The iPhone and the DMCA: Locking the Hands of Consumers

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NOTES

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It’s high noon, Apple and AT&T—we really hate to break it to you, but the jig is up.

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I. INTRODUCTION

On August 24, 2007, less than two months after its initial release for sale, the Apple iPhone was unlocked, untethering the phones from the AT&T cellular network. Because AT&T has exclusive rights to provide coverage for the iPhone until the year 2010, hackers and computer enthusiasts worked feverishly to be the first to use the iPhone on a network other than AT&T. Although the practice of cell phone unlocking has been occurring for years, the tremendous public interest surrounding the launch of the iPhone focused attention on the issue like never before.

Wireless carriers can use software locks, hardware locks, or both to disable a handset from being used on any network except the one for which it was purchased. Most handset makers, such as Motorola and Nokia, manufacture almost identical versions of their phones for different networks, making, for example, a new T-Mobile customer purchase a different version of the same phone he used on the AT&T network. As a result, most customers choose phones based on the network they plan to use. The practice of linking a specific cell phone handset to a particular network did not, of course, originate with Apple and AT&T. T-Mobile, Verizon, and Sprint also lock handsets to prevent them from working on competitors' networks. A network provider may sometimes unlock a customer's handset so that the customer can take the phone overseas to use on a foreign network, but generally, providers operate according to a business

2. Id.; see also Brad Stone, With Software and Soldering, AT&T's Lock on iPhone Is Undone, N.Y. TIMES, Aug. 25, 2007, at C1 (discussing various techniques used to unlock iPhones). One method used a software package to break the SIM lock on the iPhone. Id. The second method used a combination of hardware modifications and added software. Id.

3. See, e.g., Sumner Lemon, Race Is on to Unlock the iPhone; Because Half the Fun (if You're a Hacker, Anyway) Is Breaking the Thing, COMPUTERWORLD, July 1, 2007, http://www.computerworld.com/action/article.do?command= vie wArticleBasic&articleId=9026041 (describing hackers' efforts to unlock the iPhone).


6. This is with the exception of popular new phones, which sometimes are offered only on one network, but often filter quickly out to or have analogous products appear on other networks.

7. See Stone, supra note 2 (describing how and why carriers lock phones).

model that subsidizes expensive handsets and locks customers into multi-year contractual commitments. The iPhone, for instance, will not appear on networks other than AT&T, nor will AT&T unlock it for use overseas. If consumers want iPhones, they must use the AT&T network and be willing to use locked phones, with all their inherent limitations.

In contrast, an unlocked cell phone offers considerably more freedom than a locked phone: it is available for use on any cellular network with which the customer has an account. If a consumer has an unlocked iPhone, he can use the iPhone on an account with T-Mobile, O2 (a British carrier), Vodafone (a European carrier), or any other carrier using GSM technology. Generally, phone owners replace the SIM cards (which carry users' phone numbers and other personal information) in their phones whenever they switch networks. With multiple SIM cards and multiple accounts, an owner can use the same handset on multiple networks. Alternatively, a user could close his account with one network, purchase a new SIM card, and switch to another network. The desire to achieve this level of portability and freedom prompted interested groups and individuals to enter the race to unlock the iPhone, a race that was won less than two months after the phone's release.


11. This proposition, of course, excludes hardware limitations. There are two types of cell phone networks generally used: CDMA and GSM. See Joe Peacock, CDMA vs. GSM, Why You Should Know the Difference, PC TODAY, Jan. 2006, http://www.pctoday.com/editorial/article.asp?article=articles%2F2006%2Ft0401%2Ft0401%2Ft0401.asp (discussing the GSM and CDMA standards). Sprint and Verizon use CDMA; T-Mobile, AT&T, and most of the rest of the world use GSM. Id. The two networks are non-compatible; a CDMA phone cannot work on a GSM network. Id. Thus, the iPhone (a GSM phone) could never work on Sprint or Verizon's network, only T-Mobile's (in the United States). Id.


13. Switching networks is somewhat more complicated with CDMA phones, since they lack removable SIM cards. See Peacock, supra note 11.

14. The user could also simply move their account information so that a new SIM card would not be necessary.
Once people began publishing their methods of unlocking the iPhone, AT&T sent many of them cease-and-desist letters, grounded in section 1201(a)(2) of the Digital Millennium Copyright Act of 1998 ("DMCA" or "the Act"). Congress passed the DMCA to curtail the copyright piracy made possible by the new technologies of the 1990s. Section 1201(a)(2) of the DMCA protects an owner's copyright by making it illegal to "circumvent a technological measure" installed by the owner. Essentially, the Act makes it illegal, as a separate offense, merely to circumvent protective measures that copyright holders place on copyrighted works; it does not require actual copying.

For cell phones, the "copyrighted work" at issue is the software that runs the phone, known as "firmware." The "technological measure" that the act makes illegal to circumvent is the locking software or hardware that the manufacturer or wireless provider installs. Wireless service providers such as TracFone, the United States' largest pre-paid service provider, argue that the steps they have taken to lock the phones they sell simply are protective measures against copyright infringement. On the other hand, consumer groups argue that cell phone locks hamper consumers' rights to choose which network to use with their handsets.

Subsections 1201(a)(1)(C) and (D) of the DMCA offer an intriguing possibility for those who are concerned that copyright law overly restricts consumer choice. These subsections allow the Librarian of Congress to accept comments from interested parties every three years and declare certain uses of copyrighted works legal


17. See infra Section II.A.


19. See infra Section II.A. One example of such a measure would be the digital rights management ("DRM") software that prevents consumers from copying DVD movies.


21. Wireless Alliance Comment, supra note 5, at 7–10 (arguing that unlocking handsets should be exempted from the restrictions in the DMCA).

for the subsequent three years, notwithstanding the prohibitions of
the DMCA.\textsuperscript{23} During the lead-up to the Librarian’s 2006 exemption
decision, seventy-four comments and thirty-five replies were
submitted in support of or against certain proposed exemptions.\textsuperscript{24} On
November 27, 2006, after considering the comments and replies and
holding public hearings, the Librarian declared six classes of activities
exempt from the section 1201 regulations (hereinafter “the November
27th solution”).\textsuperscript{25} Class number five exempts “[c]omputer programs in
the form of firmware that enable wireless telephone handsets to
connect to a wireless telephone communication network, when
circumvention is accomplished for the sole purpose of lawfully
connecting to a wireless telephone communication network.”\textsuperscript{26}

This ruling effectively made it legal for owners to unlock their
handsets for use on other networks. Because the Librarian phrased
the rule so narrowly, however, the prohibitions of sections 1201(a)(2)
and (b) that make it illegal to offer the public programs or services
that circumvent technological measures designed to protect copyrights
are still in force.\textsuperscript{27} This exemption creates a confusing dichotomy: it is
legal to unlock a phone and sell it, but it is illegal to unlock a phone
for someone else or provide instructions on how to unlock phones.
Thus, when the iPhone “unlockers” discovered how to unlock the
phones and published that information, enabling others to provide
software that would unlock iPhones automatically, they made
themselves susceptible to legal challenges by copyright
owners.\textsuperscript{28} Indeed, Tracfone has been remarkably successful at suing handset
unlockers in recent years. In at least one published case, \textit{TracFone
Wireless, Inc. v. Dixon}, the court flatly denied that the Librarian’s
2006 exemption applied to businesses that unlock phones for sale.\textsuperscript{29}

On the other side of the issue is a recent spate of lawsuits,
principally in California, against wireless providers.\textsuperscript{30} A principal

\begin{itemize}
\item \textsuperscript{23} Id.
\item \textsuperscript{24} United States Copyright Office, Rulemaking on Exemptions from Prohibition on
Circumvention of Technological Measures that Control Access to Copyrighted Works,
\item \textsuperscript{25} Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access
\item \textsuperscript{26} Id. at 68,476.
\item \textsuperscript{27} 17 U.S.C. §§ 1201(a)(2), (b) (2000).
\item \textsuperscript{28} See supra note 15.
\item \textsuperscript{29} 475 F. Supp. 2d 1236, 1237 (M.D. Fla. 2007).
\item \textsuperscript{30} See, e.g., Third Amended Consolidated Complaint at 1–2, Meoli v. Viva Wireless, Inc.,
No. RG03086113 (Cal. Super. Ct. Alameda County Mar. 12, 2003) [hereinafter AT&T Complaint]
(suing on the basis of handset locking claims); Complaint at 2, Zill v. Sprint Spectrum Ltd.
issue in these cases is whether providers should be forced either to unlock phones at the will of consumers or to do away with cell phone locking altogether. Many of the lawsuits based on handset locking claims have made their way through the California courts on motions to compel arbitration pursuant to clauses in customers’ contracts. On October 10, 2007, the California Supreme Court declined to review the Court of Appeals’s decision in Gatton v. T-Mobile, which struck down an arbitration clause as unconscionable. This ruling, as well as similar rulings against AT&T and Cingular, clear the way for plaintiffs to sue the nation’s largest wireless providers over handset locking. Aside from its import for applying the doctrine of unconscionability, the outcome of Gatton and other cases will greatly affect the relationship between wireless providers and their customers.

