have wide discretion in determining the amount of a security bond to secure a preliminary injunction. *Moltan Co. v. Eagle-Picher Indus., Inc.*, 55 F.3d 1171, 1176 (6th Cir. 1995); *Roth v. Bank of the Commonwealth*, 583 F.2d 527, 539 (6th Cir.1978).

In the present case, the district court did not abuse its discretion by setting SCC's bond at \$250,000. First, SCC never asked the district court to increase the bond and did not complain that the district court set the bond too low until this appeal. Consequently, SCC waived its right to raise this issue on appeal.<sup>12</sup>

Second, SCC's claim that "it would sustain damages in the amount of \$17,463,580" is unsubstantiated. SCC relies solely on the speculative declaration of William Swartz, which is wholly conclusory and unsupported by any corroborating evidence. Mr. Swartz's declaration fails to provide any data or numbers considered in forming his "conclusion." (TR 165-166, Apx. \_\_\_\_). Nor

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<sup>12</sup> SCC could have raised the issue in its Motion for Clarification, but it did not. (R.98, SCC's Motion to Clarify, Apx. \_\_\_\_).

does Mr. Swartz's declaration provide any information regarding the actual models used or calculations performed to formulate Mr. Swartz's "conclusion." (TR 165-166, Apx. \_\_\_\_).

Finally, SCC's reliance on *Northern States Power Co. v. Federal Transit Admin.* is misplaced. In that case, the court increased the amount of bond because of concerns that the defendant would not be able to pay the damages incurred by the injunction if the plaintiff was later found to be wrongfully enjoined. *Northern States Power Co. v. Federal Transit Admin.*, 270 F.3d 586, 588 (8th Cir. 2001). There is no question that Lexmark will be able to pay damages that SCC may incur as a result of the district court's injunction.

In sum, SCC has failed to establish that the district court abused its discretion in not raising the bond.

## **V. THE VARIOUS AMICUS BRIEFS FAIL TO ESTABLISH AN ABUSE OF DISCRETION BY THE DISTRICT COURT**

The various amicus briefs filed in support of SCC's appeal are inapposite for a number of reasons. Several of the amicus briefs are premised entirely on fatally flawed misunderstandings of the facts, such as the incorrect assumption that the TLP is a "lockout code." Other briefs raise irrelevant issues such as the Clean Air Act and purported increases in landfill waste, ignoring the fact that Lexmark is one of the largest remanufacturers of used toner cartridges in the world. (R.65 Yaro Decl., pp.2-3, ¶6, Apx. \_\_\_\_). Nothing in the briefs provides assistance in



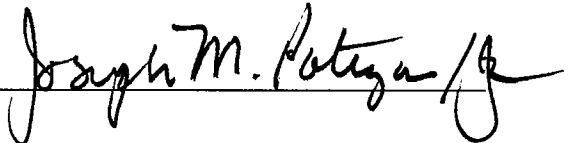
establishing whether the district court abused its discretion in issuing a preliminary injunction against blatant copying.

## CONCLUSION

For the reasons stated above, Lexmark respectfully requests that this Court  
AFFIRM the district court's decision on all grounds.

Respectfully submitted,

Dated: July 23, 2003

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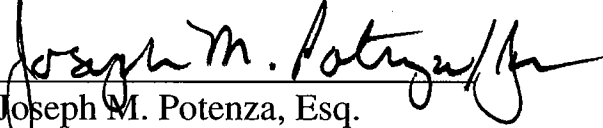
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## CERTIFICATE OF COMPLIANCE

I hereby certify that the foregoing brief was prepared in Word, using Times Roman 14pt. and contains 13,876 words, including footnotes, in compliance with the type-volume limitations set forth in F.R.A.P. 32(a)(7)(B).

Respectfully submitted,

  
\_\_\_\_\_  
Joseph M. Potenza, Esq.

\_\_\_\_\_  
July 23, 2003  
Date

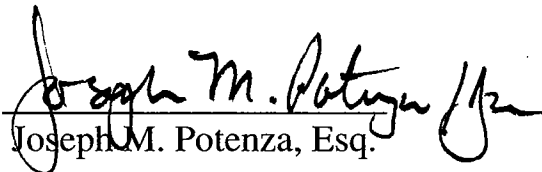
## CERTIFICATE OF SERVICE

I hereby certify that true and correct copies of the foregoing Proof Brief of Appellee has been served by facsimile and U.S. mail, postage prepaid, on this 23rd day of July, 2003 as follows:

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

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

**v.**

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

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

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**APPELLEE'S DESIGNATION OF JOINT APPENDIX CONTENTS**

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Appellee hereby designates the following filings in the district court as items to  
be included in the Parties' Joint Appendix:

<b><u>Description of Item</u></b>	<b><u>Record Entry No.</u></b>	<b><u>File Date</u></b>
Complaint with Exhibits A-C pp. 1, 4 <input type="checkbox"/> Exhibit A (Certificate of Registration for T520/522 Print Cartridge – TX 5-609- 284) <input type="checkbox"/> Exhibit B (Certificate of Registration for T620/622 Print Cartridge – TX 5-609- 285)	1	12/30/2002

<ul style="list-style-type: none"> <li>□ Exhibit C (Certificate of Registration for T620 Engine Microcode – TX 5-624-273)</li> </ul>		
<p>Motion for Preliminary Injunction with Memorandum in Support with Exhibits B-C pp. 4, 5</p> <ul style="list-style-type: none"> <li>□ Exhibit B (Declaration of Michael Robert Yaro) pp. 2-5, 6</li> <li>□ Exhibit C (Declaration of Douglas A. Able) pp. 2-4, 6               <ul style="list-style-type: none"> <li>□ Tab 1 (Table 1A: T620 Toner Loading Program; Table 1B: SMARTEK Program for T620)**</li> <li>□ Tab 2 (Table 2A: T522 Toner Loading Program; Table 2B: SMARTEK Program for T522)**</li> </ul> </li> </ul>	3	12/30/2002
Order Granting Temporary Restraining Order	14	01/08/2003
Order Granting in Part Relief from Temporary Restraining Order p. 1	38	01/24/2003
<p>Memorandum in Opposition to Motion for Preliminary Injunction with Appendixes 3, 6 and 7 pp. 2-4, 11, 12, 19, 22, 26-27</p> <ul style="list-style-type: none"> <li>□ Appendix 3 (Affidavit of Lester Cornelius) pp. 3, 6-7</li> <li>□ Appendix 6 (Affidavit of Carrie A. Shufflebarger with Exhibits A-C)</li> <li>□ Appendix 7 (Glossary of Relevant Technical Terms)</li> </ul>	53	02/03/2003

pp. 1, 3		
Affidavit of Lynton Burchette pp. 2-7	58	02/04/2003
Amended Affidavit of Dr. Benjamin Goldberg with Exhibits B, C & E pp. 4, 6-10, 12-15 <ul style="list-style-type: none"> <li>□ Exhibit B (Copy of Deposit TX 5-609-284)</li> <li>□ Exhibit C (Copy of Deposit TX 5-609-285)</li> <li>□ Exhibit E (Explanation of the T520/T522 Toner Loading Program)</li> </ul>	60	02/04/2003
Affidavit of Tricia Judge pp. 2	63	02/06/2003
Reply Memorandum in Support of its Motion for Preliminary Injunction with Exhibits C, H and G <ul style="list-style-type: none"> <li>□ Exhibit C (Compendium of Copyright Office Practices § 321 at 300-16)</li> <li>□ Exhibit F (Declaration of Ralph Oman) pp. 7, 21-27</li> <li>□ Exhibit G (Declaration of Michael R. Yaro with Exhibit A) pp. 1-3</li> <li>□ Exhibit H. (Declaration of Wm. Keith Richardson with exhibit A-B)** <ul style="list-style-type: none"> <li>□ Exhibit A (Fountain Engine Code LXX-SCC 7002487)**</li> <li>□ Exhibit B (Fountain Engine Code LXX-SCC 7002483)**</li> <li>□ Exhibit D (Portion of the Source Code for the Printer Engine Program)**</li> </ul> </li> </ul>	65	02/06/2003

Declaration of Bruce MacDowell Maggs with Exhibits B-F** pp. 2-3, 6-10	66	02/06/2003
<ul style="list-style-type: none"> <li>□ Exhibit B (Dallas Semiconductor – DS2432 1k-Bit Protected 1-Wire EEPROM with SHA-1 Engine)**</li> <li>□ Exhibit C (Fountain/Hawkeye Chip Layout Version 1.8)**</li> <li>□ Exhibit D (Fountain/Hawkeye Cartridge-based Remote Program Specification)**</li> <li>□ Exhibit E (Alternative Toner Loading Programs for use with T520/522 printers)**</li> <li>□ Exhibit F (Alternative Toner Loading Programs for use with T620/622 printers)**</li> </ul>		
Affidavit of William K. Swartz pp. 2, 5, 6	67	02/06/2003
Order Extending Injunctive Relief until 2/28/03 and Increasing Bond to \$250,000 p. 2	75	02/07/2003
Transcript of Preliminary Injunction Hearing** pp. 1-231	82	02/11/2003
Order Granting Preliminary Injunction	91	02/27/2003
Order Stating Findings of Fact and Conclusions of Law pp. 1, 3-9, 10-18, 20, 21, 24, 26-33, 35-37, 41, 45-48, 50, 51, 53	92	02/27/2003
Motion to Clarify Preliminary Injunction p. 1	98	03/06/2003
<ul style="list-style-type: none"> <li>□ Exhibit A (SCC Press Release of</li> </ul>		



March 3, 2003)		
Amended Answer p. 7	102	03/12/2003
Notice of Appeal	107	03/25/2003
Order Granting Motion for Clarification	114	04/21/2003
Amicus Curiae Brief by Automotive Parts Rebuilders Association	115	4/21/2003
Amicus Curiae Brief by Basel Action Network	116	4/21/2003
Amicus Curiae Brief by Silicon Valley Toxics Coalition	117	4/21/2003
Amicus Curiae Brief by Computer & Communications Industry Association	118	4/21/2003
Amicus Curiae Brief of Law Professors	119	4/21/2003
Amicus Curiae Brief by Automotive Aftermarket Industry Association	120	4/21/2003

## **ADDENDUM OF UNPUBLISHED AUTHORITIES**

Pursuant to Sixth Circuit Rule 28(g), Appellee Lexmark International, Inc. hereby attaches copies of unpublished authorities cited in its brief.

LEXSEE 1999 U.S. APP. LEXIS 13401

**VIRGIL A. HOMAN, Plaintiff-Appellant, v. WILLIAM J.  
CLINTON, President, et al., Defendants-Appellees.**

**No. 98-3844**

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

*1999 U.S. App. LEXIS 13401; Copy. L. Rep. (CCH)  
P27,980*

**June 14, 1999, Filed**

**NOTICE:**           [\*1]           NOT  
RECOMMENDED FOR FULL-TEXT  
PUBLICATION. SIXTH CIRCUIT  
RULE 206 LIMITS CITATION TO  
SPECIFIC SITUATIONS. PLEASE  
SEE RULE 206 BEFORE CITING IN A  
PROCEEDING IN A COURT IN THE  
SIXTH CIRCUIT. IF CITED, A COPY  
MUST BE SERVED ON OTHER  
PARTIES AND THE COURT. THIS  
NOTICE IS TO BE PROMINENTLY  
DISPLAYED IF THIS DECISION IS  
REPRODUCED.

**SUBSEQUENT HISTORY:**

Reported in Table Case Format at:  
*1999 U.S. App. LEXIS 27670.*

**PRIOR HISTORY:** Northern District  
of Ohio. 98-07254. Katz. 6-26-98.

**DISPOSITION:** Affirmed.

**COUNSEL:** VIRGIL A. HOMAN,  
Plaintiff - Appellant, Pro se, Maria  
Stein, OH.

For WILLIAM J. CLINTON, Defendant  
- Appellee: Holly Taft Sydlow, Office of  
the U.S. Attorney, Toledo, OH.

