

A New Day For the DMCA: The *Chamberlain* and *Lexmark* Decisions

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The recent circuit court decisions in *Chamberlain v. Skylink*² and *Lexmark v. Static Control Components*³ dramatically change our understanding of the controversial anti-circumvention provisions of the Digital Millennium Copyright Act (DMCA). The judges in these cases interpreted the DMCA in a manner that will prevent its use to restrict legitimate competition in after-market components. But the reasoning of the opinions arguably goes much farther, and could even permit circumvention of access controls on entertainment products for noninfringing purposes. Only time will tell whether these holdings will be limited to their specific facts, or will evolve into rules of more general applicability.

Background

Since their enactment in 1998, the DMCA's anti-circumvention provisions have generated strong reactions from various stakeholders. The motion picture industry credits the DMCA with the enormous success of the DVD.⁴ The DMCA has permitted the studios and their business partners in the consumer electronics industry to prevent the distribution of DeCSS, software that enables the circumvention of the encryption system that protects movies distributed on DVDs.

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² 381 F.3d 1178 (Fed. Cir. 2004).

³ 2004 U.S. App. LEXIS 22250 (6th Cir. Oct. 26, 2004)

⁴ DVD sales in the U.S. exceeded \$12 billion in 2003. Chris Jones, *Power to the People*, Chicago Tribune, February 1, 2004, at C1.

Technologists, however, have argued that the DMCA has chilled legitimate research into computer security and the development of innovative products. For example, in October 2002, Richard Clarke, then the head of the White House Office of Cyber Security, stated that the DMCA needed amendment to permit the research of security flaws in software. He termed threats against academic researchers as a misuse of the law, and said that “I think a lot of people didn’t realize that it would have this potential chilling effect on vulnerability research.”⁵ Libraries and universities contend that the DMCA prevents lawful copying permitted under copyright’s fair use doctrine or library exceptions. And consumers noted with alarm two instances where companies used the DMCA to threaten competitors in after-markets: the *Chamberlain* case involving universal garage door opener transmitters and the *Lexmark* case involving printer toner cartridges.

By its terms, 17 U.S.C. § 1201(a)(1) prohibits the circumvention of access controls, regardless of the purpose of the circumvention, unless the circumvention is specifically permitted by one of the exceptions contained in Section 1201. Likewise, §§ 1201(a)(2) and 1201(b) prohibit the manufacture and distribution of circumvention devices, even if they are intended to be used for non-infringing purposes, unless the devices fall within Section 1201’s specific exceptions. Although § 1201(c)(1) provides that Section 1201 does not affect defenses to copyright infringement, including fair use, courts had ruled that fair use was not a defense to a circumvention offense.⁶ In sum,

⁵ Hiawatha Bray, *Cyber Chief Speaks on Data Network Security*, Boston Globe, Oct. 17, 2002, at C2.

⁶ *See Universal City Studios, Inc. v. Corley*, 273 F.3d 429 (2^d Cir. 2001).

Section 1201 was understood to prohibit circumvention activity and devices, regardless of whether the circumvention results in infringement.⁷

Chamberlain v. Skylink

The decision of the U.S. Court of Appeals for the Federal Circuit in *Chamberlain Group, Inc. v. Skylink Techs., Inc.*, changes this understanding. Skylink developed a universal garage door opener transmitter that could activate Chamberlain garage door openers (GDOs). To do so, software in the Skylink transmitter circumvented a lockout code in a computer program embedded in the Chamberlain GDO that controlled the operation of the GDO engine. Chamberlain sued Skylink, alleging that the Skylink transmitters violated the DMCA because they circumvented a technological protection measure to obtain unauthorized access to the software embedded in the GDO.

The district court granted summary judgment to Skylink on the grounds that Chamberlain had given implicit authorization to its customers to circumvent the access controls in the garage door openers they had purchased. On appeal, Chamberlain argued that it had not given such authorization. Skylink defended the district court's holding, while the Computer & Communications Industry Association filed an amicus brief advancing the alternative argument that the circumvention was permitted under the interoperability exception, 17 U.S.C. § 1201(f).