The Librarian of Congress’s exemption is scheduled to expire in 2009, which means that the November 27th solution is merely a temporary one. The authors of the DMCA could not have predicted the unique challenges the Act would face in the coming years. The Act’s effectiveness in dealing with today’s technological realities has often been questioned. In light of current legal challenges by both


35. See, e.g., Dan L. Burk, Anticircumvention Misuse, 50 UCLA L. REV., 1095-1140 (2003) (arguing that the DMCA’s anticircumvention measures create a “paracopyright” regime that far
consumers and corporations, the area of cell phone rights and responsibilities is ripe for review.

This Note will offer a solution to the current mishmash of policies regarding cell phone unlocking and fair use of the copyrighted intellectual property associated with unlocking. It contends that, as a first step, Congress should not only statutorily codify the exemption for unlocking of cell phones, but also should shield the tools and services used to accomplish unlocking from DMCA repercussions. More importantly, this Note will argue that the DMCA was not designed, and is ill-equipped, to deal with phone unlocking issues. Instead, this Note contends that copyright law is not the appropriate forum for this dispute; rather, the problem of cell phone unlocking belongs in the domain of U.S. telecommunications policy. This Note will also make the case that it is in the providers’ best interest to sell unlocked cell phones.

Part II of this Note reviews the history behind the DMCA, especially section 1201, in an attempt to clarify the goals of the Act generally and the goals of section 1201 specifically. It also provides an overview of the 2006 inquiry process conducted by the Librarian of Congress and addresses the arguments made both for and against the exemption currently in force. Finally, it examines a partial history of U.S. telecommunications policy that relates to the wireless industry as well as relevant legislation. Part III examines the current court battles regarding cell phone unlocking and their likely consequences for the future of telecommunications law. Part IV critically assesses the status of copyright law and the intersection between litigation on phone unlocking and U.S. telecommunications policy. Finally, this Part proposes a solution in the form of a statutory and economic framework to address the problems elucidated earlier in the Part.

II. THE DIGITAL MILLENNIUM COPYRIGHT ACT AND THE LIBRARIAN OF CONGRESS

In an attempt to deal with the explosion of digital production and piracy, the Congress amended U.S. copyright law in 1998 with the DMCA, and the changes have had wide-ranging consequences. The Act was created as a response to the digital piracy of books, movies,
music, and software.\textsuperscript{36} At the time the DMCA was passed, no one had cell phones in mind. Years later, however, consumers and corporations realized that the Act did, in fact, govern the gray area of cell phone unlocking. Luckily, a forum existed to interpret and respond to unforeseen consequences such as these: Congress created a safeguard in the DMCA so that the Librarian of Congress could exempt certain works from the new anti-piracy measures in the Act if he determined that consumer rights were being harmed.\textsuperscript{37}

Part A of this section examines the inception and passage of the DMCA. It demonstrates that Congress was overwhelmingly concerned with the theft of books, movies, music, and software; thus, the Act's applicability to an area of commerce that it was not designed to govern should be questioned. Part B examines the Librarian's 2006 exemption process, which made it legal for consumers to unlock their cell phones to use on other networks until 2009. Part C considers other governmental actions relating to the tension between telecommunications providers and consumers, including the 1968 \textit{Carterfone} Doctrine, the 1997 Federal Communications Commission ("FCC") ruling on cell phone number portability, and the 2007 congressional subcommittee hearing on the iPhone and other wireless innovation and consumer protection issues. Finally, Part D explores current legislation involving consumer rights and cell phone unlocking.

\textbf{A. The DMCA: Confronting New Realities of Digital Piracy}

Signed into law on October 28, 1998, the DMCA was described as a "comprehensive digital copyright bill" that was designed, \textit{inter alia}, to criminalize the "circumvention of technologies that secure digital copies of software, music and videos and literary works."\textsuperscript{38} The Act, described by President Clinton as the "most extensive revision of international copyright law in over 25 years," was originally designed to implement two treaties: the World Intellectual Property Organization ("WIPO") Copyright Treaty and the WIPO Performances and Phonogram Treaty.\textsuperscript{39} As described by the Register of Copyrights

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{36} U.S. COPYRIGHT OFFICE, A REPORT OF THE REGISTER OF COPYRIGHTS PURSUANT TO §104 OF THE DIGITAL MILLENIUM COPYRIGHT ACT vi–vii (2001) [hereinafter DMCA § 104 REPORT].
\item \textsuperscript{37} 17 U.S.C. §§ 1201(a)(1)(C)–(D) (2000).
\item \textsuperscript{39} Statement on Signing the Digital Millennium Copyright Act, 2 PUB. PAPERS 1902 (October 28, 1998), available at http://www.presidency.ucsb.edu/ws/index.php?pid=55169; World
\end{itemize}
\end{footnotesize}
"the Register"), however, the Act became a "far more comprehensive legislative project to address a range of issues, both digital and non-digital."40

Congress's primary reason for implementing the WIPO was to combat piracy—that is, the theft of inherently valuable pieces of intellectual property.41 As would be expected, neither the Register's 2001 report nor two years of debates surrounding the bill contain any references to cell phones, firmware, mobile software, or the like. In the congressional debates surrounding the passage of the DMCA, however, members of Congress repeatedly expressed concern about software, music, and video piracy.42 For example, in a House debate on October 12, 1998, Congressman Billy Tauzin said, "As we enter this information digital age, it becomes increasingly easy for people to make perfect copies of other people's works; their music, their books, their videos, their movies. In short, the WIPO treaty is an attempt worldwide to protect those intellectual properties from thievery, from duplication, from piracy."43 Section 1201 specifically became the heart of the effort to implement the WIPO treaties.44 The provisions applicable to these treaties are found in the beginning of section 1201(a)(1).45


40. DMCA § 104 REPORT, supra note 36, at 1.
41. See, e.g., 144 CONG. REC. H10,616–18 (1998) (including statements of Representatives Coble, Bliley, Dingell, Tauzin, Frank, Stearns, and Markey in support of the DMCA).
42. Id.
44. 17 U.S.C. § 1201(a) (2000). As explained later by the Register of Copyrights: "Legal prohibitions against circumvention of technological protection measures employed by copyright owners to protect their works, and against the removal or alteration of copyright management information, were required in order to implement U.S. treaty obligations." DMCA § 104 REPORT, supra note 36, at vi.
45. These provisions state:
No person shall circumvent a technological protection measure that effectively controls access to a work protected under this title. No person shall manufacture, import, offer to the public, provide or otherwise traffic in any technology, product, service, device, component, or part thereof that—(A) is primarily designed or produced for the purpose of circumventing a technological protection measure that effectively controls access to a work protected under this title; (B) has only limited commercially significant purpose or use other than to circumvent a technological protection measure that effectively controls access to a work protected under this title; or (C) is marketed by that person or another acting in concert with that person with
While Congress was implementing these broad new measures to combat piracy, critics argued that the DMCA tilted copyright law heavily in favor of copyright holders, most of whom are corporations.\textsuperscript{46} Thus, by inserting safeguard provisions in the DMCA, Congress sought to protect consumers and respond to commentators who expressed concern over the dampening effect that the strictures of the DMCA might have on content production, digital production and distribution, and fair use.\textsuperscript{47} Congressman Tauzin believed the most "important contribution" to the Act was section 1201(a)(1), which allows the Librarian to prevent a reduction in fair use.\textsuperscript{48} Under section 1201(a)(1)(C), the Librarian of Congress may, upon recommendation of the Register,\textsuperscript{49} exempt certain classes of works from the anti-circumvention measures of section 1201(a)(1)(A).\textsuperscript{50} This exemption should be exercised when non-infringing users of copyrighted works are or will be adversely affected by section 1201(a)(1)(A).\textsuperscript{51} The Librarian was instructed under section 1201(a)(1)(C) to carry out the first review two years after the section was enacted and every three years thereafter.\textsuperscript{52}

In addition to the provision authorizing such exemptions, section 104 of the Act requires the Register to produce a report on the joint impact of the DMCA and the "development of electronic commerce and technology" on some of the fair-use provisions of copyright law, including sections 109 and 117.\textsuperscript{53} Section 109, the federal copyright statute dealing with the First Sale Doctrine,\textsuperscript{54} is

\textsuperscript{46} \textit{See}, e.g., \textit{Burk}, supra note 35; \textit{Timothy B. Lee, Circumventing Competition; The Perverse Consequences of the Digital Millennium Copyright Act}, 564 CATO INST. POL. ANALYSIS 9 (2006), available at http://www.cato.org/pubs/pas/pas564.pdf (claiming that "DRM systems and the DMCA give copyright holders much greater control over their products and their customers than they have ever enjoyed under traditional copyright law.").

\textsuperscript{47} \textit{Supra} note 35.


\textsuperscript{49} The Register of Copyrights is also required to consult with the Assistant Secretary for Communications and Information of the Department of Commerce. 17 U.S.C. § 1201(a)(1)(C).

\textsuperscript{50} \textit{Id}.

\textsuperscript{51} \textit{Id}.

\textsuperscript{52} \textit{Id}.

\textsuperscript{53} 17 U.S.C. § 104; \textit{id.} § 109 (encompassing the "First Sale" doctrine); \textit{id.} § 117 (covering copies, adaptations, leases and sales of such, and repairs).