**JUDGES:**           Before:           KEITH,  
DAUGHTREY, and MOORE, Circuit  
Judges.

**OPINION:****ORDER**

Virgil A. Homan, an Ohio resident proceeding pro se, appeals a district court judgment dismissing his 17 U.S.C. § 102 copyright infringement suit as frivolous pursuant to 28 U.S.C.A. § 1915(e) (West 1998). This case has been referred to a panel of the court pursuant to Rule 34(j)(1), Rules of the Sixth Circuit. Upon examination, this panel unanimously agrees that oral argument is not needed. Fed. R. App. P. 34(a).

Seeking monetary relief, Homan filed a complaint against the United States Government, William J. Clinton, President of the United [\*2] States; Albert Gore, Vice President of the United States; the Democratic Presidential Committee; the Democratic National Committee; and the Democratic Party. Homan alleged that in 1996 he obtained a certificate of copyright registration for an article he authored entitled "Bridge Village," which "contains the central theme and motto about BUILDING BRIDGES TO THE FUTURE." Homan alleges that the defendants infringed upon his copyrighted work by utilizing the slogan "Building Bridges To The 21st Century" during the 1996 presidential election campaign.

On June 23, 1998, the district court determined that Homan's allegations lacked an arguable basis in law and dismissed the complaint as frivolous. Homan has filed a timely appeal, in

which he contends that the district court dismissed his complaint in error.

This court reviews de novo a judgment dismissing a suit as frivolous under § 1915(e). See *McGore v. Wigglesworth*, 114 F.3d 601, 604 (6th Cir. 1997). A complaint "is frivolous where it lacks an arguable basis either in law or in fact." *Neitzke v. Williams*, 490 U.S. 319, 325, 104 L. Ed. 2d 338, 109 S. Ct. 1827 (1989).

In order to establish copyright infringement, the plaintiff [\*3] must prove: "(1) ownership of a valid copyright"; and (2) copying by the defendant of the protectible elements of the plaintiff's work. *Feist Publications, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 361, 113 L. Ed. 2d 358, 111 S. Ct. 1282 (1991); see also *Wickham v. Knoxville Int'l Energy Exposition, Inc.*, 739 F.2d 1094, 1097 (6th Cir. 1984). Copyright protection extends only to the expression of ideas, not the ideas themselves or general concepts. See *Mazer v. Stein*, 347 U.S. 201, 217, 98 L. Ed. 630, 74 S. Ct. 460 (1954); *Mihalek Corp. v. Michigan*, 814 F.2d 290, 294 (6th Cir. 1987); *Wickham*, 739 F.2d at 1097. "When idea and expression coincide, there will be protection against nothing other than identical copying of the work." *Sid & Marty Krofft Television Prods., Inc. v. McDonald's Corp.*, 562 F.2d 1157, 1168 (9th Cir. 1977). Moreover, "the copyright law does not protect 'fragmentary words and phrases.'" *Sem-Torq, Inc. v. K Mart Corp.*, 936 F.2d 851, 854-55 (6th Cir.

1991) (quoting *Magic Mktg., Inc. v. Mailing Servs. of Pittsburgh, Inc.*, 634 F. Supp. 769, 771 (W.D. Pa. 1986)); see also *M.M. Business Forms Corp. v. UARCO, Inc.*, 472 F.2d 1137, 1140 [\*4] (6th Cir. 1973).

Where direct evidence of copying is unavailable, the plaintiff must demonstrate defendant's access to the underlying work and a substantial similarity between the plaintiff's and the defendant's works. See *Wickham*, 739 F.2d at 1097. The plaintiff bears the burden of proving substantial similarity between "the copyrighted material and the allegedly infringing material." *Mihalek*, 814 F.2d at 294. Substantial similarity between two works alone is insufficient to establish copying when there is no proof of access. See *Wickham*, 739 F.2d at 1097.

Upon review, we conclude that the district court properly dismissed Homan's complaint as frivolous. See *McGore*, 114 F.3d at 604. Assuming that Homan registered his copyrighted work, his copyright infringement suit fails. Homan failed to present sufficient evidence that the defendants had access to his "Building Bridges to the Future" motto prior to the 1996 presidential election campaign. See *Wickham*, 739 F.2d at 1097. Even if Homan could establish the defendant's access to his

motto, his copyright infringement claim fails because he has failed to prove substantial similarity between his work and the presidential [\*5] campaign slogan. See *Mihalek*, 814 F.2d at 294; *Wickham*, 739 F.2d at 1097. Furthermore, Homan's action is merely an attempt to establish copyright protection for an idea or general concept, which is not protected, rather than the expression of the idea or general concept, which is protected. See *Mazer*, 347 U.S. at 217; *Mihalek*, 814 F.2d at 294. Indeed, Homan offers neither argument nor evidence that the defendants expressed the idea in the same manner as he did in his "Bridge Village" article or copied his motto exactly as it is stated in his article. See *Sid & Marty Krofft Television Prods., Inc.*, 562 F.2d at 1168.

Words and phrases are not subject to protection under the copyright act. See *Sem-Torq, Inc.*, 936 F.2d at 854-55; *M.M. Business Forms Corp.*, 472 F.2d at 1140. Because Homan merely seeks copyright protection for a phrase used in an article that he wrote, his complaint lacks an arguable basis in law. See *Neitzke*, 490 U.S. at 325; *McGore*, 114 F.3d at 604.

Accordingly, the district court's judgment is affirmed. Rule 34(j)(2)(C), [\*6] Rules of the Sixth Circuit.

United States Court of Appeals,  
Ninth Circuit.

Leslie A. KELLY, an individual, dba  
Les Kelly Publications, dba Les Kelly  
Enterprises, dba Show Me The Gold,  
Plaintiff-Appellant,

v.

ARRIBA SOFT CORPORATION, an  
Illinois Corporation, Defendant-  
Appellee.

No. 00-55521.

Argued and Submitted Sept. 10, 2001.

Opinion Filed Feb. 6, 2002.

Withdrawn July 7, 2003.

Re-filed July 7, 2003.

Owner of copyrighted images displayed on Internet web sites sued operator of visual search engine, which displayed search results as "thumbnail" pictures, for copyright infringement. The United States District Court for the Central District of California, Gary L. Taylor, J., 77 F.Supp.2d 1116, granted summary judgment for search engine operator based on finding of fair use, and owner appealed. On denial of rehearing, and withdrawing and superseding its prior opinion, 280 F.3d 934, the Court of Appeals, T.G. Nelson, Circuit Judge, held that operator's use of owner's images as "thumbnails" in its search engine was fair use.

Affirmed in part, reversed in part,  
and remanded.

Appeal from the United States District  
Court for the Central District of  
California; Gary L. Taylor, District  
Judge, Presiding. D .C. No. CV-99-  
00560- GLT.

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Frontier Foundation.

Before BETTY B. FLETCHER,

THOMAS G. NELSON, and  
MARSHA S. BERZON, Circuit  
Judges.

## ORDER AND OPINION

T.G. NELSON, Circuit Judge.

### ORDER

\*1 The Opinion filed February 6, 2002, slip op.1953, and appearing at 280 F.3d 934 (9th Cir.2002), is withdrawn. It may not be cited as precedent by or to this court or any district court of the Ninth Circuit.

Therefore, Appellee's petition for rehearing and the petition for rehearing en banc are DENIED as moot.

### OPINION

This case involves the application of copyright law to the vast world of the internet and internet search engines. The plaintiff, Leslie Kelly, is a professional photographer who has copyrighted many of his images of the American West. Some of these images are located on Kelly's web site or other web sites with which Kelly has a license agreement. The defendant, Arriba Soft Corp., [FN1] operates an internet search engine that displays its results in the form of small pictures rather than the more

usual form of text. Arriba obtained its database of pictures by copying images from other web sites. By clicking on one of these small pictures, called "thumbnails," the user can then view a large version of that same picture within the context of the Arriba web page.

When Kelly discovered that his photographs were part of Arriba's search engine database, he brought a claim against Arriba for copyright infringement. The district court found that Kelly had established a prima facie case of copyright infringement based on Arriba's unauthorized reproduction and display of Kelly's works, but that this reproduction and display constituted a non-infringing "fair use" under Section 107 of the Copyright Act. Kelly appeals that decision, and we affirm in part and reverse in part. The creation and use of the thumbnails in the search engine is a fair use. However, the district court should not have decided whether the display of the larger image is a violation of Kelly's exclusive right to publicly display his works. Thus, we remand for further proceedings consistent with this opinion.

#### I.

The search engine at issue in this case is unconventional in that it displays the results of a user's query

as "thumbnail" images. When a user wants to search the internet for information on a certain topic, he or she types a search term into a search engine, which then produces a list of web sites that contain information relating to the search term. Normally, the list of results is in text format. The Arriba search engine, however, produces its list of results as small pictures.

To provide this service, Arriba developed a computer program that "crawls" the web looking for images to index. This crawler downloads full-sized copies of the images onto Arriba's server. The program then uses these copies to generate smaller, lower-resolution thumbnails of the images. Once the thumbnails are created, the program deletes the full-sized originals from the server. Although a user could copy these thumbnails to his computer or disk, he cannot increase the resolution of the thumbnail; any enlargement would result in a loss of clarity of the image.

\*2 The second component of the Arriba program occurs when the user double-clicks on the thumbnail. From January 1999 to June 1999, clicking on the thumbnail produced the "Images Attributes" page. This page used in-line linking to display the original full-sized image, surrounded by text describing the size of the image, a link to the original web site,

the Arriba banner, and Arriba advertising.

In-line linking allows one to import a graphic from a source website and incorporate it in one's own website, creating the appearance that the in-lined graphic is a seamless part of the second web page. [FN2] The in-line link instructs the user's browser to retrieve the linked-to image from the source website and display it on the user's screen, but does so without leaving the linking document. [FN3] Thus, the linking party can incorporate the linked image into its own content. As a result, although the image in Arriba's Images Attributes page came directly from the originating web site and was not copied onto Arriba's server, the user would not realize that the image actually resided on another web site.

From July 1999 until sometime after August 2000, the results page contained thumbnails accompanied by two links: "Source" and "Details." The "Details" link produced a screen similar to the Images Attributes page but with a thumbnail rather than the full-sized image. Alternatively, by clicking on the "Source" link or the thumbnail from the results page, the site produced two new windows on top of the Arriba page. The window in the forefront contained solely the full-sized image. This window partially obscured another window, which



displayed a reduced-size version of the image's originating web page. Part of the Arriba web page was visible underneath both of these new windows. [FN4]

In January 1999, Arriba's crawler visited web sites that contained Kelly's photographs. The crawler copied thirty-five of Kelly's images to the Arriba database. Kelly had never given permission to Arriba to copy his images and objected when he found out that Arriba was using them. Arriba deleted the thumbnails of images that came from Kelly's own web sites and placed those sites on a list of sites that it would not crawl in the future. Several months later, Arriba received Kelly's complaint of copyright infringement, which identified other images of his that came from third-party web sites. Arriba subsequently deleted those thumbnails and placed those third-party sites on a list of sites that it would not crawl in the future.

The district court granted summary judgment in favor of Arriba. Kelly's motion for partial summary judgment asserted that Arriba's use of the thumbnail images violated his display, reproduction, and distribution rights. Arriba cross-moved for summary judgment. For the purposes of the motion, Arriba conceded that Kelly established a *prima facie* case of infringement. However, it limited its

concession to the violation of the display and reproduction rights *as to the thumbnail images*. Arriba then argued that its use of the thumbnail images was a fair use.

\*3 The district court did not limit its decision to the thumbnail images alone. The court granted summary judgment to Arriba, finding that its use of both the thumbnail images and the full-size images was fair. In doing so, the court broadened the scope of Kelly's original motion to include a claim for infringement of the full-size images. The court also broadened the scope of Arriba's concession to cover the *prima facie* case for both the thumbnail images and the full-size images. The court determined that two of the fair use factors weighed heavily in Arriba's favor. Specifically, the court found that the character and purpose of Arriba's use was significantly transformative and the use did not harm the market for or value of Kelly's works. Kelly now appeals this decision.