The Federal Circuit agreed with the district court that the customers' circumvention was authorized, but it devoted most of its opinion to a completely different

⁷ [For a more detailed discussion of Section 1201's provisions, see Jonathan Band & Taro Ishiki, *The New Anti-Circumvention Provisions in the Copyright Act: A Flawed First Step*, *Cyberspace Lawyer* at 2 (Feb. 1999). For a critical discussion of the application of Section 1201 since enactment, see Electronic Frontier Foundation, *Unintended Consequences: Five Years Under the DMCA*, available at www.eff.org/IP/DMCA/unintended_consequences.pdf (last visited Sept. 10, 2004).]

rationale from that advanced by Skylink or its *amici*. It interpreted 1201(a) to prohibit circumvention only if it enables access that infringes or facilitates infringement.

The starting point of the court's analysis was its perception that the DMCA does not create a new property right. Rather, it provides property owners with new ways to secure their property. Further, after reviewing the legislative history of the DMCA, the court concluded that Congress's objective was not to change the balance of interests in the copyright law, but preserve them in the new digital environment.

Specifically, the Federal Circuit noted that in the DMCA, "Congress attempted to balance the legitimate interests of copyright owners with those of consumers of copyrighted products....Were we to interpret Congress' words in a way that eliminated all balance and granted copyright owners carte blanche authority to preclude all use, Congressional intent would remain unrealized." 381 F.3d at 1203. The Court interpreted Section 1201(a) as "prohibit[ing] only forms of access that bear a reasonable relationship to the protections that the Copyright Act otherwise affords copyright owners." *Id.* at 1202. The court ruled that this is the "only meaningful reading of the statute." *Id.* at 1203. Thus, the Court held that trafficking in a circumvention device violates Section 1201(a)(2) only if the circumvention enables access that "infringes or facilitates infringing a right protected by the Copyright Act...." *Id.* Here, Chamberlain failed to show "the critical nexus between access and protection." *Id.* at 1204. It "neither alleged copyright infringement nor explained how the access provided by the [Skylink] transmitter facilitates the infringement of any right the Copyright Act protects." *Id.*

The Federal Circuit took great pains to minimize any apparent inconsistency between its holding and that of *Universal City Studios, Inc. v. Corley*, 273 F.3d 429 (2nd

Cir. 2001), where the Second Circuit held that Section 1201(c)(1) did not provide a fair use defense to a circumvention violation. In *Corley*, the plaintiffs provided evidence that the circumvention program at issue, DeCSS, allowed a user to circumvent the CSS protection system and view or copy a motion picture without authorization. In contrast, Skylink's product permits *only* lawful uses of the software embedded in the Chamberlain garage door opener. The Federal Circuit acknowledged that some language in the *Corley* decision could be understood to suggest that Section 1201(a) imposes liability even if the access can not facilitate infringement. The Federal Circuit argued, however, that "[i]t is unlikely ... that the Second Circuit meant to imply anything as drastic as wresting the concept of 'access' from its context within the meaning of the Copyright Act." *Id.* at 1199.

Lexmark v. Static Control Components

Less than two months after the Federal Circuit issued its decision in *Chamberlain*, the Sixth Circuit issued its decision in *Lexmark v. SCC*. The Sixth Circuit's decision is far more complex than that of the Federal Circuit because it contains three opinions and addresses more issues. Although the panel opinion does not go as far as *Chamberlain*, the concurring opinion by Judge Merritt goes even farther.

Lexmark designed the software embedded in its printer – the printer engine program (PEP) -- to permit the printer to operate only if it recognized an authentication sequence from the toner loading program (TLP) embedded in the toner cartridge. Lexmark did this to prevent users from employing less expensive toner cartridges with its printers. Static Control Components (SCC) manufactures the Smartek chip, which it sells to manufacturers of replacement toner cartridges. The Smartek chip contained a copy of

the Lexmark TLP, which permitted the replacement toner cartridges to operate in conjunction with Lexmark printers. Lexmark sued SCC for infringing the copyright in the TLP as well as violating the Digital Millennium Copyright Act by circumventing the technological measures that protected access to the TLP and the PEP. The district court found that Lexmark was likely to prevail on the merits of both claims, and entered a preliminary injunction in its favor.