\textsuperscript{54} This copyright doctrine holds that a copyright holder's control over an individual, lawfully made copy of a copyrighted work ends when that copy is sold or given away. \textit{COPYRIGHT IN A GLOBAL INFORMATION ECONOMY} 369 (Julie E. Cohen et al. eds., 2d ed. 2006). After this "first sale," the owner of the copy may resell or give away the work without consent of the copyright
relevant to software and End User License Agreements ("EULAs") but
is not particularly applicable to cell phone firmware and unlocking.\textsuperscript{55}
More critical to the unlocking debate, though not realized at the time,
is the effect of the DMCA on section 117 of the United States Code.
Section 117 allows consumers to produce backup copies of computer
programs and adaptations of programs only if the copy or adaptation
is created "as an essential step" in using the program.\textsuperscript{56}

In 2001, the Register issued the section 104 report,\textsuperscript{57} which was
the product of a public comment process and analysis by the U.S.
Copyright Office. Most importantly for this Note, the report addresses
concerns about the effects of section 1201 on fair use and other
noninfringing use rights of consumers.\textsuperscript{58} Unfortunately, it concludes
that the fair use concerns affected by the DMCA were not so great as
to warrant changes to section 117 of the Act.\textsuperscript{59}

The Register concluded that, although section 117 may have
adverse effects on consumers' ability to make archival copies legally,
"such a concern appears to be minimal, since licenses generally define
the scope of permissible archiving of software, and the use of CD-ROM
reduces the need to make backup copies."\textsuperscript{60} Unfortunately for
advocates of cell phone unlocking, the Register has not addressed the
impact of the DMCA on the "adaptation" provisions of section 117.
The Register's report, then, ultimately offers no support for those who
believe that the DMCA negatively affects consumers' rights to unlock
cell phones.

But the report offers more than conclusions. A close reading of
the report demonstrates that just three years after the DMCA was
passed and two years before the first class action cell phone unlocking
suit was filed, the Register interpreted the DMCA with piracy
concerns in mind, just as Congress had when it created the law. The
Register's portrayal of the purpose of the anticircumvention measures
of section 1201 is illustrative of this mindset. In discussing copy
control measures (which can be circumvented legally since copying for
archival purposes is legal), the Register offered an analogy: "[F]air use
and other copyright exceptions are not defenses to gaining

\begin{itemize}
  \item \textsuperscript{55} 17 U.S.C. § 109.
  \item \textsuperscript{56} 17 U.S.C. § 117(a)(1).
  \item \textsuperscript{57} DMCA § 104 REPORT, supra note 36.
  \item \textsuperscript{58} See, e.g., 17 U.S.C. § 117 (allowing consumers to make archival copies and/or
adaptations of works in specific circumstances).
  \item \textsuperscript{59} DMCA § 104 REPORT, supra note 36, at xvii.
  \item \textsuperscript{60} DMCA § 104 REPORT, supra note 36, at xvii.
\end{itemize}
unauthorized access to a copyrighted work: Quoting a manuscript may be a fair use; breaking into a desk drawer and stealing it is not. Circumventing access control measures was, therefore, prohibited in the Administration's proposed implementing legislation.\textsuperscript{61}

The Register was by no means the first or only person to use this analogy. The House Judiciary Committee Report explains the situation with a similar analogy: "The act of circumventing a technological protection measure put in place by a copyright owner to control access to a copyrighted work is the electronic equivalent of breaking into a locked room in order to obtain a copy of a book."\textsuperscript{62}

The congressional discussions, the Register's report, and the text of the DMCA indicate a concern with digital piracy and attempts to circumvent technology to steal copyrighted works. The vast majority of cell phone unlocking, however, does not implicate piracy at all. Unlockers do not generally attempt to steal phone software directly or to circumvent security to steal protected software. Thus, the overwhelming concerns of the DMCA are mismatched to the concerns over cell phone unlocking.

The authors of the DMCA did not consider cell phones and mobile firmware. Rather, Congress through the DMCA was dealing with the rise in digital theft that resulted from increasing Internet use, digital commerce, and digital production. A few years later when cell phone use exploded worldwide, both consumers and corporations began to realize that section 1201 of the DMCA, which was aimed at digital piracy, incidentally regulated mobile firmware. Thus, in 2006, the Librarian of Congress was set to deal with the new restrictions on cell phone unlocking that section 1201 created.

\textit{B. The Librarian of Congress's 2006 Exemption Process}

Included in section 1201 of the DMCA are subsections (a)(1)(C) and (D), which direct the Librarian of Congress, in consultation with the Register of Copyrights, to grant exemptions for certain noninfringing classes of works from the provisions of section 1201(a)(1)(A) every three years.\textsuperscript{63} As explained in the previous Section, Congress included this clause as a safeguard to protect the fair use of copyrights and, according to the DMCA, to exempt such "noninfringing uses by persons who are users of a copyrighted work [and who] are, or are likely to be, adversely affected" by the

\textsuperscript{61} Id. at 12.
\textsuperscript{62} Id. at 12 n.16.
\textsuperscript{63} 17 U.S.C. § 1201(a)(1)(C)-(D).
prohibitions of subsection (a)(1)(A). Thus, in 2003 and again in 2006, the Librarian exempted certain classes of works from the anticircumvention measures of section 1201.

1. Comments and Reply Comments

During the exemption process, the Librarian takes a recommendation from the Register of Copyrights and written and aural comments from the public. During the 2006 public comment period, numerous comments on a range of topics were submitted. Several comments argued that the restrictions on circumventing access controls guarding mobile firmware should be removed. Bases for this argument included the advancement of consumer rights, the necessity of handset portability between countries, and the adverse environmental effects of the existing restrictions.

In 2006, a comment submitted by the Wireless Alliance ("Wireless Alliance comment") urged the Librarian to exempt "computer programs that operate wireless telecommunications handsets (mobile firmware)." This exemption would have made it legal to modify or bypass copyrighted firmware on a handset. The Wireless Alliance comment was supported by two reply comments, one by Mark Crocker, a software engineer and mobile phone programmer, and another by Michael Weisman, a businessman and frequent international traveler. These comments and additional testimony persuaded the Register of Copyrights and the Librarian of Congress to exempt mobile firmware from the anticircumvention clauses of section 1201(a).

64. See supra Section II.A; 17 U.S.C. § 1201(a)(1)(D).
68. Wireless Alliance Comment, supra note 5, at 2.
69. Supra note 67.
The Wireless Alliance comment argues persuasively that unlocking phones is a noninfringing use of the copyrighted software under existing statutory and case law.\footnote{Wireless Alliance Comment, supra note 5, at 3–10.} It details the extent of the problem, explaining the different types of locks and detailing specific unfair business practices that are contrary to FCC rulings.\footnote{Id. at 3–4, 7.} It also provides an overview of relevant case law and explains why phone locking has adverse consequences for consumers, the environment, and overall wireless competition.\footnote{Id. at 4–6, 8–10.} The comment’s legal arguments cover two areas of law: U.S. telecommunications policy and copyright law.

The comment makes two arguments about U.S. telecommunications policy: (1) current “bundling” practices of various providers is against FCC policy as outlined in a 1992 ruling\footnote{FCC Bundling Ruling, supra note 73.} and (2) locking practices are anticompetitive and akin to the practices outlawed by the Telecommunications Act of 1996 and the subsequent FCC ruling on number portability.\footnote{FCC Bundling Ruling, supra note 73.} In 1992 the FCC issued a ruling that expresses “concern” that customers are not able to choose their own handsets and service packages and are “forced to buy unwanted carrier-provided [phones] in order to obtain necessary service. . . .”\footnote{FCC Bundling Ruling, supra note 73.} Thus, the FCC ruling allows carriers to bundle wireless service and handsets, “provided that service is also offered separately at [sic] a nondiscriminatory basis.”\footnote{FCC Bundling Ruling, supra note 73.} The Wireless Alliance comment alleges that most, if not all wireless companies are in flagrant violation of this ruling because they do not allow customers to use handsets not purchased from the provider on the provider’s network.\footnote{Wireless Alliance Comment, supra note 5, at 4.} This same argument has been made in at least one of the lawsuits against AT&T.\footnote{AT&T Complaint, supra note 30, at 8.}

The second argument pertaining to U.S. telecommunications policy is that the Telecommunications Act of 1996, which made cell phone number portability (the ability to keep the same phone number
when switching providers) a duty of providers, shows by analogy that it is the stated policy of the FCC to remove barriers on consumers’ ability to choose wireless service freely. Locked cell phones are an anticompetitive barrier very similar to the lack of number portability available prior to 1996.

In addition to explaining official U.S. telecommunications policy, the Wireless Alliance comment also discusses relevant cases clarifying U.S. copyright law. Foresight Resources Corp. v. Pfortmiller and Aymes v. Bonelli establish that an owner of a copy of copyrighted software can make additions or adaptations to the software or reprogram it in order to make it work for the owner. The next three cases involve failed challenges to alleged circumvention under section 1201; as argued by the comment, however, the opinions fail to give adequate protection to firmware circumventers because of the grounds upon which they were decided.

Chamberlain Group Inc. v. Skylink Technologies Inc., a case involving a manufacturer of “universal” garage-door openers that mimic the software of other garage-door openers, resulted in a verdict for the universal opener manufacturer on the narrow grounds that the plaintiff did not contractually limit its customers to using only the purchased garage-door openers. Unfortunately, most, if not all, wireless providers have contractual provisions that limit customers to using handsets on one network only.