## II.

[1] We review a grant of summary judgment *de novo*. [FN5] We also review the court's finding of fair use, which is a mixed question of law and fact, by this same standard. [FN6] "In doing so, we must balance the nonexclusive factors set out in 17 U.S.C. § 107." [FN7]

The district court's decision in this case involves two distinct actions by Arriba that warrant analysis. The first action consists of the reproduction of Kelly's images to create the thumbnails and the use of those thumbnails in Arriba's search engine. The second action involves the display of Kelly's larger images when the user clicks on the thumbnails. We conclude that, as to the first action, the district court correctly found that Arriba's use was fair. However, as to the second action, we conclude that the district court should not have reached the issue because neither party moved for summary judgment as to the full-size images and Arriba's response to Kelly's summary judgment motion did not concede the prima facie case for infringement as to those images.

A.

[2][3][4] An owner of a copyright has the exclusive right to reproduce, distribute, and publicly display copies of the work. [FN8] To establish a claim of copyright infringement by reproduction, the plaintiff must show ownership of the copyright and copying by the defendant. [FN9] As to the thumbnails, Arriba conceded that Kelly established a prima facie case of infringement of Kelly's reproduction rights.

[5][6] A claim of copyright infringement is subject to certain statutory exceptions, including the fair use exception. [FN10] This exception "permits courts to avoid rigid application of the copyright statute when, on occasion, it would stifle the very creativity which that law is designed to foster." [FN11] The statute sets out four factors to consider in determining whether the use in a particular case is a fair use. [FN12] We must balance these factors in light of the objectives of copyright law, rather than view them as definitive or determinative tests. [FN13] We now turn to the four fair use factors.

1. *Purpose and character of the use.*

[7] The Supreme Court has rejected the proposition that a commercial use of the copyrighted material ends the inquiry under this factor. [FN14] Instead,

\*4 [t]he central purpose of this investigation is to see ... whether the new work merely supersede[s ] the objects of the original creation, or instead adds something new, with a further purpose or different character, altering the first with new expression, meaning, or message; it asks, in other words, whether and to what extent the new work is transformative. [FN15]

The more transformative the new work, the less important the other

factors, including commercialism, become. [FN16]

[8] There is no dispute that Arriba operates its web site for commercial purposes and that Kelly's images were part of Arriba's search engine database. As the district court found, while such use of Kelly's images was commercial, it was more incidental and less exploitative in nature than more traditional types of commercial use. [FN17] Arriba was neither using Kelly's images to directly promote its web site nor trying to profit by selling Kelly's images. Instead, Kelly's images were among thousands of images in Arriba's search engine database. Because the use of Kelly's images was not highly exploitative, the commercial nature of the use weighs only slightly against a finding of fair use.

The second part of the inquiry as to this factor involves the transformative nature of the use. We must determine if Arriba's use of the images merely superseded the object of the originals or instead added a further purpose or different character. [FN18] We find that Arriba's use of Kelly's images for its thumbnails was transformative.

Although Arriba made exact replications of Kelly's images, the thumbnails were much smaller, lower-resolution images that served an entirely different function than Kelly's

original images. Kelly's images are artistic works intended to inform and to engage the viewer in an aesthetic experience. His images are used to portray scenes from the American West in an aesthetic manner. Arriba's use of Kelly's images in the thumbnails is unrelated to any aesthetic purpose. Arriba's search engine functions as a tool to help index and improve access to images on the internet and their related web sites. In fact, users are unlikely to enlarge the thumbnails and use them for artistic purposes because the thumbnails are of much lower-resolution than the originals; any enlargement results in a significant loss of clarity of the image, making them inappropriate as display material.

Kelly asserts that because Arriba reproduced his exact images and added nothing to them, Arriba's use cannot be transformative. Courts have been reluctant to find fair use when an original work is merely retransmitted in a different medium. [FN19] Those cases are inapposite, however, because the resulting use of the copyrighted work in those cases was the same as the original use. For instance, reproducing music CDs in computer MP3 format does not change the fact that both formats are used for entertainment purposes. Likewise, reproducing news footage into a different format does not

change the ultimate purpose of informing the public about current affairs.

\*5 Even in *Infinity Broadcast Corp. v. Kirkwood*, [FN20] where the retransmission of radio broadcasts over telephone lines was for the purpose of allowing advertisers and radio stations to check on the broadcast of commercials or on-air talent, there was nothing preventing listeners from subscribing to the service for entertainment purposes. Even though the intended purpose of the retransmission may have been different from the purpose of the original transmission, the result was that people could use both types of transmissions for the same purpose.

This case involves more than merely a retransmission of Kelly's images in a different medium. Arriba's use of the images serves a different function than Kelly's use—improving access to information on the internet versus artistic expression. Furthermore, it would be unlikely that anyone would use Arriba's thumbnails for illustrative or aesthetic purposes because enlarging them sacrifices their clarity. Because Arriba's use is not superseding Kelly's use but, rather, has created a different purpose for the images, Arriba's use is transformative.

Comparing this case to two recent cases in the Ninth and First Circuits

reemphasizes the functionality distinction. In *Worldwide Church of God v. Philadelphia Church of God, Inc.*, [FN21] we held that copying a religious book to create a new book for use by a different church was not transformative. [FN22] The second church's use of the book was merely to make use of the same book for another church audience. The court noted that "where the use is for the same intrinsic purpose as [the copyright holder's] ... such use seriously weakens a claimed fair use." [FN23]

On the other hand, in *N# 3A DB# ez v. Caribbean International News Corp.*, [FN24] the First Circuit found that copying a photograph that was intended to be used in a modeling portfolio and using it instead in a news article was a transformative use. [FN25] By putting a copy of the photograph in the newspaper, the work was transformed into news, creating a new meaning or purpose for the work. The use of Kelly's images in Arriba's search engine is more analogous to the situation in *N# 3A DB# ez* because Arriba has created a new purpose for the images and is not simply superseding Kelly's purpose.

[9] The Copyright Act was intended to promote creativity, thereby benefitting the artist and the public alike. To preserve the potential future

use of artistic works for purposes of teaching, research, criticism, and news reporting, Congress created the fair use exception. [FN26] Arriba's use of Kelly's images promotes the goals of the Copyright Act and the fair use exception. The thumbnails do not stifle artistic creativity because they are not used for illustrative or artistic purposes and therefore do not supplant the need for the originals. In addition, they benefit the public by enhancing information-gathering techniques on the internet.

In *Sony Computer Entertainment America, Inc. v. Bleem*, [FN27] we held that when Bleem copied "screen shots" from Sony computer games and used them in its own advertising, it was a fair use. [FN28] In finding that the first factor weighed in favor of Bleem, we noted that "comparative advertising redounds greatly to the purchasing public's benefit with very little corresponding loss to the integrity of Sony's copyrighted material." [FN29] Similarly, this first factor weighs in favor of Arriba due to the public benefit of the search engine and the minimal loss of integrity to Kelly's images.

## 2. Nature of the copyrighted work.

\*6 [10][11][12][13] "Works that are creative in nature are closer to the core of intended copyright protection than are more fact-based works."

[FN30] Photographs that are meant to be viewed by the public for informative and aesthetic purposes, such as Kelly's, are generally creative in nature. The fact that a work is published or unpublished also is a critical element of its nature. [FN31] Published works are more likely to qualify as fair use because the first appearance of the artist's expression has already occurred. [FN32] Kelly's images appeared on the internet before Arriba used them in its search image. When considering both of these elements, we find that this factor weighs only slightly in favor of Kelly.

## 3. Amount and substantiality of portion used.

[14][15] "While wholesale copying does not preclude fair use per se, copying an entire work militates against a finding of fair use." [FN33] However, the extent of permissible copying varies with the purpose and character of the use. [FN34] If the secondary user only copies as much as is necessary for his or her intended use, then this factor will not weigh against him or her.

[16] This factor neither weighs for nor against either party because, although Arriba did copy each of Kelly's images as a whole, it was reasonable to do so in light of Arriba's use of the images. It was necessary for Arriba to copy the entire image to

allow users to recognize the image and decide whether to pursue more information about the image or the originating web site. If Arriba only copied part of the image, it would be more difficult to identify it, thereby reducing the usefulness of the visual search engine.

*4. Effect of the use upon the potential market for or value of the copyrighted work.*

[17][18] This last factor requires courts to consider "not only the extent of market harm caused by the particular actions of the alleged infringer, but also 'whether unrestricted and widespread conduct of the sort engaged in by the defendant ... would result in a substantially adverse impact on the potential market for the original.' " [FN35] A transformative work is less likely to have an adverse impact on the market of the original than a work that merely supersedes the copyrighted work. [FN36]

[19] Kelly's images are related to several potential markets. One purpose of the photographs is to attract internet users to his web site, where he sells advertising space as well as books and travel packages. In addition, Kelly could sell or license his photographs to other web sites or to a stock photo database, which then could offer the images to its

customers.

Arriba's use of Kelly's images in its thumbnails does not harm the market for Kelly's images or the value of his images. By showing the thumbnails on its results page when users entered terms related to Kelly's images, the search engine would guide users to Kelly's web site rather than away from it. Even if users were more interested in the image itself rather than the information on the web page, they would still have to go to Kelly's site to see the full-sized image. The thumbnails would not be a substitute for the full-sized images because the thumbnails lose their clarity when enlarged. If a user wanted to view or download a quality image, he or she would have to visit Kelly's web site. [FN37] This would hold true whether the thumbnails are solely in Arriba's database or are more widespread and found in other search engine databases.

\*7 Arriba's use of Kelly's images also would not harm Kelly's ability to sell or license his full-sized images. Arriba does not sell or license its thumbnails to other parties. Anyone who downloaded the thumbnails would not be successful selling full-sized images enlarged from the thumbnails because of the low resolution of the thumbnails. There would be no way to view, create, or sell a clear, full-sized image without

going to Kelly's web sites. Therefore, Arriba's creation and use of the thumbnails does not harm the market for or value of Kelly's images. This factor weighs in favor of Arriba.

[20] Having considered the four fair use factors and found that two weigh in favor of Arriba, one is neutral, and one weighs slightly in favor of Kelly, we conclude that Arriba's use of Kelly's images as thumbnails in its search engine is a fair use.

B.

As mentioned above, the district court granted summary judgment to Arriba as to the full-size images as well. However, because the court broadened the scope of both the parties' motions for partial summary judgment and Arriba's concession on the prima facie case, we must reverse this portion of the court's opinion.

[21] With limited exceptions that do not apply here, a district court may not grant summary judgment on a claim when the party has not requested it. [FN38] The parties did not move for summary judgment as to copyright infringement of the full-size images. Further, Arriba had no opportunity to contest the prima facie case for infringement as to the full-size images. [FN39] Accordingly, we reverse this portion of the district court's opinion and remand for further

proceedings.

## CONCLUSION

We hold that Arriba's reproduction of Kelly's images for use as thumbnails in Arriba's search engine is a fair use under the Copyright Act. However, we hold that the district court should not have reached whether Arriba's display of Kelly's full-sized images is a fair use because the parties never moved for summary judgment on this claim and Arriba never conceded the prima facie case as to the full-size images. The district court's opinion is affirmed as to the thumbnails and reversed as to the display of the full-sized images. We remand for further proceedings consistent with this opinion. Each party shall bear its own costs and fees on appeal.

AFFIRMED in part, REVERSED in part, and REMANDED.

FN1. Arriba Soft has changed its name since the start of this litigation. It is now known as "Ditto.com."

FN2. Mark Sableman, *Link Law Revisited: Internet Linking Law at Five Years*, 16 BERKELEY TECH. L.J. 1273, 1297 (2001).

FN3. Stacey L. Dogan, Infringement Once Removed: The Perils of Hyperlinking to Infringing Content, 87 IOWA L. REV. 829, 839 n. 32 (2002).