The Sixth Circuit reversed with respect to both the copyright and the DMCA claims. Much of the majority and dissenting opinions focus on the copyrightability of the TLP. The details of this discussion are significant with respect to the scope of copyright protection for program elements necessary for interoperability, but have no impact on the core DMCA analysis relating to the PEP.

1. Accessing the PEP

Lexmark argued that the SCC Smartek chip was a device marketed to circumvent the technological measure that controlled access to the PEP. The District Court agreed, finding that Lexmark's authentication sequence effectively controls access to the Printer Engine Program because it controls the consumer's ability to make use of the program. The Sixth Circuit, however, found that there were other ways for the user to access the PEP:

Anyone who buys a Lexmark printer may read the literal code of the [PEP] directly from the printer memory, with or without the benefit of the authentication sequence, and data from the program may be translated into readable source code after which copies may be freely distributed. No security device, in other words, protects access to the [PEP] and no security device accordingly must be circumvented to obtain access to that program code.

Lexmark at *58. Therefore, *Lexmark* did

not block another relevant form of “access”—the “ability to [] obtain” a copy of the work or to “make use of” the literal elements of the program (its code). Because the statute refers to “control[ing] access to a work protected under this title,” it does not naturally apply when the “work protected under this title” is otherwise accessible. [Just as one would not say that a lock on the back door of a house “controls access” to a house whose front door does not contain a lock and just as one would not say that a lock on any door of a house “controls access” to the house after its purchaser receives the key to the lock, it does not make sense to say that this provision of the DMCA applies to otherwise-readily-accessible copyrighted works.]

Id. at *59 (citations omitted).

Lexmark argued that in other DMCA cases, courts had adopted a “to make use of” definition of “access.” The Sixth Circuit distinguished these cases. The Court explained that in cases such as *321 Studios v MGM Studios*, 307 F. Supp.2d 1085 (N.D. Cal. 2004) or *Corley*, copyright protection exists on two planes: in the literal code of the work and the audio or visual manifestation generated by the code’s execution. In these cases, restricting the use of the code had the effect of preventing consumers from accessing the audio or visual manifestation of the work. Here, by contrast, the PEP operates only on one plane—the literal elements of the program. Unlike the code underlying a video game or DVD, the execution of the PEP does not create protectable expression – just functional output. Hence, restricting use of the PEP code does not prevent access to any protectable expression.

The Court then addressed the DMCA’s interoperability exception, section 1201 (f). The district court had found that the exception was available for achieving interoperability between an independently created program and other programs. Because SCC copied the TLP, it was not independently created and thus SCC could not avail itself

of the defense. However, the Sixth Circuit found that there was evidence that the Smartek chip contained programs “independently created” by SCC in addition to a copy of the TLP. The circumvention of the technological protection was necessary to allow these other programs to interoperate with the PEP.

Lexmark argued that these independently created programs had to exist before the reverse engineering of the TLP. The Court found that “nothing in the statute precludes simultaneous creation of an interoperability device and another program; it just must be ‘independently’ created.” *Lexmark* at *71. Lexmark also argued that “the technological means must be necessary or absolutely needed” to enable interoperability. The Court responded that “the statute is silent about the degree to which the ‘technological means’ means must be necessary, if indeed they are necessary at all, for interoperability.” *Id.* In any event, the Court found that SCC did in fact need to copy the TLP to achieve interoperability with the PEP.

The Court’s suggestion that the statute is silent about whether the technological means must be “necessary at all” to achieve interoperability is curious, given the plain language of §1201(f). §1201(f)(1) authorizes circumvention “for the sole purpose of identifying and analyzing those elements of the program that are necessary to achieve interoperability....” Similarly, §1201(f)(2) permits the development of technological means to circumvent, “if such means are necessary to achieve ... interoperability....”