In a Sixth Circuit case, Lexmark Company lost against a generic printer cartridge company whose cartridges circumvented a “secret-handshake” piece of software in order to be compatible with Lexmark printers on the grounds that Lexmark’s copyrighted software was not an effective control; thus, the defendant’s circumvention did


80. Wireless Alliance Comment, supra note 5, at 4.


82. Aymes, 47 F.3d at 26; Pfortmiller, 719 F. Supp. at 1009. These cases deal with 17 U.S.C. § 117, a section allowing adaptation of software as a noninfringing use. See also Wireless Alliance Comment, supra note 5, at 8–9.

83. Wireless Alliance Comment, supra note 5, at 9.

84. Chamberlain, 381 F.3d at 1204.

85. Wireless Alliance Comment, supra note 5, at 9. This is, of course, with the unusual exception of Verizon, which will soon allow any device meeting minimum standards access to its network. See infra note 228.
not violate section 1201. No one disputes that the locking techniques employed by wireless providers are effective controls under section 1201.

Storage Technology Corp. v. Custom Hardware Engraving & Consulting offers a bit more guidance on section 1201. In this 2004 case, the Federal Circuit ruled against the plaintiffs on the ground that when an independent computer repair company bypassed security on the servers it was fixing, its actions did not intrude on any copyrights held by StorageTek, and the use of the software was noninfringing. The court concluded that even though circumvention under section 1201 did occur in the case, it was not actionable because the underlying software use was noninfringing. This interpretation of section 1201 might support the argument in favor of cell phone unlocking. The Wireless Alliance comment concludes that accessing or modifying firmware to use other networks is clearly noninfringing under Storage Tech., Pfortmiller, and Aymes. However, because the firmware also guards copyrighted ringtones, photos, videos, and games, and "there is some relationship, though attenuated, between access controls on the firmware and copyrights, StorageTek may not protect mobile phone unlockers."

In addition to the arguments about environmental and competitive impact put forth by the Wireless Alliance comment, two other reply commenters made practical arguments for the proposed exemption. Mark Crocker, a software engineer who writes code for mobile devices, argued that his inability to get an unlocked phone cost his company considerable time and money. His company needed to test its software on a particular phone and could not do so without unlocking the phone. If phones were unlocked, he argued, it would "promote the creation of new products for mobile users." This position often is taken by software engineers writing unauthorized programs

86. Lexmark, 387 F.3d at 546-47; see 17 U.S.C. § 1201(a)(1)(A) (2000) (prohibiting circumvention of "a technological measure that effectively controls access to a work") (emphasis added).
87. Storage Tech. Corp. v. Custom Hardware Eng'g & Consulting, Inc. (StorageTek), 421 F.3d 1307, 1318 (Fed. Cir. 2004).
88. Id.
89. Wireless Alliance Comment, supra note 5, at 10.
90. Id.
91. Id. at 4-6; see also Crocker Reply Comment, supra note 67, at 1-2; Weisman Reply Comment, supra note 67, at 1-2.
93. Id.
for the iPhone. Michael Weisman's reply comment echoes the complaints of hundreds of iPhone users and an argument made in the Wireless Alliance comment. Weisman explains that travelers need unlocked phones so they can use their handsets when they travel abroad. With locked phones, consumers cannot simply buy foreign SIM cards and minutes for use with their handsets. Instead, they must either activate their phones (if possible) for global calling, or buy new handsets and plans in their destination countries, both costly alternatives.

2. The Register of Copyright's Recommendation

After receiving all of the comments, reply comments, and testimony, the Register of Copyrights made an eighty-eight page recommendation on November 17, 2006. This recommendation examined both the commenting process itself and the merits of the proposed exemptions. In particular, the recommendation analyzed the proposed firmware exemption and determined that such an exemption should be granted. The Register narrowed the language of the exemption proposed by the Wireless Alliance, however; the exemption is valid only when "circumvention is accomplished for the sole purpose of lawfully connecting to a wireless telephone communication network." Jennifer Granick, one of the authors of the Wireless Alliance comment, stated, "But how useful this DMCA exemption is—I think it's a bit limited—more than I like." Indeed, this narrow language still creates liability under section 1201(a)(2) for

94. Id. at 2; See, e.g., Matt Richtel, Apple to Open iPhone Programming to Outsiders, N.Y. Times, Oct. 18, 2007, at C2.
95. Wireless Alliance Comment, supra note 5, at 4–5.
96. Weisman Reply Comment, supra note 67, at 1–2. Most regular travelers buy a local SIM card and wireless minutes for use while abroad and simply switch the SIM cards in their handsets while abroad. This, of course, requires an unlocked phone.
98. Id. at 48–53.
99. See Wireless Alliance Comment, supra note 5, at 2 (proposing the inclusion of "computer programs that operate wireless telecommunications handsets. (Mobile firmware)").
100. Register of Copyrights Recommendation, supra note 97, at 53.
an individual unlocker who publishes a method of unlocking a phone.\textsuperscript{102}

The Register's recommendation contains more than just the suggested exemption, however. Before concluding that an exemption is warranted, the Register argues (with language later quoted in at least one complaint filed against Apple and AT&T\textsuperscript{103}) that unlocking phones is noninfringing activity.\textsuperscript{104} The Register writes:

There is no evidence in the record of this rulemaking that demonstrates or even suggests that obtaining access to the mobile firmware in a mobile handset that is owned by a consumer is an infringing act. Similarly, there has been no argument or suggestion that a consumer desiring to switch a lawfully purchased mobile handset from one network carrier to another is engaging in copyright infringement or in activity that in any way implicates copyright infringement or the interests of the copyright owner. The underlying activity sought to be performed by the owner of the handset is to allow the handset to do what it was manufactured to do—lawfully connect to any carrier. This is a noninfringing activity by the user. But for the software lock protected by section 1201, it appears that there would be nothing to stand in the way of a consumer being able to engage in this noninfringing use of a lawfully purchased mobile handset and the software that operates it. Indeed, there does not appear to be any concern about protecting access to the copyrighted work itself. The purpose of the software lock appears to be limited to restricting the owner's use of the mobile handset to support a business model, rather than to protect access to a copyrighted work itself.\textsuperscript{105}

This statement strongly supports the view of unlocking advocates: accessing mobile firmware for the purpose of changing networks, not pirating the software, is noninfringing activity, and when providers lock cell phones, they do so to protect a business advantage, not copyrighted material.

Finally, it should be noted that when the Register refers to "the record," she specifically excludes comments from Tracfone Wireless and the Cellular Telecommunications Industry Association ("CTIA") because, although these industry groups knew about the comment period and the proposed exemptions, they did not file comments or replies within the stated deadlines.\textsuperscript{106} As a result, the official record for the 2006 Librarian's exemption process does not include arguments against the proposed firmware exemption because representatives of the wireless industry, for unknown reasons, failed to file their comments on time.\textsuperscript{107} As the Register of Copyrights

\textsuperscript{102} 17 U.S.C. § 1201(a)(2) (2000) (making it illegal to "offer to the public" any product or service that circumvents copyright guards).
\textsuperscript{104} Register of Copyrights Recommendation, \textit{supra} note 97, at 50–53.
\textsuperscript{105} \textit{Id.} at 50–51.
\textsuperscript{106} \textit{Id.} at 42–48. The CTIA is a wireless industry trade group representing all the major wireless providers. Its primary purpose is lobbying.
\textsuperscript{107} \textit{Id.}
opined, late filings not only would wreck the process of decisionmaking, but also would be unfair to those who had filed on time (and who would not be able to respond to the late comments).\textsuperscript{108} Perhaps the Librarian’s final decision would have been different had she considered comments from the wireless industry, but given the Register’s strong language, it seems unlikely. Even so, if the fundamental structure of the U.S. wireless system is the same in 2009 when the next exemption process will occur, it is a safe bet that wireless companies will make sure their comments are reflected in the record.\textsuperscript{109}

\textbf{C. Congressional Control: Federal Telecommunications Policy}

Though the debate over unlocking often centers on copyright law, it is actually an issue of federal telecommunications policy. Several FCC and congressional decisions over the years offer key insights into the goals of U.S. telecommunications policy and the methods used to meet those goals. This Section focuses on two key decisions—\textit{Carter v. AT&T} ("Carterfone") and the FCC’s ruling on wireless number portability—and then provides an overview of recent hearings and legislation surrounding mobile phone issues.

AT&T’s longstanding monopoly was held responsible in large part for building and maintaining nationwide telephone service. To that end, it was given broad discretion, including the power to restrict the kinds of devices consumers could use to connect to the service.\textsuperscript{110} Until the 1968 \textit{Carterfone} decision, telephone companies could restrict the types of devices used on their networks.\textsuperscript{111} Consumers were forced, for the most part, to rent identical phones from the local phone company. When Thomas Carter built a device that could take a radio transmission, connect that transmission via a base unit, and make a telephone call,\textsuperscript{112} AT&T issued a tariff under existing law to remove the device from operation and suspend or terminate service to anyone

\begin{footnotes}
\item 108. \textit{Id.} at 47.
\item 109. For an excellent summary of the reactions to the Librarian’s 2006 exemption, see Bryan Gardiner, \textit{Carriers Split over Cell-Phone Unlocking}, \textit{PC MAGAZINE}, Dec. 8, 2006, available at http://www.pcmag.com/article2/0,1895,2069318,00.asp.
\item 111. \textit{In re} Use of the Carterfone Device in Message Toll Telephone Service 13 F.C.C.2d 420 app. A (1968) [hereinafter Carterfone Decision].
\item 112. This allowed consumers to make remote telephone calls; Carter’s main customers were oil rigs. \textit{See} Kevin Maney, \textit{FCC Ruling Changed Phone industry in 1968; It Could Happen Again Today}, \textit{USA TODAY}, Jan. 31, 2007, at 3B (discussing Carter’s invention).
\end{footnotes}
using the device. Thomas Carter filed an antitrust action against AT&T because all local networks were threatening, suspending, or disconnecting customers using the Carterfone. The Texas district court passed on the antitrust issues, essentially declaring that the issues were under the purview of the FCC. The Fifth Circuit Court of Appeals agreed, affirming the lower court’s decision on the grounds that the FCC had “primary jurisdiction” over the issues involved. Before any other appeals were made, the FCC held a public hearing to discuss the issues involved in Carterfone.