FN4. Currently, when a user clicks on the thumbnail, a window of the home page of the image appears on top of the Arriba page. There is no window just containing the image.

FN5. Los Angeles News Serv. v. Reuters Television Int'l. Ltd., 149 F.3d 987, 993 (9th Cir.1998).

FN6. *Id.*

FN7. *Id.*

FN8. 17 U.S.C. § 106.

FN9. Hustler Magazine, Inc. v. Moral Majority, Inc., 796 F.2d 1148, 1151 (9th Cir.1986) (quoting 3 M. Nimmer & D. Nimmer, *Nimmer on Copyright* § 13.01 (1985)).

FN10. 17 U.S.C. §§ 106, 107.

FN11. Dr. Seuss Enters., L.P. v. Penguin Books USA, Inc., 109 F.3d 1394, 1399 (9th Cir.1997) (internal quotation marks omitted).

FN12. The four factors are: (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes; (2) the nature of the copyrighted work; (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and (4) the effect of the use upon the potential market for or value of the copyrighted work. 17 U.S.C. § 107.

FN13. Dr. Seuss, 109 F.3d at 1399.

FN14. Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 579, 114 S.Ct. 1164, 127 L.Ed.2d 500 (1994).

FN15. *Id.* (internal quotation marks and citation omitted)



(alteration in original).

FN16. *Id.*

FN17. See, e.g., *A & M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004, 1015 (9th Cir.2001) ("[C]ommercial use is demonstrated by a showing that repeated and exploitative unauthorized copies of copyrighted works were made to save the expense of purchasing authorized copies.").

FN18. *Campbell*, 510 U.S. at 579.

FN19. See *Infinity Broad. Corp. v. Kirkwood*, 150 F.3d 104, 108 (2d Cir.1998) (concluding that retransmission of radio broadcast over telephone lines is not transformative); *UMG Recordings, Inc. v. MP3.com, Inc.*, 92 F.Supp.2d 349, 351 (S.D.N.Y.2000) (finding that reproduction of audio CD into computer MP3 format does not transform the work); *Los Angeles News Serv.*, 149 F.3d at 993 (finding that reproducing news footage without editing

the footage "was not very transformative").

FN20. 150 F.3d 104.

FN21. 227 F.3d 1110 (9th Cir.2000).

FN22. *Id.* at 1117.

FN23. *Id.* (internal quotation marks omitted) (alteration and ellipses in original).

FN24. 235 F.3d 18 (1st Cir.2000).

FN25. *Id.* at 22-23.

FN26. 17 U.S.C. § 107 ("[T]he fair use of a copyrighted work ... for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright."); see also *Campbell*, 510 U.S. at 576- 77.

FN27. 214 F.3d 1022 (9th

Cir.2000).

FN28. *Id.* at 1029.

FN29. *Id.* at 1027.

FN30. *A & M Records*, 239 F.3d at 1016 (citing *Campbell*, 510 U.S. at 586) (internal quotation marks omitted).

FN31. *Harper & Row Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 564, 105 S.Ct. 2218, 85 L.Ed.2d 588 (1985) (noting that the scope of fair use is narrower with respect to unpublished works because the author's right to control the first public appearance of his work weighs against the use of his work before its release).

FN32. *Id.*

FN33. *Worldwide Church of God*, 227 F.3d at 1118 (internal quotation marks omitted).

FN34. *Campbell*, 510 U.S. at 586-87.

FN35. *Id.* at 590 (quoting 3 M. Nimmer & D. Nimmer, *Nimmer on Copyright* § 13.05[A][4] (1993)) (ellipses in original).

FN36. *See id.* at 591 (stating that a work that supersedes the object of the original serves as a market replacement for it, making it likely that market harm will occur, but when the second use is transformative, market substitution is less certain).

FN37. We do not suggest that the inferior display quality of a reproduction is in any way dispositive or will always assist an alleged infringer in demonstrating fair use. In this case, however, it is extremely unlikely that users would download thumbnails for display purposes, as the quality full-size versions are easily accessible from Kelly's web sites.

In addition, we note that in the unique context of photographic images, the quality of the reproduction may matter more than in other fields of creative endeavor. The appearance of photographic images accounts

for virtually their entire  
aesthetic value.

FN38. See *Kilroy v.*  
*Ruckelshaus*, 738 F.2d 1448,  
*1452* (9th Cir.1984).

FN39. See *United States v.*  
*Grayson*, 879 F.2d 620, 625  
(9th Cir.1989).

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3 Cal. Daily Op. Serv. 5888, 2003  
Daily Journal D.A.R. 7459

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LEXSEE 2000 U.S. DIST. LEXIS 1889

**RealNetworks, Inc., Plaintiff, v. Streambox, Inc., Defendant.**

**No. C99-2070P**

**UNITED STATES DISTRICT COURT FOR THE  
WESTERN DISTRICT OF WASHINGTON**

***2000 U.S. Dist. LEXIS 1889***

**January 18, 2000, Decided**

**January 18, 2000, Filed**

**DISPOSITION:** [\*1] Plaintiff's motion for a preliminary injunction with respect to the Streambox Ripper **DENIED**. The Temporary Restraining Order entered by Judge Coughenour on December 23, 1999 **VACATED**.

**COUNSEL:** For REALNETWORKS INC, plaintiff: James A DiBoise, David H Kramer, WILSON, SONSINI, GOODRICH & ROSATI, PALO ALTO, CA. Robert D Stewart, MCNAUL, EBEL, NAWROT, HELGREN & VANCE, SEATTLE, WA.

For STREAMBOX INC, defendant: Robert J Carlson, CHRISTENSEN, O'CONNOR, JOHNSON & KINDNESS, PLLC, SEATTLE, WA. Chun M Ng, BLAKELY SOKOLOFF

TAYLOR & ZAFMAN, KIRKLAND, WA.

**JUDGES:** Marsha J. Pechman, United States District Judge.

**OPINIONBY:** Marsha J. Pechman

**OPINION:**

**ORDER ON PLAINTIFF'S  
MOTION FOR PRELIMINARY  
INJUNCTION**

**INTRODUCTION**

Plaintiff RealNetworks, Inc. ("RealNetworks") filed this action on December 21, 1999. RealNetworks claims that Defendant Streambox has violated provisions of the Digital Millennium Copyright Act ("DMCA"),

17 U.S.C. § 1201 *et seq.*, by distributing and marketing products known as the Streambox VCR and the Ripper. RealNetworks also contends that another Streambox product, known as the Ferret, is unlawfully designed to permit consumers to make unauthorized modifications [\*2] to a software program on which RealNetworks holds the copyright.

On December 21, 1999, RealNetworks applied for a temporary restraining order to bar Streambox from manufacturing, distributing, selling, or marketing the VCR, the Ripper, and the Ferret. On December 23, 1999, Chief Judge Coughenour of this Court entered a Temporary Restraining Order, finding RealNetworks was likely to succeed on the merits of its claims and that it was suffering irreparable harm from Streambox's conduct. The Court also ordered Streambox to show cause as to why the restraints contained in the Temporary Restraining Order should not be continued as a preliminary injunction.

After expedited briefing, a show cause hearing was held on January 7, 2000 before the Court. Both parties were permitted to submit overlength briefs in support of their arguments. The Court further requested that both parties submit and highlight portions of the legislative history of the DMCA that they believe to be relevant to interpreting the statute with respect to Plaintiff's claims under the statute.

The Court, having considered the papers and pleadings filed herein and having heard oral argument from the parties, concludes that [\*3] a preliminary injunction should be entered to enjoin the manufacture, distribution, and sale of the Streambox VCR and the Ferret during the pendency of this action. The Court does not conclude that a preliminary injunction should be entered with respect to the Ripper. Pursuant to Fed. R. Civ. P. 52(a), the Court's findings of fact and conclusions of law are stated below.

## FINDINGS OF FACT

### RealNetworks

1. RealNetworks is a public company based in Seattle, Washington that develops and markets software products designed to enable owners of audio, video, and other multimedia content to send their content to users of personal computers over the Internet.

2. RealNetworks offers products that enable consumers to access audio and video content over the Internet through a process known as "streaming." When an audio or video clip is "streamed" to a consumer, no trace of the clip is left on the consumer's computer, unless the content owner has permitted the consumer to download the file.

3. Streaming is to be contrasted with "downloading," a process by which a complete copy of an audio or video clip is delivered to and stored on a consumer's computer. Once a consumer

[\*4] has downloaded a file, he or she can access the file at will, and can generally redistribute copies of that file to others.

4. In the digital era, the difference between streaming and downloading is of critical importance. A downloaded copy of a digital audio or video file is essentially indistinguishable from the original, and such copies can often be created at the touch of a button. A user who obtains a digital copy may supplant the market for the original by distributing copies of his or her own. To guard against the unauthorized copying and redistribution of their content, many copyright owners do not make their content available for downloading, and instead distribute the content using streaming technology in a manner that does not permit downloading.

5. A large majority of all Internet Web pages that deliver streaming music or video use the RealNetworks' format.

#### **RealNetworks' Products**

6. The RealNetworks' products at issue in this action include the "RealProducer," the "RealServer" and the "RealPlayer." These products may be used together to form a system for distributing, retrieving and playing digital audio and video content via the Internet.

7. Owners of audio [\*5] or video content may choose to use a RealNetworks product to encode their digital content into RealNetworks'

format. Once encoded in that format, the media files are called RealAudio or RealVideo (collectively "RealMedia") files.

8. After a content owner has encoded its content into the RealMedia format, it may decide to use a "RealServer" to send that content to consumers. A RealServer is software program that resides on a content owner's computer that holds RealMedia files and "serves" them to consumers through streaming.

9. The RealServer is not the only available means for distributing RealMedia files. RealMedia files may also be made available on an ordinary web server instead of a RealServer. An end-user can download content from an ordinary web server using nothing more than a freely available Internet browser such as Netscape's Navigator or Microsoft's Internet Explorer.

10. To download streaming content distributed by a RealServer, however, a consumer must employ a "RealPlayer." The RealPlayer is a software program that resides on an end-user's computer and must be used to access and play a streaming RealMedia file that is sent from a RealServer.

#### **RealNetworks' Security Measures [\*6]**

11. RealNetworks' products can be used to enable owners of audio and video content to make their content available for consumers to listen to or view, while at the same time securing

the content against unauthorized access or copying.

12. The first of these measures, called the "Secret Handshake" by RealNetworks, ensures that files hosted on a RealServer will only be sent to a RealPlayer. The Secret Handshake is an authentication sequence which only RealServers and RealPlayers know. By design, unless this authentication sequence takes place, the RealServer does not stream the content it holds.

13. By ensuring that RealMedia files hosted on a RealServer are streamed only to RealPlayers, RealNetworks can ensure that a second security measure, which RealNetworks calls the "Copy Switch," is given effect. The Copy Switch is a piece of data in all RealMedia files that contains the content owner's preference regarding whether or not the stream may be copied by end-users. RealPlayers are designed to read this Copy Switch and obey the content owner's wishes. If a content owner turns on the Copy Switch in a particular RealMedia file, when that file is streamed, an end-user [\*7] can use the RealPlayer to save a copy of that RealMedia file to the user's computer. If a content owner does not turn on the Copy Switch in a RealMedia file, the RealPlayer will not allow an end-user to make a copy of that file. The file will simply "evaporate" as the user listens to or watches it stream.

14. Through the use of the Secret Handshake and the Copy Switch, owners

of audio and video content can prevent the unauthorized copying of their content if they so choose.

15. Content owners who choose to use the security measures described above are likely to be seeking to prevent their works from being copied without their authorization. RealNetworks has proffered declarations from copyright owners that they rely on RealNetworks security measures to protect their copyrighted works on the Internet. Many of these copyright owners further state that if users could circumvent the security measures and make unauthorized copies of the content, they likely would not put their content up on the Internet for end-users.