[Interestingly, the Court didn’t mention the Copyright Office’s opinion concerning the § 1201(f) defense. After the District Court ruled in this case, SCC asked the Copyright Office for an exception from § 1201(a) pursuant to the DMCA rulemaking

procedure. The Copyright Office concluded that an exception was not necessary because of § 1201(f). Given that the Court’s view of § 1201(f) coincides with that of the Copyright Office, it is surprising that the Court didn’t cite the Copyright Office opinion.]

Judge Feikens, in an opinion that dissented in part and concurred in part, developed a different rationale concerning the PEP DMCA claim. He said that “[b]y buying a Lexmark printer, the consumer acquires an implied license to use the [PEP] for the life of that printer.” *Id.* at *110. Because of this implied license, the consumer was authorized to circumvent the technological protection measures to gain access to the PEP. This argument is similar to the district court’s rationale in *Chamberlain*.⁸

2. Judge Merritt’s Concurrence

Judge Merritt wrote a concurring opinion that attempted to broaden the majority’s DMCA holding.

We should make clear in the future companies like Lexmark cannot use the DMCA in conjunction with copyright law to create monopolies of manufactured goods for themselves just by tweaking the facts of this case: by, for example, creating a [TLP] that is more complex and ‘creative’ than the one here, or by cutting off other access to the [PEP]....The key question is the “purpose” of the circumvention technology.

Id. at *73-74.

⁸ Lexmark also asserted that SCC also violated the DMCA by accessing the TLP. However, the Sixth Circuit found that the Smartek chip doesn’t provide access to the TLP, it replaces it. Moreover, as noted above, the Court found that the TLP was not copyrightable in the first place. Thus, the Court held that it was not protected by the DMCA at all. Judge Feikens had dissented from the finding that the TLP was not copyrightable; accordingly, he could not agree with the majority that the DMCA did not apply to the TLP. Instead, Judge Feikens stated that the Smartek chip was not primarily designed or produced for the purpose of circumventing the protection of the TLP; its primary purpose was to access the PEP.

Judge Merritt rejected Lexmark’s interpretation of the DMCA, which would impose liability for any circumvention of a technological measure, regardless of the purpose of the circumvention. If the court were to adopt Lexmark’s reading of the statute, “manufacturers could potentially create monopolies for replacement parts simply by using similar, more creative, lock-out codes. Automobile manufacturers, for example, could control the entire market for replacement parts for their vehicles by including lock-out chips.” *Id.* at *75. According to Judge Merritt, this reading “ignores ... the main point of the DMCA – to prohibit the pirating of copyright protected works such as movies, music, and computer programs.” *Id.* Judge Merritt concluded that unless a plaintiff can show that a defendant “circumvented protective measures ‘for the purpose’ of pirating works protected by the copyright statute,” *id.*, its claim should not be allowed to go forward. This interpretation of the DMCA is similar to the Federal Circuit’s in *Chamberlain*. Judge Merritt, however, did not cite *Chamberlain*, even though it was issued almost two months earlier.

Judge Merritt also opined that Lexmark’s interpretation ran contrary to the objectives of the intellectual property clause of the Constitution – promoting the progress of science and useful arts.

[Lexmark’s reading ... would allow authors exclusive rights not only over their own expression, but also over whatever functional use they can make of that expression in manufactured goods. Giving authors monopolies over manufactured goods as well as their own creative expression will clearly not ‘promote the Progress of Science and the useful Arts,’ but rather would stifle progress by stamping out competition from manufacturers who may be able to design better or less expensive replacement parts like toner cartridges.

Id. at *78.]

What Does This All Mean?