In a groundbreaking move, the FCC ruled that AT&T's tariff that prevented other devices from connecting to their network would be “unreasonable and unduly discriminatory” in the future and had been “unreasonable, discriminatory, and unlawful in the past.” The FCC had the power to strike down such regulations under the Communications Act of 1934, which in section 205 specifically “authorized and empowered” the FCC to “determine and prescribe . . . what classification, regulation, or practice is or will be just, fair, and reasonable, to be thereafter followed . . . .” In this way, the FCC decided that customers who wanted to use an interconnecting device on the phone system would be allowed to do so as long as “the interconnection does not adversely affect the telephone company's operations or the telephone system’s utility for others.”

At least a few commentators believe that a new Carterfone-type decision is needed for the digital age. In a January, 2007, article in USA Today, journalist Kevin Maney interviewed Chairman Martin of the FCC about the applicability of the Carterfone decision to modern

113. Carterfone Decision, supra note 111, at 421; Maney, supra note 112. A copy of the tariff issued by AT&T is attached to the anti-trust case filed by Thomas Carter against AT&T. Carter v. AT&T, 365 F. 2d 486, 492 n.5 (5th Cir. 1966). In pertinent part, the tariff reads, “In case any such unauthorized attachment or connection is made, the Telephone Company shall have the right to remove or disconnect the same; or to suspend the service during the continuance of said attachment or connection; or to terminate the service.” Id.


115. Carter, 250 F. Supp. at 192 (declaring that the “technical and complex” issues were within the “special competence and ‘expertise’” of the FCC and that any court action might “disrupt that agency's delicate regulatory scheme and throw existing rate structures out of balance”).

116. Carter, 365 F. 2d at 492.

117. Carterfone Decision, supra note 111, at 421.

118. Id. at 423.


120. Carterfone Decision, supra note 111, at 424.
Writing that "[m]aybe U.S. consumers need another Carterfone [sic] to bust open the cell phone industry," Maney quotes the FCC chairman as saying, "There would be some real consumer savings on the wireless (cellphone) side." The article also quotes Danny Briere, CEO of Telechoice, and J.P. Auffret, a professor at George Mason University's business school, who argue that current "bundling" policies (i.e. the hindrances to switching wireless carriers and networks being strictly access-controlled) retard innovation and competition. Maney predicts that "the only way cell phones will get unbundled from the networks is if the government makes it happen." He also notes that, although FCC Chairman Martin did not commit to such an action, the chairman was thinking about it. Maney concludes, "As happened after Carterfone [sic], innovation would doubtlessly flourish."

Less than two weeks after the iPhone went on sale, the House Subcommittee on Telecommunications and the Internet held a hearing entitled, "Wireless Innovation and Consumer Protection." Holding up an iPhone, Chairman Markey introduced the hearing:

Just over a week ago, people stood in line, slept overnight, so that they could get one of these: an iPhone. The iPhone highlights both the promise and the problems of the wireless industry today. On the one hand, it demonstrates the sheer brilliance and wizardry of the new technologies which are available in wireless engineering today. . . . But at the same time, the advent of the iPhone raises questions about the fact that a consumer can't use this phone with other wireless carriers and that consumers, in some areas of the country, where AT&T doesn't provide service, that they can't use it, actually, in some neighborhoods at all.

This hearing, held immediately after the iPhone's release, dealt with many issues of the wireless industry: early termination fees, restrictions on innovation, the 2008 UHF spectrum auction, and
most importantly, handset locking and device portability. The subcommittee even touched on the possibility that a new Carterfone doctrine should be applied to today’s wireless market. One witness especially, Professor Timothy Wu, focused on consumer issues in the modern wireless marketplace. Elsewhere, Professor Wu also has called for a new “Wireless Carterfone” doctrine. Professor Wu opined,

You know, imagine the situation where if you bought a television set, it had cable service, you decide, “I’m done with cable; I’m moving to satellite,” next thing you know your... television stopped working. Now, that would be completely unacceptable. When people buy a television, they think, “This is my television; I own it. If I want to move to broadcast, fine. If I want to move to cable: fine, satellite: fine. This is my property, I do with it what I want.” Telephones are nothing like that. They are locked to carriers, they are disabled from switching, and it is a situation which has become unacceptable, and will become increasingly unacceptable when we see companies like Apple trying to enter this market, but being forced to be hamstrung and disable their devices from the full kind of compatibility that they should have. And so... the point of Wireless Carterfone is addressing these issues. And the most important rule for addressing these issues is rules against locking and rules against blocking. Device portability must be allowed, and these phone companies should not be allowed to block applications that people want to use.

Given the testimony of Professor Wu and the comments of several members of the subcommittee, including the chairman, it is fair to say that the consumer issues of handset locking and device portability are on Congress’s radar. Indeed, consciousness of these issues, due in part to the introduction of the iPhone and the furor it caused, may be provoking Congress and the FCC to take action. Indeed, this hearing is not the only time in which Congress and the FCC have taken action to protect consumers and open up competition in the telecommunications marketplace.

The FCC’s 1996 Ruling on Number Portability and its later orders applying that decision to wireless carriers promoted openness, competition, and innovation much the same way the Carterfone decision did. In the Telecommunications Act of 1996, Congress passed the first major revision of U.S. telecommunications policy in over sixty years. Included in the Act are provisions designed to facilitate competition, deregulation, and consumer choice by requiring

131. Id.
132. Id.
133. Id.
136. Portability First Order, supra note 79, at 8377; Portability Third Order, supra note 74, at 14,972.
all local telephone service operators to allow number portability. These provisions were designed to lower barriers to switching carriers since "the ability to change service providers is only meaningful if a customer can retain his or her local telephone number." 

The Act originally required providers to comply by June 30, 1999; however, several extensions and challenges delayed the implementation of number portability for wireless carriers until November 24, 2003. Not surprisingly, the CTIA and wireless companies fought these rules tooth and nail because refusing to offer customers number portability was one way wireless providers maintained subscribers and market share. In spite of these companies' efforts, and after numerous FCC decisions and at least one appellate opinion, number portability for wireless carriers became a reality. Motivated as they were to "provide consumers greater choices and better quality in their telephone, cable, and information services," Congress and the President were delighted when number portability became a reality for the nation's rapidly growing wireless network.

The current Congress has not proposed a solution that would ameliorate the effects of handset locking. Senate Bill 2033, the Cellphone Consumer Empowerment Act of 2007, takes action against early termination fees and adhesive contracts but only calls for a study by the FCC analyzing:

(1) the practice in the United States of handset locking;

138. 47 U.S.C. § 251(b)(2). Number portability is the ability to keep one's phone number when switching carriers. For the exact definition of "number portability" as supplied by the Act, see 47 U.S.C. § 153(30). The FCC also initiated a feasibility study for number portability and issued its rules and regulations implementing the law. See Portability First Order, supra note 79, at 8354-55.

139. Portability First Order, supra note 79, at 8354 n.8.


141. After losing, however, at least some carriers publicly embraced the change. See, e.g., Matt Richtel, In a Reversal, Verizon Backs Rule to Keep Cell Numbers, N.Y. TIMES, June 25, 2003, at C1.

142. See, e.g., Mike Musgrove, Cell Users Can Keep Numbers; Court Affirms FCC Rule, WASH. POST, June 7, 2003, at E1 (explaining how a federal court decision requiring number portability affects both providers and consumers); Richtel, supra note 141, at C1 (describing some providers' concerns with number portability).


144. See generally Kessing, supra note 140; Musgrove, supra note 142; Richtel, supra note 141.

(2) the practice of handset portability in European and Asian markets;

(3) the effects on competition and the effect of consumer behavior, of the practices described in (1) and (2); and

(4) potential methods of regulating handset locking and portability in the United States.”

Although an insightful report would be a step in the right direction, the bill seems destined to die in committee.147 The only other piece of legislation applicable to the situation is the Digital Media Consumers’ Rights Act of 2005, which called for an amendment to section 1201(c)(1): “[I]t is not a violation of this section to circumvent a technological measure in order to obtain access to the work for purposes of making noninfringing use of the work.”148 This bill has already died in committee.

Given the conclusion of the Register of Copyrights that “[t]he purpose of the software lock appears to be limited to restricting the owner’s use of the mobile handset to support a business model” instead of actually protecting copyrighted material,149 the cell phone locking question may yet be governed by existing or future telecommunications policy instead of the arcane machinations of copyright law. Because the FCC and Congress have failed to address the locking issue, however, both consumers and corporatons are pursuing the issue vigorously in venues across the United States.