16. Many copyright owners make content available on their Web site as a means to attract end-users to the Web site; that is, to drive "traffic" to the Web site. The more [\*8] traffic a Web site generates, the more it can charge for advertisements placed on the Web site. Without RealNetworks' security measures, a copyright owner could lose the traffic its content generates. An end-user could obtain a copy of the content after only one visit and listen to or view it repeatedly without ever returning to the Web site. That end-user could also redistribute the content to others who would then have no occasion to visit the site in the first instance.

17. Copyright owners also use Real Networks' technology so that end-users can listen to, but not record, music that

is on sale, either at a Web site or in retail stores. Other copyright owners enable users to listen to content on a "pay-per-play" basis that requires a payment for each time the end-user wants to hear the content. Without the security measures afforded by RealNetworks, these methods of distribution could not succeed. End-users could make and redistribute digital copies of any content available on the Internet, undermining the market for the copyrighted original.

18. RealNetworks' success as a company is due in significant part to the fact that it has offered copyright owners a successful means of [\*9] protecting against unauthorized duplication and distribution of their digital works.

#### **The RealPlayer Search Functionality**

19. In addition to its content playing and content protection capabilities, the RealPlayer enables end-users to search the Internet for audio and video content. Currently, a company known as Snap! LLC supplies the search services available to end-users through the RealPlayer under a contract with RealNetworks.

20. Under RealNetworks' contract with Snap, the search bar on the bottom of the RealPlayer's graphical user interface (the screen end-users view and interact with) is emblazoned with Snap's logo. An end-user can input a search request by inserting "key words" into the search bar. The RealPlayer then uses Snap's search services to locate specific

content corresponding to the search request from among the millions of media files available on the Internet. The RealPlayer then routes the end-user to a Web site maintained and co-branded by RealNetworks and Snap, where the names and locations of the files responsive to the search request are displayed.

21. Through this process, Snap garners visibility and visitors, enhancing Snap's ability to sell [\*10] advertising and products. Snap compensates RealNetworks for the promotional value it receives based on the number of searches performed by users who are directed to the Snap search engine. RealNetworks maintains that it has earned several million dollars from its contract with Snap.

#### **Streambox**

22. Defendant Streambox, Inc. is a Washington corporation which provides software products for processing and recording audio and video content, including but not limited to content which is streamed over the Internet. Streambox also maintains a searchable database of Internet web addresses of various audio and video offerings on the Internet. The Streambox products at issue in this case are known as the Streambox VCR, the Ripper, and the Ferret.

#### **Streambox VCR**

23. The Streambox VCR enables end-users to access and download copies



of RealMedia files that are streamed over the Internet. While the Streambox VCR also allows users to copy RealMedia files that are made freely available for downloading from ordinary web servers, the only function relevant to this case is the portions of the VCR that allow it to access and copy RealMedia files located on RealServers.

24. In order [\*11] to gain access to RealMedia content located on a RealServer, the VCR mimics a RealPlayer and circumvents the authentication procedure, or Secret Handshake, that a RealServer requires before it will stream content. In other words, the Streambox VCR is able to convince the RealServer into thinking that the VCR is, in fact, a RealPlayer.

25. Having convinced a RealServer to begin streaming content, the Streambox VCR, like the RealPlayer, acts as a receiver. However, unlike the RealPlayer, the VCR ignores the Copy Switch that tells a RealPlayer whether an end-user is allowed to make a copy of (i.e., download) the RealMedia file as it is being streamed. The VCR thus allows the end-user to download RealMedia files even if the content owner has used the Copy Switch to prohibit end-users from downloading the files.

26. The only reason for the Streambox VCR to circumvent the Secret Handshake and interact with a RealServer is to allow an end-user to access and make copies of content that a copyright holder has placed on a

RealServer in order to secure it against unauthorized copying. In this way, the Streambox VCR acts like a "black box" which descrambles cable or satellite broadcasts so that [\*12] viewers can watch pay programming for free. Like the cable and satellite companies that scramble their video signals to control access to their programs, RealNetworks has employed technological measures to ensure that only users of the RealPlayer can access RealMedia content placed on a RealServer. RealNetworks has gone one step further than the cable and satellite companies, not only controlling access, but also allowing copyright owners to specify whether or not their works can be copied by end-users, even if access is permitted. The Streambox VCR circumvents both the access control and copy protection measures.

27. The Streambox VCR can be distinguished from a third-party product sold by RealNetworks called GetRight. GetRight enables end-users to download RealAudio files that have been placed on a web server, but not RealAudio files placed on a RealServer.

28. A copyright owner that places a RealMedia file onto a web server instead of a RealServer does not make use of protections offered by the RealNetworks security system. Thus, when GetRight is used to obtain such a file, it need not and does not circumvent RealNetworks' access control and copyright protection measures. GetRight [\*13] cannot access materials available from a RealServer because it cannot perform the requisite

Secret Handshake. Unlike GetRight, the Streambox VCR circumvents the Secret Handshake and enables users to make digital copies of content that the copyright owner has indicated that it should not be copied.

29. Once an unauthorized, digital copy of a RealMedia file is created it can be redistributed to others at the touch of a button.

30. Streambox's marketing of the VCR notes that end-users can "download RealAudio and RealMedia files as easily as you would any other file, then reap the benefits of clean, unclogged streams straight from your hard drive" and that the product can be used by "savvy surfers who enjoy taking control of their favorite Internet music/video clips."

31. The Streambox VCR poses a threat to RealNetworks' relationships with existing and potential customers who wish to secure their content for transmission over the Internet and must decide whether to purchase and use RealNetworks' technology. If the Streambox VCR remains available, these customers may opt not to utilize RealNetworks' technology, believing that it would not protect their content against unauthorized copying. [\*14]

#### **Streambox Ripper**

32. Streambox also manufactures and distributes a product called the Streambox Ripper. The Ripper is a file conversion application that allows

conversion (adaptation) of files from RealMedia format to other formats such as .WAV, .RMA, and MP3. The Ripper also permits conversion of files between each of these formats, i.e., .WAV to .WMA and .WAV to MP3.

33. The Ripper operates on files which are already resident on the hard disk of the user's computer. The Ripper permits users to convert files that they have already created or obtained (presumably through legitimate means) from one format to another.

34. Streambox has proffered evidence that one potential use of the Ripper would be to permit copyright owners to translate their content directly from the RealMedia format into other formats that they may wish to utilize for their own work. Streambox has provided examples of various content owner who need a way to convert their own RealMedia files into different formats, such as .WAV for editing, or .WMA to accommodate those users who wish to access the content with a Windows Media Player instead of a RealPlayer. In addition, content which is freely available, [\*15] such as public domain material and material which users are invited and even encouraged to access and copy, may be converted by the Ripper into a different file format for listening at a location other than the user's computer.

#### **Streambox Ferret**

35. Streambox manufactures, markets, and distributes a third product

called the Streambox Ferret. The Ferret may be installed as a "plug-in" application to the RealPlayer.

36. When a consumer installs the Ferret as a plug-in to the RealPlayer, the RealPlayer's graphical user interface is configured with an added button, which allows the user to switch between the Snap search engine and the Streambox search engine. The use of the Ferret may also result in replacement of the "Snap.Com" logo that appears on the RealPlayer's graphical user interface with a "Streambox" logo.

37. When consumers install the Ferret as a plug-in to the RealPlayer, the visual appearance and operation of the RealPlayer is altered.

### CONCLUSIONS OF LAW

1. The Court has jurisdiction over this action under 28 U.S.C. § § 1331 and 1338.

2. The Court finds that RealNetworks has standing to pursue DMCA claims under 17 U.S.C. § 1203, [\*16] which affords standing to "any person" allegedly injured by a violation of sections 1201 and 1202 of the DMCA.

#### Preliminary Injunction Standard

3. To obtain a preliminary injunction, a party must show either (1) a combination of probable success on the merits and the possibility of irreparable harm, or (2) that serious questions are raised and the balance of hardships tips in its favor. *Apple Computer v. Formula Int'l, Inc.*, 725 F.2d 521, 523 (9th Cir.

1984). These are not separate tests, but rather "opposite ends of a single 'continuum in which the required showing of harm varies inversely with the required showing of meritoriousness.'" *Rodeo Collection v. West Seventh*, 812 F.2d 1215, 1217 (9th Cir. 1987); *Cadence Design Sys., Inc. v. Avant! Corp.*, 125 F.3d 824, 826 (9th Cir. 1997), cert. denied, 118 S. Ct. 1795 (1998) (quotation omitted).

4. RealNetworks argues that a plaintiff who demonstrates a reasonable likelihood of success on claims under section 1201 of the DMCA is entitled to a presumption of irreparable harm. In support of this argument, RealNetworks cites cases in which such a presumption was [\*17] afforded to plaintiffs who brought copyright infringement claims. *See Cadence Design Sys., Inc. v. Avant! Corp.*, 125 F.3d 824, 827 (9th Cir. 1997), cert. denied, 118 S. Ct. 1795, and *Triad Sys. Corp. v. Southeastern Express*, 64 F.3d 1330, 1335 (9th Cir. 1995).

5. RealNetworks' claims against the Streambox VCR and the Ripper, by contrast, arise under section 1201 of the DMCA, and thus do not constitute copyright "infringement" claims. *See 1 Nimmer on Copyright* (1999 Supp.), § 12.A17[B] (noting that section 1201 of the DMCA occupies "a niche distinct from copyright infringement" and that section 1201 is removed from the Act's definition of copyright infringement.) Because the DMCA is a recently-enacted statute, there appears to be no

authority holding that a plaintiff seeking a preliminary injunction who shows a reasonable likelihood of success on a claim arising under section 1201 of the DMCA is entitled to a presumption of irreparable harm.

**RealNetworks Has Demonstrated a Reasonable Likelihood of Success on its DMCA Claims With Respect to the Streambox VCR**

6. The DMCA prohibits the manufacture, import, [\*18] offer to the public, or trafficking in any technology, product, service, device, component, or part thereof that: (1) is primarily designed or produced for the purpose of circumventing a technological measure that effectively "controls access to" a copyrighted work or "protects a right of a copyright owner;" (2) has only limited commercially significant purpose or use other than to circumvent such technological protection measures; or (3) is marketed for use in circumventing such technological protection measures. 17 U.S.C. § 1201(a)(2), 1201(b).

**Parts of the VCR Are Likely to Violate Sections 1201(a)(2) and 1201(b)**

7. Under the DMCA, the Secret Handshake that must take place between a RealServer and a RealPlayer before the RealServer will begin streaming content to an end-user appears to constitute a "technological measure" that "effectively controls access" to copyrighted works. See 17 U.S.C. § 1201(a)(3)(B) (measure "effectively

controls access" if it "requires the application of information or a process or a treatment, with the authority of the copyright holder, to gain access to the work"). To gain access to a work [\*19] protected by the Secret Handshake, a user must employ a RealPlayer, which will supply the requisite information to the RealServer in a proprietary authentication sequence.

8. In conjunction with the Secret Handshake, the Copy Switch is a "technological measure" that effectively protects the right of a copyright owner to control the unauthorized copying of its work. See 17 U.S.C. § 1201(b)(2)(B) (measure "effectively protects" right of copyright holder if it "prevents, restricts or otherwise limits the exercise of a right of a copyright owner"); 17 U.S.C. § 106(a) (granting copyright holder exclusive right to make copies of its work). To access a RealMedia file distributed by a RealServer, a user must use a RealPlayer. The RealPlayer reads the Copy Switch in the file. If the Copy Switch in the file is turned off, the RealPlayer will not permit the user to record a copy as the file is streamed. Thus, the Copy Switch may restrict others from exercising a copyright holder's exclusive right to copy its work.

9. Under the DMCA, a product or part thereof "circumvents" protections afforded a technological measure by "avoiding bypassing, [\*20] removing, deactivating or otherwise impairing" the operation of that technological measure. 17 U.S.C. § 1201(b)(2)(A),

1201(a)(2)(A). Under that definition, at least a part of the Streambox VCR circumvents the technological measures RealNetworks affords to copyright owners. Where a RealMedia file is stored on a RealServer, the VCR "bypasses" the Secret Handshake to gain access to the file. The VCR then circumvents the Copy Switch, enabling a user to make a copy of a file that the copyright owner has sought to protect.