The *Chamberlain* decision represents a major development in DMCA jurisprudence. By requiring a nexus between the circumvention of access controls and infringement, the Federal Circuit prevented the DMCA from being employed to prevent legitimate competition in after-markets. The *Chamberlain* court's reasoning should also apply in other circumstances far removed from the facilitation of infringement, such as the software security research mentioned by Richard Clarke.⁹

The panel decision in *Lexmark* is far narrower. To be sure, its holding that circumvention of one form of access control does not violate the DMCA so long as other unprotected means of access exist is significant. But in the future, product developers can avoid this problem simply by eliminating other means of access. For example, Lexmark could encrypt the PEP in its next generation of printers.

However, it is important to note that both concurring opinions in *Lexmark* support a more far reaching interpretation of the DMCA similar to *Chamberlain*'s. As noted above, Judge Merritt expressed concern that the panel's decision was too narrow and could be avoided "just by tweaking the facts of this case...." *Id.* at *74. Thus, Judge Merritt stated that "a better reading of the statute is that it requires plaintiffs as part of their burden of pleading and persuasion to show a purpose to pirate on the part of defendants." *Id.* at *77. Judge Feikens appeared to reach a similar conclusion. He described the DMCA's legislative history as demonstrating "that Congress did not intend this provision

⁹ See n. 4, *supra*.

to apply to devices that merely facilitated legitimate access.” *Id.* at *111. Judge Feikens reasoned that “[b]ecause Defendant’s chip can only make non-infringing uses of the Lexmark [PEP], it is clear that Congress did not intend to apply the DMCA to this situation.” *Id.* at *112-13.

These two concurring opinions may not be binding precedent in the Sixth Circuit, but other courts certainly should find persuasive that two of the three judges on the *Lexmark* panel agreed with the *Chamberlain* panel that DMCA liability should attach only to circumvention that facilitates infringement.

Although the *Chamberlain* panel and the *Lexmark* “majority” agree that there must be a nexus between circumvention and infringement, they seem to disagree on the extent of the nexus. *Chamberlain* only reached the situation where the circumvention was incapable of facilitating infringement; it did not consider the situation where the circumvention facilitated both infringing and noninfringing uses. The Federal Circuit in a footnote stated, “[w]e leave open the question as to when § 107 [the fair use doctrine] might serve as an affirmative defense to a prima facie violation of § 1201.” 381 F.3d at 1200 n.14.

In contrast, Judge Merritt seemed willing to permit circumvention so long as infringement was not intended, even if it were possible. Judge Merritt averred, “Congress ... only sought to reach those who circumvented protective measures ‘for the purpose’ of pirating works protected by the copyright statute.” *Lexmark* at *75. Later he stated that properly read, the DMCA imposes on the plaintiff the burden of proving “a purpose to

pirate on the part of the defendant.” *Id.* at *77. Judge Merritt’s interpretation of the DMCA would appear to allow circumvention for the purpose of making a fair use.¹⁰

The *Chamberlain* court’s caution seems to be motivated by a desire to avoid a conflict with prior DMCA decisions, particularly *Corley*, where the Second Circuit explicitly held that fair use was not a defense to circumvention. The *Chamberlain* court explained that in earlier DMCA decisions, “the access alleged ... was intertwined with a protected right.” 381 F.3d at 1199. By restricting its holding to situations where the circumvention could not enable infringement, the *Chamberlain* court steered clear of these other cases. Perhaps because he was only writing a policy-oriented concurring opinion, Judge Merritt did not appear constrained by these earlier decisions. He did not address the apparent inconsistency between his view and other DMCA decisions. Indeed, Judge Merritt did not cite any decisions whatsoever. He referenced only the Constitution’s intellectual property clause, the DMCA, and Lawrence Lessig’s *Free Culture*.

The *Chamberlain* court also left open the question of the impact of a contractual restriction on circumvention on DMCA liability: “It is not clear whether a consumer who circumvents a technological measure controlling access to a copyrighted work in a manner that enables uses permitted under the Copyright Act but prohibited by contract can be subject to liability under the DMCA.” 381 F.3d at 1202 n.17. The court decided not to reach this issue because *Chamberlain* did not attempt to limit its customers’ use by contract before it sued Skylink. However, this question is far from academic; after the district court opinion that *Chamberlain* had implicitly authorized its users to employ

¹⁰ Judge Feikens did not address this issue in his opinion.

universal transmitters, Chamberlain began to sell its GDOs subject to a license that prohibited use of competitors' transmitters.