III. HANDSET LOCKING LITIGATION

Consumers and corporations began litigating the issues surrounding handset locking long before the Librarian’s controversial anticircumvention exemption, and have continued to do so afterwards. On the one hand, consumers such as iPhone purchasers have come to expect complete ownership of the handsets they buy and freedom to choose the networks they use. These consumers see the practices of wireless providers as unfair and unjust. On the other hand, wireless providers and handset makers, especially Apple, want to protect their copyrighted firmware and maintain the profitability of the wireless business. Part A will detail consumers’ lawsuits against and

149. Register of Copyrights Recommendation, supra note 97, at 50–51.
settlements with wireless providers, and Part B will examine corporate lawsuits against cell phone unlockers.

A. Free My Phone!

_The problem with the iPhone is that the iPhone with AT&T is kind of a “Hotel California” service: you can check out anytime you like, but you can never leave._

- Congressman Edward Markey, July 11, 2007

Given the rapid proliferation of cell phones in the late twentieth and early twenty-first centuries, lawsuits arose regarding cell phone service, fees, contracts, and handset locks. Even before the Librarian passed the anticircumvention exemption with respect to cell phones, consumers and corporations initiated a wave of handset locking litigation. Consumers filed suit primarily in California because of the broadly construed consumer protection and unfair business practice laws in that state, including the Consumer Legal Remedies Act (“CLRA”) and the Unfair Competition Law (“UCL”). These suits named as defendants the five major wireless carriers: Sprint, AT&T, Cingular, Verizon, and T-Mobile.

Consumers filed suit against these carriers as early as 2003, three years before the Librarian’s exemption. Many of these lawsuits complained of unfair termination fee practices or unconscionable contract clauses. A handful of lawsuits filed in


151. *See supra* note 30.


155. *See supra* note 152.

California between March 12, 2003, and February 3, 2004, directly challenged the carriers' policies against handset unlocking under the California Civil Code and the California Business and Professions Code.

Today, these cases are part of a coordinated set of cases in California state court known as the Cellphone Termination Fee Cases. Although the cases deal with various issues, several of them involve wireless providers who were sued specifically over their handset locking practices. Through the Cellphone Termination Fee Cases, California likely will forge new rules of interaction between consumers and wireless providers. The first stop on the road to settlement or trial in many of these cases has been litigation over motions to compel arbitration.

Most, if not all, wireless contracts include clauses in which customers agree to arbitrate disputes. Thus, when the plaintiffs in


157. These included Sprint, AT&T, Cingular, Verizon (doing business as Cellco), and T-Mobile.

158. See supra note 154. According to USA Today, these five (now four) wireless providers represent 88.1% of the wireless market. Cauley, supra note 10, at 1B.

159. CAL. CIV. CODE §§ 1770(a)(5)-(7), (9), (14), (19) (West 2008); CAL. BUS. & PROF. CODE §§ 16720, 16727, 17200-17210 (West 2008).


161. See Memorandum of Points and Authorities in Support of Defendant's Motion to Compel Arbitration at 3–7, Cellphone Termination Fee Cases, No. 4332 (Cal. Super. Ct. Alameda County July 15, 2005) (detailing T-Mobile's arbitration clauses and arguments); Memorandum of Points and Authorities in Support of Motion of Defendant Cingular to Compel Arbitration at 4–5,
the handset unlocking cases (a subset of the *Cellphone Termination Fee Cases*) filed suit, service providers moved to compel arbitration.\textsuperscript{162} Consumers have been successful in fending off these challenges. AT&T's motion to compel arbitration was denied and the clause compelling arbitration and banning class actions was struck down as unconscionable by the California Court of Appeals on September 30, 2005.\textsuperscript{163} The U.S. Supreme Court denied AT&T's petition for certiorari on June 19, 2006, letting the lower court's decision stand.\textsuperscript{164} Similarly, a California Court of Appeals denied Cingular's motion to compel arbitration and declared arbitration provisions in customer contracts unconscionable on October 3, 2005.\textsuperscript{165} The U.S. Supreme Court denied Cingular certiorari on June 5, 2006.\textsuperscript{166} On June 22, 2007, a California Court of Appeals struck down T-Mobile's contract provisions as unconscionable and denied T-Mobile's motion to compel arbitration.\textsuperscript{167} This time, the California Supreme Court denied review, letting the appellate court's decision stand.\textsuperscript{168} Since clearing these hurdles, the lawsuits have moved forward.

Though they were filed against different providers, all six complaints allege similar abuses with identical bases for recovery. *Meoli v. AT&T Wireless Services, Inc.*, the first suit filed, is a class action embodying all of the issues involved in the five subsequent cases.\textsuperscript{169} The most recent amended complaint claims that AT&T makes material representations that special software is needed to make a phone work with AT&T's service.\textsuperscript{170} The complaint alleges that

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\textsuperscript{162} Notice of Motion and Petition and Motion of Defendant T-Mobile USA, Inc. to Compel Arbitration, Cellphone Termination Fee Cases, No. 4332 (Cal. Super. Ct. Alameda County July 15, 2005); Notice of Motion and Motion of Cingular to Compel Arbitration, Cellphone Termination Fee Cases, No. 4332 (Cal. Super. Ct. Alameda County Nov. 4, 2003); Order, Cellphone Termination Fee Cases, No. 4332 (Cal. Super. Ct. Alameda County July 1, 2003).

\textsuperscript{163} Id.


\textsuperscript{168} Id. at note 33.

\textsuperscript{169} Id. at 1, 4-7. Because the *Meoli* complaint contains all of the legal arguments of the other subsequent complaints, it will serve as the basis for discussion.

\textsuperscript{170} Id. at 7.
AT&T materially misrepresents the condition of the phones it sells as new and unaltered, and its packaging misleads consumers to believe that the phones are compatible with other networks.171 The complaint further alleges that AT&T makes these misrepresentations to conceal that AT&T locks its handsets, that the handsets work with other carriers’ services, that the only limits on use are put in place deliberately and systematically by AT&T, and that handsets can be unlocked simply in a matter of seconds.172

Essentially, Meoli contends that AT&T cripples the phones it sells, untruthfully passes the phones off as new, hides the changes from consumers, misleads consumers into believing that phones cannot be used on other networks, and refuses to restore the phones.173 The harms that Meoli claims for herself and her class are numerous: she claims that the AT&T handsets are of diminished value and that the class members are discouraged from switching carriers, may incur costs to unlock phones, and may lose the use of their phones if they switch carriers.174 The complaint bases its arguments on two crucial parts of California code: California Civil Code section 1770 and California Business and Professions Code sections 16720, 16727, and 17200 to 17210.175

California Civil Code section 1770 is part of the Consumers Legal Remedies Act, passed in 1970.176 The Meoli complaint lists six subsections that it claims AT&T violated:

(a)(5), representing goods as having qualities that they do not have;

(a)(6), representing deteriorated or altered goods as new;

(a)(7), representing goods as a particular standard, quality, or grade if they are not so;

(a)(9), advertising goods intending not to sell them as advertised;

(a)(14), representing a transaction as including rights, remedies, or obligations which the transaction lacks (or which are illegal); and

(a)(19), inserting an unconscionable provision in a contract.177

171. Id.
172. Id. at 8.
173. Id. at 4–9.
174. Id. at 9.
175. CAL. CIV. CODE §§ 1770(a)(5)–(7), (9), (14), (19) (West 2008); CAL. BUS. & PROF. CODE §§ 16720, 16727, 17200–17210 (West 2008).
177. CAL. CIV. CODE §§ 1770(a)(5)–(7), (9), (14), (19) (West 2008).
In addition, the complaint alleges that AT&T violated sections 17200, 16720 and 16727 of the California Business and Professions Code. In 1933, the state legislature added section 17200, better known as the Unfair Competition Law ("UCL") to the Business and Professions Code. The UCL enjoins corporations and people and holds them liable for unfair competition, which is defined in section 17200 as "any unlawful, unfair, or fraudulent business act or practice and unfair, deceptive, untrue or misleading advertising...." Counts I, II, and III of the Meoli complaint allege that AT&T is subject to and violated the fraudulent, unlawful, and unfair prongs of the UCL, respectively.

Finally, the complaint alleges in Count II that AT&T violated the UCL's "unlawful" prong by conspiring with other Providers to restrict trade by locking handsets in violation of Business and Professions Code section 16720 and unlawfully tying together wireless handsets and services in violation of section 16727. It also alleges that AT&T ran afoul of the UCL's "unlawful" prong by violating 15 U.S.C. section 45, which gives the Federal Trade Commission ("FTC") power to declare that certain actions are "unfair methods of competition" and "unfair or deceptive acts." Lastly, the complaint alleges that AT&T violated the UCL's "unlawful" prong by failing to honor the FCC bundling rule, which states that in order to offer cellular service bundled with a phone, a company must also offer cellular service independently on a nondiscriminatory basis. The complaint alleges that AT&T does not offer service unbundled from a phone.

Taken together, this litany of complaints against AT&T seems persuasive. However, Meoli has neither settled nor gone to trial.