10. Given the circumvention capabilities of the Streambox VCR, Streambox violates the DMCA if the product or a part thereof: (i) is primarily designed to serve this function; (ii) has only limited commercially significant purposes beyond the circumvention; or (iii) is marketed as a means of circumvention. 17 U.S.C. § § 1201(a)(2)(A-C), 1201(b)(b)(A-C). These three tests are disjunctive. *Id.* A product that meets only one of the three independent bases for liability is still prohibited. Here, the VCR meets at least the first two.

11. The Streambox VCR meets the first test for liability under the DMCA because at least [\*21] apart of the Streambox VCR is primarily, if not exclusively, designed to circumvent the access control and copy protection measures that RealNetworks affords to copyright owners. 17 U.S.C. § § 1201(a)(2)(A), 1201(b)(c)(A).

12. The second basis for liability is met because portion of the VCR that circumvents the Secret Handshake so as

to avoid the Copy Switch has no significant commercial purpose other than to enable users to access and record protected content. 17 U.S.C. § 1201(a)(2)(B), 1201(b)(d)(B). There does not appear to be any other commercial value that this capability affords.

13. Streambox's primary defense to Plaintiff's DMCA claims is that the VCR has legitimate uses. In particular, Streambox claims that the VCR allows consumers to make "fair use" copies of RealMedia files, notwithstanding the access control and copy protection measures that copyright owner may have placed on that file.

14. The portions of the VCR that circumvent the secret handshake and copy switch permit consumers to obtain and redistribute perfect digital copies of audio and video files that copyright owners have made clear they do not want copied. For [\*22] this reason, Streambox's VCR is entitled to the same "fair use" protections the Supreme Court afforded to video cassette recorders used for "time-shifting" in *Sony Corp. v. Universal City Studios, Inc.*, 464 U.S. 417, 78 L. Ed. 2d 574, 104 S. Ct. 774 (1984).

15. The *Sony* decision turned in large part on a finding that substantial numbers of copyright holders who broadcast their works either had authorized or would not object to having their works time-shifted by private viewers. *See Sony*, 464 U.S. at 443, 446.

Here, by contrast, copyright owners have specifically chosen to prevent the copying enabled by the Streambox VCR putting their content on RealServers and leaving the Copy Switch off.

16. Moreover, the *Sony* decision did not involve interpretation of the DMCA. Under the DMCA, product developers do not have the right to distribute products that circumvent technological measures that prevent consumers from gaining unauthorized access to or making unauthorized copies of works protected by the Copyright Act. Instead, Congress specifically prohibited the distribution of the tools by which such circumvention could be accomplished. The portion [\*23] of the Streambox VCR that circumvents the technological measures that prevent unauthorized access to and duplication of audio and video content therefore runs afoul of the DMCA.

17. This point is underscored by the leading treatise on copyright, which observes that the enactment of the DMCA means that "those who manufacture equipment and products generally can no longer gauge their conduct as permitted or forbidden by reference to the *Sony* doctrine. For a given piece of machinery might qualify as a stable item of commerce, with a substantial noninfringing use, and hence be immune from attack under *Sony's* construction of the Copyright Act- but nonetheless still be subject to suppression under Section 1201." 1 *Nimmer on Copyright* (1999 Supp.), §

12A.18[B]. As such, "equipment manufacturers in the twenty-first century will need to vet their products for compliance with Section 1201 in order to avoid a circumvention claim, rather than under *Sony* to negate a copyright claim." *Id.*

18. Streambox also argues that the VCR does not violate the DMCA because the Copy Switch that it avoids does not "effectively protect" against the unauthorized copying of copyrighted works [\*24] as required by § 1201(a)(3)(B). Streambox claims this "effective" protection is lacking because an enterprising end-user could potentially use other means to record streaming audio content as it is played by the end-user's computer speakers. This argument fails because the Copy Switch, in the ordinary course of its operation when it is on, restricts and limits the ability of people to make perfect digital copies of a copyrighted work. The Copy Switch therefore constitutes a technological measure that effectively protects a copyright owner's rights under section. 1201(a)(3)(B).

19. In addition, the argument ignores the fact that before the Copy Switch is even implicated, the Streambox VCR has already circumvented the Secret Handshake to gain access to a unauthorized RealMedia file. That alone is sufficient for liability under the DMCA. *See 17 U.S.C. § 1201(i)(e).*

20. Streambox's last defense to liability for the VCR rests on Section

1201(c)(3) of the DMCA which it cites for the proposition that the VCR is not required to respond to the Copy Switch. Again, this argument fails to address the VCR's circumvention of the Secret Handshake, which is enough, [\*25] by itself, to create liability under Section 1201(a)(2).

21. Moreover, Section 1201(c)(3) states that "nothing in this section shall require . . . a response to any particular technological measure, so long as . . . the product . . . does not otherwise fall within the prohibitions of subsections (a)(2) or (b)(1)." 17 U.S.C. § 1201(c)(3). As the remainder of the statute and the leading copyright commentator make clear, Section 1201(c)(3) does not provide immunity for products that circumvent technological measures in violation of Sections 1201(a)(2) or (b)(1). See 17 U.S.C. § 1201(c)(3) (a product need not respond to a particular measure "so long as such . . . product . . . does not otherwise fall within the prohibitions of subsections (a)(2) or (b)(1)." (emphasis added); 1 *Nimmer on Copyright* (1999 Supp.), § 12A.05[C]. If the statute meant what Streambox suggests, any manufacturer of circumvention tools could avoid DMCA liability simply by claiming it chose not to respond to the particular protection that its tool circumvents.

22. As set forth above, the Streambox VCR falls within the prohibitions of sections 1201(a)(2) [\*26] and 1201(b)(1). Accordingly, Section

1201(c)(3) affords Streambox no defense.

**RealNetworks is Likely to Suffer Irreparable Harm With Respect to the VCR**

23. RealNetworks argues that because it has demonstrated a reasonable likelihood of success on its DMCA claims concerning the VCR, it is entitled to a presumption of irreparable harm. As noted above, however, this point is not settled.

24. Assuming that a plaintiff who demonstrates a reasonable likelihood of success with respect to claims arising under section 1201 of the DMCA is entitled to a presumption of irreparable harm, RealNetworks would be entitled to such a presumption.

25. In the event that such a presumption is not applicable, RealNetworks has demonstrated that it would likely suffer irreparable harm if the Streambox VCR is distributed. The VCR circumvents RealNetworks' security measures, and will necessarily undermine the confidence that RealNetworks' existing and potential customers have in those measures. It would not be possible to determine how many of RealNetworks' existing or potential customers declined to use the company's products because of the perceived security problems created by the VCR's ability [\*27] to circumvent RealNetworks' security measures.

26. An injunction against the VCR also would serve the public interest because the VCR's ability to circumvent RealNetworks' security measures would likely reduce the willingness of copyright owners to make their audio and video works accessible to the public over the Internet.

**RealNetworks Has Not Demonstrated that It Is Reasonably Likely to Succeed on its DMCA Claim With Respect to the Ripper.**

27. RealNetworks also alleges that Streambox's marketing and distribution of the Ripper violates section 1201(b) (but not section 1201(a)(2)) of the DMCA.

28. RealNetworks maintains that the primary purpose and only commercially significant use for the Ripper would be to enable consumers to prepare unauthorized "derivatives" of copyrighted audio or video content in the RealMedia format in violation of 17 U.S.C. § 106(2).

29. The Ripper has legitimate purposes and commercially significant uses. For example, the Ripper may be used by content owners, including copyright holders, to convert their content from the RealMedia format to other formats. Streambox has submitted evidence that at least some content [\*28] owners would use the Ripper for this legitimate purpose. The Ripper may also be used by consumers to convert audio and video files that they acquired with

the content owner's permission from RealMedia to other formats. RealNetworks has not demonstrated that it is likely to succeed on its claims that the Ripper violates sections 1201(b)(1)(A) or (B) of the DMCA.

30. RealNetworks' DMCA claims with respect to the Ripper rely largely on its argument that the proprietary RealMedia format constitutes a technological measure that effectively protects a right of a copyright owner because it prevents end-users from making derivative works based on audio or video content that a consumer obtains in RealMedia format. RealNetworks did not offer this argument in any detail in its opening memorandum.

31. There is little evidence that content owners use the RealMedia format as a "technological measure" to prevent end-users from making derivative works. In any case, RealNetworks has not introduced evidence that a substantial number of content owners would object to having end-users convert RealMedia files that they legitimately obtain into other formats.

32. Similarly, RealNetworks has not submitted [\*29] substantial evidence that the Ripper's alleged violations of section 1201(b) will cause RealNetworks injury. None of the numerous declarations submitted by RealNetworks' customers or recording industry employees express concern that the Ripper will permit RealMedia files



to be converted to other formats. Instead, persons who submitted these declarations indicate that they are concerned that unnamed Streambox products will permit consumers to acquire unauthorized copies of copyrighted works that are made available only in the streaming format. These concerns appear to relate to the functions of the Streambox VCR, not to the functions of the Ripper. The Ripper functions as a "converter," not as a copier. As such, these declarations do not suggest that the Ripper's alleged violations of section 1201(b) will result in any injury to RealNetworks in the form of lost customers or business.

33. RN further alleges that Streambox's marketing of the Ripper violates section 1201(b)(1)(C) of the DMCA. The brief quotes from Streambox's promotional materials that RealNetworks references do not appear to urge consumers to buy the Ripper in order to create derivative works in violation of the Copyright [\*30] Act. The evidence submitted by RealNetworks is not sufficient to show a reasonable likelihood of success on its claims under section 1201(b)(1)(C).

34. In light of Streambox's demonstration that the Ripper has legitimate and commercially significant uses, RealNetworks has not shown that it is likely to succeed on its DMCA claims with respect to the product.

35. Even if RealNetworks had raised a "serious question" about the Ripper's

alleged violation of the DMCA, RealNetworks has not demonstrated that the balance of hardships tips sharply in its favor. As noted above, RealNetworks has not submitted evidence that the sale of the Ripper would cause it to lose customers or goodwill. By contrast, enjoining the Ripper would deprive Streambox of the ability to market a potentially valuable product with legitimate uses.

**RealNetworks Has Demonstrated that It Is Entitled to a Preliminary Injunction with Respect to the Ferret**

36. Finally, RealNetworks claims that Streambox commits contributory and/or vicarious copyright infringement by distributing the Ferret product to the public. In order to prevail on such claims, RealNetworks must demonstrate that consumers who use the [\*31] Ferret as a plug-in to the RealPlayer infringe RealNetworks' rights as a copyright owner. RealNetworks alleges that consumers who install the Ferret as a plug-in application to a RealPlayer create an unauthorized derivative of the RealPlayer, thus violating RealNetwork's rights under 17 U.S.C. § 106(2).

37. RealNetworks holds a valid copyright registration for version 7 of the RealPlayer, which constitutes prima facie evidence that RealNetworks is the owner of the copyright to the program. See *Apple Computer, Inc. v. Formula Int'l, Inc.*, 725 F.2d 521, 523 (9th Cir. 1984).

38. Streambox does not dispute that consumers who use the Ferret as a plug-in to a RealPlayer create a change the RealPlayer user interface by adding a clickable button that permits the user to access the Streambox search engine, rather than the Snap search engine.

39. Streambox claims that changes that the Ferret makes to the RealPlayer do not constitute the creation of a derivative work. To support this argument, Streambox cites generally the Ninth Circuit's decision in *Lewis Galoob Toys, Inc. v. Nintendo of America, Inc.*, 964 F.2d 965 (9th Cir. 1992). [\*32] As RealNetworks notes, however, the court in *Galoob* held that the manufacturer of a product that altered the audiovisual displays of a Nintendo game did not commit contributory copyright infringement because the "the altered displays do not incorporate a portion of a copyrighted work in some concrete or permanent form." *Id.* at 968. Here, by contrast, the alterations to the RealPlayer assume a more concrete form that the altered displays at issue in *Galoob*.