The Federal Circuit's *dicta* certainly suggests that it would prefer not to impose DMCA liability under such circumstances. In rejecting Chamberlain's argument that it is entitled to prohibit legitimate purchasers of embedded software from using it in a certain manner, the Court stated that this entitlement would "allow any copyright owner, through a combination of contractual terms and technological measures, to repeal the fair use doctrine with respect to an individual copyrighted work...." *Id.* at 1202. The Court states that this implication contradicts the § 1201(c)(1) savings clause directly. But even if circumvention in defiance of a contractual term is not a DMCA violation, the Federal Circuit's decision in *Bowers v. Baystate*¹¹ suggests that such circumvention could be a breach of contract. In *Bowers*, the Federal Circuit enforced a contractual restriction on software reverse engineering permitted by the Copyright Act.¹²

A remaining question is why both courts engaged in complex analysis of the DMCA and its legislative history when they could have decided the cases on simpler, narrower grounds. The Federal Circuit in *Chamberlain* could just have affirmed the district court's finding that Chamberlain had authorized the circumvention, or it could have found the circumvention permitted under the interoperability exception, § 1201(f).¹³

¹¹ *Bowers v. Baystate*, 320 F.3d 1317 (Fed. Cir.), *cert. denied*, 539 U.S. 928 (2003)

¹² Judge Dyk's dissent in *Bowers*, however, could form the basis for a panel declining to enforce a contractual restriction on circumvention.

¹³ The Federal Circuit did not reach the interoperability exception : "Because § 1201(f) is an affirmative defense, it becomes relevant only if Chamberlain can prove a prima facie case and shift the burden of proof to Skylink." 381 F.3d at 1201 n.15.

Similarly, since the *Lexmark* panel found that § 1201(f) could apply, it had no need to rule that a circumvention does not violate the DMCA if other means of access exist.

Obviously, both panels objected to the DMCA being used “offensively” to prevent competition in after-markets. But as the *Lexmark* panel recognized, “Congress added the interoperability provision in part to ensure that the DMCA would not diminish the benefits to consumers of interoperable devices in the consumer electronics environment.” *Lexmark* at *67 (citations omitted). Since Congress included §1201(f) precisely to address the fact patterns in these cases, why did the courts look beyond §1201(f)? Judge Merritt provided one explanation of the reluctance to rely on the interoperability defense:

we should be wary of shifting the burden to a rival manufacturer to demonstrate that its conduct falls under such an exception in cases where there is no indication that it has any intention of pirating a protected work. A monopolist could enforce its will against a smaller rival simply because the potential cost of extended litigation and discovery where the burden of proof shifts to the defendant is itself a deterrent to innovation and competition. [Misreading the statute to shift the burden in this way could allow powerful manufacturers in practice to create monopolies where they are not in principle supported by law.]

Lexmark at *76. By placing the initial burden of proving intent to infringe on the plaintiff, Judge Merritt (and perhaps the *Chamberlain* panel) hoped to prevent abusive litigation by companies with market power.

Conclusion

The *Chamberlain* and *Lexmark* decisions reflect the practical wisdom of the federal appellate courts. Both panels were confronted by conduct that appeared to constitute prima facie violations of the DMCA, even though Congress clearly did not

intend to target such conduct. Cognizant that dominant companies in the future may bring similar DMCA actions to prevent competition from smaller firms, judges on both panels adopted broad rationales that not only would dictate the correct outcome in these cases, but would also influence the course of the litigation. By placing on plaintiffs the burden of proving intent to infringe, the judges permit smaller defendants to short circuit the litigation through dispositive motions in cases where infringement is nowhere to be seen.