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180. CAL. BUS. & PROF. CODE § 17200 (West 2008).
181. AT&T Complaint, supra note 30, at 13–18. "Fraudulent" claims are in paragraphs 60–61; "unlawful" claims are in paragraphs 64–71; and "unfair" claims are in paragraphs 74–81.
182. CAL. BUS. & PROF. CODE §§ 16720, 16727 (West 2008) (defining "trusts" and making it illegal to sell goods with the agreement that the purchaser will refrain from using a competitor's goods, respectively). The complaint is alleging, by implication, that AT&T has violated California Business and Professional Code section 16726, which holds that "[e]xcept as provided in this chapter, every trust is unlawful, against public policy and void." Id. § 16726.
184. FCC Bundling Ruling, supra note 73, ¶ 6.
185. AT&T Complaint, supra note 30, at 18.
although several similar and related cases have settled. These settlements could be harbingers of things to come for AT&T and T-Mobile. Verizon settled both of its handset locking suits on June 11, 2007. In the settlement agreement, Verizon agreed to a twenty-four month injunction during which it would set the software lock code to the default. This setting allows consumers to unlock their phones easily for use on another network. Verizon also agreed to insert clauses into user manuals and customer-service manuals, and to disseminate information to retail stores about unlocking phones and the use of unlocked phones on Verizon’s network.

Not long after Verizon settled its handset-locking lawsuits, Sprint settled a suit of its own, much to the media’s acclaim. As part of the settlement, Sprint agreed to provide unlocking codes to customers, provided that they can authenticate their accounts and are not in default of any payment, have closed accounts, or have pre-pay, global, or iDEN phones. Additionally, Sprint promised to inform its customer service representatives and retail outlets of the change and to update its owner’s manuals. Finally, Sprint agreed to allow other approved devices on its network.

The Sprint settlement was hailed by the press as signaling “the start of more flexibility for cellphone customers switching carriers.” Indeed, the Verizon and Sprint settlements, along with the decisions

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188. Verizon Settlement Agreement, supra note 187, at 8 (excluding pre-pay and Global phones). This lock code is known as an SPC code and the default setting is either 000000 or 123456.
189. Id. at 8–9.
192. Id. at 9–10.
193. Id.
denying orders to compel arbitration in the AT&T, Cingular, and T-Mobile cases, all point toward a trend among wireless providers to offer open networks and unlock phones quickly and more frequently.\textsuperscript{195} As portentous as the settlements may be, the November 27, 2007, announcement that Verizon planned to open up its wireless network to “[a]ny device that meets the minimum technical standard” required to access the network is just as telling.\textsuperscript{196} Verizon’s openness and the Verizon and Sprint settlements signal a change in the wireless model that likely will end with providers selling unlocked phones or unlocking them after a short time, thereby allowing most phones and devices to access their networks. These changes would save consumers the cost of purchasing new cell phones, would encourage innovation by handset and device manufacturers by decoupling device sales from wireless access sales, and would spur increased competition among the wireless carriers, leading to better service and prices for consumers.

While the Verizon and Sprint settlements are a positive sign of things to come, these agreements are not solutions to the problem of unlocking: they are too limited in scope. Although it purports to unlock its phones, Sprint still has multiple conditions that must be met before phones are unlocked.\textsuperscript{197} Moreover, both settlements have many exemptions.\textsuperscript{198} It is clear that, though the settlements are a positive first step, a larger and more comprehensive solution is needed to protect consumers.

In addition to the \textit{Cellphone Termination Fee Cases}, at least two lawsuits arose soon after the introduction of the iPhone that specifically relate to that product.\textsuperscript{199} Both cases are class actions and rely on many of the same grounds as the other handset locking
cases. In addition, the lawsuits allege antitrust violations and breaches of the Computer Fraud Abuse Act as a result of some unlocked iPhones being “bricked.”

B. Copyright, Trademark, and Contract Violations: The Wireless Industry Responds

A short time after consumers filed lawsuits in California, corporations such as Tracfone Wireless, Nokia, and Virgin Mobile successfully sued individuals and companies that unlocked and resold cell phones. Although these lawsuits were argued all over the United States, they were concentrated in Florida, Texas, and California. As a corporate plaintiff, Tracfone sued unlockers on the


201. See supra note 200 (alleging violations of the Computer Fraud Abuse Act, 18 U.S.C. § 1030 (2000)). “Bricking” is when products, iPhones in this case, become disabled because of modifications or, here, a software update sent out by Apple. In some cases, the phones become irreversibly disabled and about as useful as a brick. Douglas Adams presciently wrote of the concept of a “bricked” computer in his 1987 novel, Dirk Gently’s Holistic Detective Agency:

“Well, you’re absolutely right, officer. The thing is hopeless. It’s the major reason the original company went bust. I suggest you use it as a big paperweight.”

“Well, I wouldn’t like to do that, sir,” the policeman persisted. “The door would keep blowing open.”

“What do you mean, officer?” asked Richard.

“I use it to keep the door closed, sir. Nasty draughts down our station this time of year. In the summer, of course, we beat suspects round the head with it.”


basis of section 1201,\textsuperscript{204} making these suits particularly important to the issues of cell phone unlocking under the DMCA.\textsuperscript{205}

After filing only three such lawsuits in 2005 and 2006,\textsuperscript{206} Tracfone Wireless went on the warpath, filing at least twenty federal lawsuits directed at cell phone unlockers in 2007.\textsuperscript{207} These later suits were predicated on the company's success in three crucial early lawsuits: \textit{Tracfone Wireless, Inc. v. Sol Wireless, Tracfone Wireless, Inc. v. Pan Ocean Communications}, and \textit{Virgin Mobile v. Iser.}\textsuperscript{208} All

\textsuperscript{204}Tracfone v. Dixon, 475 F. Supp. 2d 1236, 1237 (M.D. Fla. 2007); Tracfone v. Sol Wireless, No. 05-23279 (S.D. Fla. filed Dec. 21, 2005).

\textsuperscript{205}Virgin Mobile has been suing cell phone resellers for years, but although it has successfully won injunctions in perhaps every lawsuit it tries, these suits offer less guidance to cell phone unlocking law than those of Tracfone. See Complaint at 13–14 n.1, \textit{Virgin Mobile v. Blue Oceans Distrib.}, No. 1:06-cv-00511-EJL (D. Idaho Dec. 19, 2006) (naming at least eleven cases in eight different states where Virgin Mobile has won injunctive relief from resellers). This is because Virgin Mobile does not file suit on the basis of section 1201. Several of the suits mention the section, but since it is not a basis on which claims are based, courts do not rule on the applicability of section 1201 to unlockers. See Complaint at 12–13, 17–18, \textit{Virgin Mobile v. Iser}, No. 06-CV-0434-CVE-PJC (N.D. Okla. Aug. 23, 2006) (mentioning section 1201 in several paragraphs but not as the direct basis for a claim); Complaint at 11, 14, 17, \textit{Virgin Mobile v. World MMP}, No. 4:06-cv-024 (S.D. Tex. July 24, 2006) (mentioning section 1201 in several paragraphs but not as the direct basis for a claim).


three lawsuits resulted in final judgments and permanent injunctions against cell phone unlockers. Because of the strength of these victories, Tracfone settled at least seven of its 2007 lawsuits less than a year after they were filed.

Sol Wireless and Pan Ocean Communications, suits filed less than a week apart, allege that the defendants bought Tracfone Wireless prepaid phones in bulk, removed them from the packaging, modified or erased the firmware so as to unlock the phones and disable them from reaching the Tracfone network, and resold them in different, Nokia-branded packaging. Tracfone sued the respective defendants for federal trademark violations, unfair business practices, and (most importantly) violations of section 1201 of the DMCA. Tracfone alleged both illegal circumvention of a technology designed to protect a copyrighted work and trafficking in the service by providing the product of illegal circumvention to the public. Thus, when District Judge Altonaga entered final judgments and permanent injunctions against Sol Wireless on February 27th, 2006, and Pan Ocean Communications on August 7th, 2006, she specifically


interpreted the strictures of sections 1201(a)(1)-(2) against cell phone unlockers.\textsuperscript{215}

The injunctions prohibit the defendants from "engaging in the alteration or unlocking of any TracFone phones" or "facilitating or in any way assisting" others who the defendants know, or should have known, are "engaged in altering or unlocking any TracFone phone."\textsuperscript{216} Similarly, in the Virgin Mobile suits, the injunctions bar the defendants from "tampering with, altering, erasing, disabling, or otherwise modifying the software"\textsuperscript{217} or "tampering with the software"\textsuperscript{218} of Virgin Mobile phones or "inducing or soliciting" others to do so.\textsuperscript{219}

Likely based on the success of these early suits,\textsuperscript{220} the remainder of Tracfone's lawsuits include actions based on sections 1201(a)(1)-(2).\textsuperscript{221} In the only published case of the Tracfone series, \textit{Tracfone Wireless, Inc. v. Dixon}, a Florida district court judge evaluated the claims under sections 1201(a)(1)-(2) and found specifically that the November 2006 exemption by the Librarian of Congress did not apply.\textsuperscript{222} As he stated,

\begin{quote}
The Court finds that this new exemption does not absolve the Defendants of liability for their violations of the DMCA as alleged in Counts III and IV of TracFone's Complaint, because the Defendants' conduct as alleged in this case does not come within the scope of the new exemption. The Defendants' misconduct and involvement in unlocking
\end{quote}
TracFone handsets was for the purpose of reselling those handsets for a profit, and not "for the sole purpose of lawfully connecting to a wireless telephone communication network." Because the exemption does not apply to the conduct alleged in this case, there is no need for the Court to address the validity of the exemption or the circumstances surrounding its enactment.\(^\text{223}\)