40. However, the Court is not persuaded that RealNetworks has demonstrated that it is likely to succeed on its contributory/vicarious copyright infringement claims with respect to the Ferret. The facts and issues presented in the principal case that RealNetworks relies upon, *Micro Star v. Formgen, Inc.*, 154 F.3d 1107 (9th Cir. 1998), do not appear to be completely analogous to the situation here. In addition, RealNetworks' argument that consumers

who install the Ferret breach a license agreement that they must agree to in order to obtain the RealPlayer was first raised in RealNetworks' reply brief.

41. Nonetheless, the Court concludes that RealNetworks has raised serious questions going [\*33] to the merits of its claim. It is undisputed that consumers who install the Ferret as a plug-in application to the RealPlayer cause the graphical interface of the RealPlayer to be modified, arguably creating a derivative work under 17 U.S.C. § 106(2) without the copyright owner's authorization. In addition, RealNetworks has proffered evidence that end, users who install the Ferret are violating a license agreement with RealNetworks.

42. A plaintiff seeking a preliminary injunction who raises serious questions going to the merits of its claim is entitled to an injunction if the balance of hardships tips sharply in its favor. *See Micro Star v. Formgen, Inc.*, 154 F.3d 1107, 1109 (9th Cir. 1998).

43. The balance of hardships here clearly favors RealNetworks. The Ferret's ability to permit consumers to modify the RealPlayer jeopardizes RealNetworks' exclusive relationship with Snap. In addition, each time a consumer opts to use the Streambox search engine that is present on a modified RealPlayer rather than the Snap search engine that is present on an unmodified RealPlayer costs RealNetworks royalty payments from Snap, and it would be difficult [\*34] if

not impossible to calculate the lost revenue to RealNetworks.

44. By contrast, the hardship that Streambox would experience if an injunction issued against the product would not be nearly as severe. The Ferret plug-in simply provides consumers with a way to access the Streambox search engine through the RealPlayer. The Streambox search engine is already accessible to consumers in other places. If the Ferret is not available for distribution as a plug-in to the RealPlayer, consumers will still have the ability to conveniently access and use the Streambox search engine.

#### CONCLUSION

Consistent with the findings of fact and conclusions of law above, the Court hereby ORDERS that:

During the pendency of this action, Defendant Streambox, Inc. and its officers, agents, servants, employees and attorneys, and those persons in active concert and participation with Streambox, Inc. who receive actual notice of this Preliminary Injunction, are restrained and enjoined from manufacturing, importing, licensing, offering to the public, or offering for sale:

a) versions of the Streambox VCR or similar products that circumvent or attempt to circumvent RealNetworks'

technological security [\*35] measures, and from participating or assisting in any such activity;

b) versions of the Streambox Ferret or similar products that modify RealNetworks' RealPlayer program, including its interface, its source code, or its object code, and from participating or assisting in any such activity.

Plaintiff's motion for a preliminary injunction with respect to the Streambox Ripper is DENIED.

This Order shall be effective immediately, on the condition that RealNetworks continues to maintain security with the Clerk in the amount of \$ 1,000,000 for the payment of such costs and damages as may be incurred by Streambox if it is found that Streambox was wrongfully enjoined by this Order.

The TRO entered by Judge Coughenour on December 23, 1999, and extended by the Court until 5:00 p.m. on January 18, 2000, is hereby VACATED by this Order.

The clerk is directed to provide copies of this order to all counsel of record.

Dated: January 18, 2000.

Marsha J. Pechman

United States District Judge

LEXSEE 2001 U.S. DIST. LEXIS 23595

**SUPERCHIPS, INC., a Florida corporation, Plaintiff, v.  
STREET & PERFORMANCE ELECTRONICS, INC., an  
Arkansas corporation; JOHN BOVEIA, an individual; and  
BULLY DOG TECHNOLOGIES, LLC, an Idaho  
corporation; Defendants.**

**CASE NO. 6:00-CV-896-ORL-31 KRS**

**UNITED STATES DISTRICT COURT FOR THE  
MIDDLE DISTRICT OF FLORIDA, ORLANDO  
DIVISION**

*2001 U.S. Dist. LEXIS 23595; 61 U.S.P.Q.2D (BNA) 1589*

**December 6, 2001, Decided**

**DISPOSITION:** [\*1] Partial summary judgment and permanent injunction were granted.

**COUNSEL:** For SUPERCHIPS, INC., plaintiff: John Arthur Baldwin, Baldwin & Morrison, P.A., Fern Park, FL USA.

For SUPERCHIPS, INC., plaintiff: Stephen D. Milbrath, Herbert L. Allen, Brian R. Gilchrist, Allen, Dyer, Doppelt, Milbrath & Gilchrist, P.A., Orlando, FL USA.

For STREET & PERFORMANCE ELECTRONICS, INC., JOHN

BOVEIA, BULLY DOG TECHNOLOGIES, LLC, defendants: Steven Michael Fahlgren, Fisher, Rushmer, Werrenrath, Dickson, Talley & Dunlap, P.A., Orlando, FL USA.

For STREET & PERFORMANCE ELECTRONICS, INC., defendant: Joseph Tamborello, Jr., Fisher, Rushmer, Werrenrath, Dickson, Talley & Dunlap, P.A., Orlando, FL USA.

For STREET & PERFORMANCE ELECTRONICS, INC., JOHN BOVEIA, BULLY DOG TECHNOLOGIES, LLC, defendants:

Stephen L. Curry, Kemp, Duckett, Spradley, Curry & Arnold, Little Rock, AR.

For STREET & PERFORMANCE [\*2] ELECTRONICS, INC., counter-claimant: Steven Michael Fahlgren, Fisher, Rushmer, Werrenrath, Dickson, Talley & Dunlap, P.A., Orlando, FL USA.

For STREET & PERFORMANCE ELECTRONICS, INC., counter-claimant: Stephen L. Curry, Kemp, Duckett, Spradley, Curry & Arnold, Little Rock, AR.

For SUPERCHIPS, INC., counter-defendant: John Arthur Baldwin, Baldwin & Morrison, P.A., Fern Park, FL USA.

For SUPERCHIPS, INC., counter-defendant: Stephen D. Milbrath, Herbert L. Allen, Brian R. Gilchrist, Allen, Dyer, Doppelt, Milbrath & Gilchrist, P.A., Orlando, FL USA.

**JUDGES:** GREGORY A. PRESNELL,  
UNITED STATES DISTRICT JUDGE.

**OPINIONBY:** GREGORY A.  
PRESNELL

**OPINION:**

**ORDER**

THIS CAUSE comes before the Court on the parties' Joint Motion for Entry of Final Judgment (Doc. 141), and

upon review of the record, including Plaintiff's Motion for Partial Summary Judgment and the evidence presented to this Court in support of the Preliminary Injunction, consent and stipulations of the parties, and such other and further evidence, this Court enters the following order:

**I. BACKGROUND**

Plaintiff, Superchips, Inc., ("Superchips") makes and sells computer chips designed to enhance the performance [\*3] of automobile engines. The manufacturing process is common to the industry and may be summarized as follows: Automobile engines are controlled by on-board computers that regulate various parameters including maximum speed, fuel usage, and shift points. The engine computer needs two things to function: a software program and data tables. Data tables contain predetermined, factory-set values that the software program reads and acts upon to control the engine.

Superchips undertakes extensive dynamic testing of automobile engines to determine optimum performance characteristics unique to a specific engine or after-market products incorporated into the engine. Superchips downloads a factory-set data table to its own computer, changes a number of values within the data table, uploads the modified data table to a computer chip, and places the chip inside a "module" designed to attach to engine computers. By changing the values within the data

table, Superchips changes the fuel curve, engine timing, transmission shift points, response time and numerous other values, which inter-relate to achieve optimum performance. Superchips does not write a new executable source, it only adjusts values [\*4] in the data tables. The architecture of the Ford computer program controls and limits the nature and extent of any adjustments.

Superchips markets over 2,000 lines of its automotive computer modules containing its computer codes and sells the computer modules retail, directly out of its place of business, and through authorized dealers. Consumers may then purchase modules with chips designed to achieve particular results for their specific automobile (e.g., higher maximum speed, more horsepower, etc.). When attached to the engine computer, the module effectively disables the factory data table and instructs the computer to use the module's data table instead. In industry parlance, data tables are known as "codes."

In 1997, Superchips entered into an agreement with Defendant Street & Performance Electronics, Inc. ("S & P") for S & P to distribute Superchips' modules. In February 2000, the parties' relationship ended when Superchips terminated S & P's distribution rights and access to Superchips' codes.

In May 2000, a third party gave Superchips a module that it acquired from Defendant Bully Dog. After

downloading and reviewing the code from the module, Superchips determined that [\*5] it was identical to one of its codes, the XLE4HORS, designed for Ford automobiles with certain modifications -- an "identifier" was changed to permit the code to be used with a different chip and module. In June 2000, Superchips submitted a copyright application for its XLE4HORS code. n1 Upon receipt of the application, an Examiner in the Copyright Office requested confirmation that the object code deposit contained copyrightable authorship and advised Superchips that any registration would be issued under the "rule of doubt." In response, Superchips informed the Examiner that the deposit contained "hex code" rather than "object code" and that registration should therefore not be issued under the rule of doubt. Despite this assertion, however, the Examiner later confirmed by letter that the registration of the XLE4HORS was issued under the "rule of doubt," meaning the Copyright Office cannot independently confirm the work is an original work.

n1 Superchips submitted a redacted copy of the code as part of its application to protect its trade secrets.

[\*6]

Shortly after Superchips' copyright issued on June 20, 2000, it filed this

action alleging claims for copyright infringement and theft of trade secrets. The parties stipulate the "codes" are substantially similar. The issue for this Court is whether Superchips is the owner of the copyrighted material, whether the material has a sufficient modicum of originality to merit copyright protection and whether the code constitutes Superchips' trade secrets.

## II. COPYRIGHT INFRINGEMENT

### A. Computer Programs

In *Montgomery v. Noga*, 168 F.3d 1282 (11th Cir. 1999), the Eleventh Circuit Court of Appeals set forth the basic principles of copyright law with respect to computer programs:

The Copyright Act of 1976, 17 U.S.C. § 101 et seq. (1994), provides protection for computer programs. The Act defines a computer program as "a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result." 17 U.S.C. § 101 (1994). For original computer programs and other original works of authorship created after 1977, copyright automatically inheres in the work at [\*7] the moment it is created without regard to whether it is ever registered. In order to

bring an action for copyright infringement, however, the author must first register the copyright.

*Id.* at 1288. (Non-statutory internal quotations and citations omitted.)

### B. Proving Copyright Validity

In order to prevail on a copyright infringement claim, a plaintiff must prove "ownership of a valid copyright" and "copying of constituent elements of the work that are original." *Feist Publications, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 361, 113 L. Ed. 2d 358, 111 S. Ct. 1282 (1991). Although the plaintiff in a copyright infringement action initially bears the burden of proving ownership of a valid copyright, a plaintiff may benefit from a rebuttable presumption of validity by producing a certificate of copyright registration. See, *Donald Frederick Evans & Assocs. Inc. v. Continental Homes, Inc.*, 785 F.2d 897 (11th Cir. 1986). A copyright registration certificate constitutes prima facie evidence in favor of a plaintiff on the issue of originality and copyrightability of the subject matter. See, *Id.* Production of the certificate [\*8] of registration will then shift the burden to the defendant to demonstrate that "the work in which copyright is claimed is unprotectable (for lack of originality) or, more specifically, to prove that . . . the copyrighted work actually taken is unworthy of copyright protection." *Montgomery v. Noga*, 168 F.3d at 1289

(quoting *Bateman v. Mnemonics, Inc.*, 79 F.3d 1532, 1541 (11th Cir. 1996)).

There is, however, an exception to this general framework of shifting burdens on the issue of copyright validity for registration certificates issued under the so-called "rule of doubt." The Copyright Office utilizes its rule of doubt for submissions of computer programs in machine readable code form because its examiners cannot interpret such a code to determine if there has been copyrightable authorship. n2 *Apple Computer, Inc. v. Franklin Computer Corp.*, 714 F.2d 1240 (3d Cir. 1983), cert. dismissed, 464 U.S. 1033 (1984); *Compaq Computer Corp. v. Procom Tech., Inc.*, 908 F. Supp. 1409 (S.D. Tex. 1995). Accordingly, plaintiffs who produce registration certificates issued under the rule of doubt do not benefit from a rebuttable presumption [\*9] of copyright validity and retain the burden of proving that issue throughout the case.

n2 Program code for a computer is written in two forms - object code which is machine readable and source code which is readable by humans. See *Quinn v. City of Detroit*, 988 F. Supp. 1044, 1054 (E.D. Mich 1997).

The letter from the Copyright Examiner clearly states that the registration certificate was issued under the rule of doubt because Superchips

chose to use object code on the application form. Deferring to the Copyright Office's conclusion, Superchips is not entitled to a presumption of validity from its registration certificate, and the burden of proof remains with Superchips to support its claim of a valid copyright.

### C. Nature of the Work

Under the Copyright Act, the nature of the work determines the level of copyright protection it receives. See, *Warren Publ., Inc. v. Microdos Data Corp.*, 115 F.3d 1509, 1515 n.16 (11th Cir. 1997). Creative works are entitled to the most protection, [\*10] followed by derivative works, and finally by compilations. See, *Id.* Here, Superchips contends that its computer module is a derivative work while Defendants assert that the module is an unoriginal compilation of facts. A derivative work is "[a] work consisting of editorial revisions, annotations, elaborations, or other modifications [to a preexisting work] which, as a whole, represent an original work of authorship...." 17 U.S.C. § 101. A work will not be deemed derivative unless it has copied substantial portions from a prior work. See, 1 Melville B. Nimmer & David Nimmer, *Nimmer on Copyright* § 3.01 (1999) [hereinafter *Nimmer*]. If it satisfies the requirements of originality, a derivative work qualifies for a separate copyright, but copyright protection does not extend to preexisting material used in the derivative work. See, *Montgomery v. Noga*, 168 F.3d at 1290.



Section 103(a) of the Copyright Act also provides protection for compilations. A compilation is "a work formed by the collection and assembling of preexisting materials or of data that are selected, coordinated, or arranged in such a way that the resulting work as [\*11] a whole constitutes an original work of authorship...." 17 U.S.C. § 101. While a derivative work is derived from pre-existing matter capable of copyright protection, a compilation is a combination of facts or data that are not otherwise capable of copyright protection. See Nimmer, § 3.02.

In the Court's view, Superchips' computer module is more appropriately identified as a derivative work than a compilation. Although Superchips admits that it used Ford's copyrighted program in creating its product, Superchips has significantly altered the data tables to achieve optimum performance from a specific automobile engine. Copyright protection is available for both derivative works and compilations alike, provided the work or compilation displays sufficient originality to qualify as an "original work of authorship." See, *Matthew Bender & Co. Inc. v. West Publ'g Co.*, 158 F.3d 674 (2d Cir. 1998). Thus, originality, and not the nature of the work, is the gravamen of copyright protection.

#### D. Originality

As stated *supra*, copyright protection exists only in "original works of

authorship." 17 U.S.C. § 101, et seq [\*12] . "With regard to the requirement of originality, all that must be shown is that the work possesses at least some minimal degree of creativity. . . . To be sure, the requisite level of creativity is extremely low; even a slight amount will suffice." *Montgomery v. Noga*, 168 F.3d at 1290 (quoting *Feist*, 499 U.S. at 345). Generally, in determining whether a derivative work has the necessary quantum of originality to qualify for copyright protection, courts consider whether there is a distinguishing variation between the derivative and underlying work and whether that variation is more than "merely trivial." *Sherry Mfg. Co. v. Towel King of Fla., Inc.*, 753 F.2d 1565, 1568 (11th Cir. 1985).

Based upon the expert testimony, this Court concludes the code is an original work of authorship and not a mere mechanical arrangement of facts. Superchips' code does not involve "merely changing a single look-up table value to increase performance," as suggested by S & P. Rather, Superchips details the substantial ingenuity and skill involved in creating the computer chips at issue:

The look-up tables are numerous and control different aspects [\*13] of the automobile. Look-up tables control such things as intake runner manifold control, rate of acceleration control, speed

control, RPM control, power delays, power reductions, solenoid operations, solenoid control for waste gates, ignition timing and fuel control, among others. When Superchips tunes a car, it alters some or all of the variables, depending on the output desired. Each tuning design is for a specific application, such as high performance or increased horsepower. As [Superchips] tune[s], we must take into consideration a myriad of factors, including engine tolerances, fuel efficiency and the interplay between each of the controlled elements. No two tuners would 'tune' or write the programs in exactly the same way, despite attempting to achieve the same end result.

Although Defendants dispute that the creation of computer chips for the tuning of specific automobile engines is original, the testimony of Defendant belies this assertion. Indeed, S & P actively promotes its own chips as superior in terms of performance, thereby portraying the computerized tuning of automobiles as a creative skill.

The Court concludes from the record that Superchips' act of changing [\*14] numerical values in the factory data tables to achieve optimum engine performance is not one which is "so

mechanical or routine as to require no creativity whatsoever." n3. *Feist*, 499 U.S. at 362. Accordingly, Superchips has met its burden of showing that the modifications it made to the Ford program were sufficiently original to support a valid copyright.

n3 Cf., *Secure Serv. Tech., Inc. v. Time and Space Precessing, Inc.*, 722 F. Supp. 1354, 1363 (E.D. Va. 1989) (finding that facsimile machine manufacturer was not entitled to copyright protection for its minor reordering or variance of binary signals in machine's "handshake protocol" because the manufacturer was able to make only minor changes which did not require significant choice or selection but were dictated by the need to communicate with other machines).

### E. Ownership

In addition to showing originality, a plaintiff must also prove ownership to prevail on a copyright claim. See, *Feist*, 499 U.S. at 361. [\*15] To establish an ownership interest in the copyright, the plaintiff must show personal authorship, a transfer of rights, or some other relationship between the author and the plaintiff evidencing ownership. See, *Bell v. Combined Registry Co.*, 397 F. Supp. 1241 (N.D. Ill. 1975). Superchips claims that its engineers designed and developed the

copyrighted computer code and that S & P has no ownership interest in it. S & P, on the other hand, claims that the copyrighted work is a product of joint authorship because the parties "jointly contributed to the data field adjustments" and "freely shared information and jointly worked on projects." In support of this claim, S & P relies on the testimony of its owner who testified at the preliminary injunction hearing. The transcript, however, does not support S & P's contention that it co-authored the XLE4HORS code. At the hearing, Mr. Boveia testified that S & P helped Superchips design most of the menus used in the creation of their programs. However, when questioned specifically concerning S & P's contribution to the development of the XLE4HORS code, Mr. Boveia testified that he was not certain that S & P had aided Superchips [\*16] in the code's development.

#### **F. Substantial Similarity**

By consent and stipulation, there is no dispute that the original Superchips' works and the S & P programs are substantially similar although the copying may have been innocent based upon Defendant's past relationship and interpretation of the law. Because Superchips has a valid and enforceable copyright, and the accused work is substantially similar, S & P has infringed Superchips' copyright. The infringing program was distributed by Defendant Bully Dog and S & P for sale to the public. The distribution and offer

for sale of the infringing work will cause Superchips irreparable injury not compensable by monetary damages. As such, Superchips is entitled to injunctive relief enjoining S & P Bully Dog from selling or offering for sale any computer programs which are substantially similar to the copyrighted works.

### **III. TRADE SECRETS**

Superchips has also brought a claim for theft of trade secrets for both the copyrighted and uncopyrighted Superchips' codes. Superchips alleges S & P, a former distributor of Superchips, misappropriated Superchips' trade secrets when it offered for sale identical or substantially similar [\*17] software as its own. Once again, there is no dispute the codes are substantially similar, the only dispute is whether the codes constitute trade secrets under Florida law. The Court finds that the Superchips' programs are in fact trade secrets owned by Superchips.

Florida's Trade Secret Statute, Chapter 688, require the codes to (1) derive independent economic value, actual or potential, from not being generally known to and not being readily ascertainable by proper means by persons who can obtain economic value from its use and (2) are the subject of efforts that are reasonable under the circumstances to maintain its secrecy. Fla. Stats., § 688.002.

Superchips has invested substantial time and effort in locating certain tables,

identifying the inter-relationship between the tables, testing the changes to the code and debugging the codes. The locations of data tables, the inter-relationship between the data tables and engine performance and other factors are not generally known to third parties who have not devoted the substantial time and effort in the research and development. If a competitor could gain access to Superchips' codes, it would save months, if not years, of research [\*18] and development and save hundreds of thousands of dollars. Accordingly, the codes derive independent economic value from not being generally known to Superchips' competitors.

Superchips encrypts its codes before they are made available to the public and seals the chip in a module to prevent direct copying. Superchips creates password protections on its bulletin board system to insure that only authorized distributors and dealers have access to the encrypted programs. The programs contain identifiers that limit the chip program to Superchips' own modules. Based upon these efforts, the Court finds that Superchips has exercised reasonable efforts to maintain the secrecy of the programs under the circumstances.

There exist elements necessary to prove that the codes constitute protectable trade secrets under Chapter 688, Fla. Stats., that do not exist under the Copyright Act. Thus, the Copyright Act does not preempt Superchips' right

to a remedy under Florida's Trade Secret Statutes. The Court finds that Plaintiff owns all rights to the trade secrets in its computer files and computer codes. The Court further finds that the activities of Defendants constitute actual or threaten misappropriation [\*19] of the trade secrets, entitling Superchips to injunctive relief.

It is, therefore,

**ORDERED** that the Joint Motion is hereby **GRANTED**. The Court will enter a final judgment and permanent injunction in substantially the form submitted by the parties.

**DONE AND ORDERED** in Chambers at Orlando, Florida, this 6Th day of December, 2001.

GREGORY A. PRESNELL

UNITED STATES DISTRICT  
JUDGE

**FINAL JUDGMENT AND  
PERMANENT INJUNCTION**

**THIS CAUSE** came onto be heard by this Court, and in accordance with the Order entered by the Court on this date, and based upon the parties' agreements, stipulations and consent, this Court enters this **FINAL JUDGMENT AND PERMANENT INJUNCTION** as follows:

1. Defendants, **STREET & PERFORMANCE ELECTRONICS, INC., JOHN BOVEIA, and BULLY DOG TECHNOLOGIES, LLC**, its officers, directors, affiliates, or those

acting in concert with or with actual knowledge of this Final Judgment and Permanent Injunction are hereby PERMANENTLY ENJOINED AND PROHIBITED from the following acts:

a. Selling or offering for sale software codes which are identical to or substantially similar to Superchips' XLE4HORS code.

b. Selling or offering for sale any Superchips codes or [\*20] substantially similar codes which Defendants know or have reason to know originated with Superchips.

2. Defendants shall purge from its computer system, including all back-ups, hard drives, disks, drives or other electronic storage devices any and all copies of Superchips' programs or substantially similar codes which Defendants know or have reason to

know originated with Superchips. The Defendants shall serve upon Plaintiff a certificate from a qualified third party that this provision has been completed within thirty (30) days from the date of this Final Judgment.

3. All other claims are hereby dismissed with prejudice and all pending motions are denied as moot.

4. Each party shall bear their own costs and fees.

5. This Court retains jurisdiction to enforce the terms of this Injunction.

DONE AND ORDERED in chambers this 6Th day of December, 2001.

GREGORY A. PRESNELL

UNITED STATES DISTRICT  
JUDGE