This likely was welcome news to Tracfone, whose attorney said, "We were concerned that the decision was susceptible to an interpretation that would allow criminals to use that exemption as a shield to avoid civil liability."\(^\text{224}\)

It seems on the basis of \textit{Dixon} that the Librarian's exemption has no real teeth.\(^\text{225}\) Though it means to allow consumers to unlock cell phones and use them on other networks, the decision by the \textit{Dixon} court declines to extend that exemption in a way that protects those who actually perform the unlocking.\(^\text{226}\) The fact that Tracfone specifically sued \textit{resellers} makes the legal situation even murkier; the provider has not yet sued a company or individual that takes customers' existing cell phones and unlocks them for use on another network (or gives consumers the tools to do so). Such a situation would push the Librarian's exemption to the limit of comprehension. In that scenario, if such an entity were found liable, the exemption would be rendered meaningless. An exemption granting protection for unlocking cell phones by individual consumers would not apply to those technically skilled enough actually to do the unlocking. Thus, the only people legally able to unlock phones would be ordinary consumers, few of whom have the knowledge and tools necessary to unlock a phone. Given the outcome of a few key Tracfone cases, however, and the eagerness with which other defendants are settling existing cases, courts may never resolve whether non-consumer unlockers are protected by the exemption. If a court never confronts the internal contradictions of the DMCA in such a case, existing precedent supports the interpretation that unlockers are liable under the DMCA, the 2006 exemption notwithstanding.

\section*{IV. Analysis and Solutions}

This Note argues that cell phone unlocking does not belong in the realm of copyright policy. Given the DMCA's origins, the congressional debates, and the analyses of the Register of Copyrights and various commentators, it is clear that the application of section

\begin{itemize}
\item 223. Id.
\item 224. Kravets, \textit{supra} note 101.
\item 225. \textit{Dixon}, 475 F. Supp. 2d at 1238.
\item 226. Id.
\end{itemize}
1201 to issues of cell phone unlocking is unplanned and incidental. Contrast this ill-fitting regime with the steady and consistent decisions of Congress and the FCC regarding competition and consumer rights in telecommunications policy. This policy history favoring consumer protections, innovation, and competition fits more naturally with the analysis of the problem than U.S. copyright law. With the combination of unfair business practices alleged in the California lawsuits and the settlement agreements on the books, the trend in cell phone unlocking is moving quickly towards fewer barriers between networks and fewer obstacles to consumers unlocking phones.

Part A of this Section analyzes the trends in telecommunications policy and copyright law with respect to cell phone unlocking. The Section argues that trends are leading toward unlocked phones and open networks. Part B of this Section critically analyzes the consumer protection and rights arguments from three copyright cases—Lexmark International Inc. v. Static Control Components; Chamberlain Group, Inc. v. Skylink Technology, Inc.; and Storage Technology Corp. v. Custom Hardware Engraving and Consulting (“StorageTek”)—and available literature in the event that the unlocking dispute carries on under copyright law. It concludes that copyright law regarding unlocking needs more consistency to combine the different arguments into a cohesive whole. Finally, Part C examines solutions to the problem of locked cell phones and lays out a dual framework for solving the problem. This framework is divided into a conservative and an active approach, with the conservative approach advocating an amendment to the DMCA and the active approach utilizing a congressional act or FCC decision to remove the problem of cell phone unlocking from the domain of copyright law altogether.

A. Trends in Telecommunications and Copyright Law

Notwithstanding the Tracfone cases, the prospects for the remaining handset unlocking suits in California are positive. Both Sprint and Verizon already have settled, agreeing in some limited form to unlock phones and open their networks.\(^227\) The other providers may settle the same types of cases. Verizon has also committed to opening its network to any device meeting minimum standards.\(^228\)

\(^{227}\) See supra notes 194–201 and accompanying text.
\(^{228}\) See supra note 196 and accompanying text.
Only a single Tracfone case, Dixon, includes a published decision;\textsuperscript{229} almost all of the others have settled.

The Tracfone cases, while numerous, do not represent the final word on the application of the DMCA and section 1201 to phone unlocking. Though section 1201 is discussed as the grounds for the complaint and the Librarian's exception is discounted as a defense, the reality is that phone resellers are open to a litany of complaints, mostly having to do with trademark infringement and dilution.\textsuperscript{230} Section 1201 is not the central focus of these cases. It is clear that the Librarian's exemption still protects individual unlockers.

It remains unclear what the outcome would be if a non-reselling unlocker were sued. If one of the iPhone development team hackers or another such individual who publishes how-to guides or software to unlock phones were sued, Lexmark, Chamberlain, and StorageTek should be interpreted to protect that activity by implication from the exemption for personal unlocking. As will be discussed below, protection for those who actually perform cell phone unlocking is a logical, necessary, and precedented step when it comes to section 1201 anticircumvention jurisprudence.\textsuperscript{231}

On the telecommunications side, Congress and the FCC have long been committed to increasing competition and protecting consumers. Though sometimes maddeningly slow, this policy-making process has resulted in more innovation and consumer choice, as demonstrated by Carterfone in 1968, the 1992 FCC bundling ruling, the Telecommunications Act of 1996, and the FCC's ruling on number portability. These decisions show that Congress and the FCC seek to destroy anticompetitive barriers and protect consumer choice. Perhaps even more enshrined, especially by the Subcommittee on Telecommunications and the Internet, is the goal of spurring innovation.\textsuperscript{232} Given the FCC's history of consumer protection, including the fact that the 2008 auction of the 700 Megahertz spectrum included a rider mandating network openness for whomever purchased the spectrum (once a reserve price had been met),\textsuperscript{233} a

\textsuperscript{229} 475 F. Supp. 2d 1236 (M.D. Fla. 2007).
\textsuperscript{231} See infra Section IV.B.
\textsuperscript{232} Wireless Innovation and Consumer Protection, supra note 128.
congressional or FCC mandate for opening networks and making available unlocked phones seems possible in the next few years. Such a decision would bring the United States into line with most other countries in the world, which generally have embraced (and sometimes mandated) open networks and unlocked phones in their wireless networks.\textsuperscript{234}

\textbf{B. Consumer Rights and Protections: Copyright Law and Consumer Products}

DMCA jurisprudence is sparse, even though ten years have passed since the introduction of the Act.\textsuperscript{235} In the last few years, however, several cases, including two out of the Court of Appeals for the Federal Circuit and one out of the Sixth Circuit, have dealt with the anticircumvention provisions of section 1201.\textsuperscript{236} Though decided on narrow, fact-specific grounds offering no direct hope to cell phone unlockers,\textsuperscript{237} at least two of these cases do offer a guide to the evolving and complicated copyright regime and the application of anticircumvention rules.\textsuperscript{238} The FCC or Congress should act in the arena of telecommunications law to provide the broadest, fairest, and most consistent solution to the unlocking problem. If, however, the government fails to act, then consumers and consumer advocates must continue to fight unlocking battles on copyright grounds.

The essential holding in Chamberlain is that the plaintiff failed to prove that it had not authorized consumers to use universal garage-door openers with its product.\textsuperscript{239} The Court of Appeals for the Federal Circuit in that case embarked upon a detailed and thorough statutory analysis of section 1201.\textsuperscript{240} Essentially, the court distinguished between access and infringement by pointing out that although the

\begin{footnotesize}

\textsuperscript{235} See Chamberlain Group, Inc. v. Skylink Tech., Inc., 381 F.3d 1178, 1185 (Fed. Cir. 2004) (noting that, in 2004, no circuit except the 2nd had ever construed 17 U.S.C. § 1201(a)(2) (the anti-circumvention provision), and that the case involved only First Amendment issues, not "an application of the statute to case-specific facts").

\textsuperscript{236} Chamberlain, 381 F.3d at 1182–83; Lexmark Int’l Inc. v. Static Control Components, 387 F.3d 522, 528–29 (6th Cir. 2004); Storage Tech. Corp. v. Custom Hardware Eng’g & Consulting (StorageTek), 421 F.3d 1307, 1318 (Fed. Cir. 2004).

\textsuperscript{237} See supra notes 67–74 and accompanying text.

\textsuperscript{238} As discussed above, Lexmark concludes that access to the program was not effectively controlled since the user was free to access and copy it. Lexmark, 387 F.3d at 547. Since phone locks do in fact effectively control access to the phone’s firmware according to the court’s definition, this case is the least helpful of the three. Id. at 546–49.

\textsuperscript{239} Chamberlain, 381 F.3d at 1204.

\textsuperscript{240} Id. at 1192–1204.
\end{footnotesize}
DMCA created new liability solely for unauthorized accessing of a copyrighted work, there must be a "critical nexus between access and protection"; the copyright owner must show that the unauthorized access that section 1201 prohibits actually imperils a right owned by the copyright holder.\textsuperscript{241} If the unauthorized access only allows the consumer to exercise a right he holds (e.g. the right to use the copy or fair use), then the prohibitions of section 1201 do not apply.\textsuperscript{242} Essentially, the court blends access and infringement, holding that consumers cannot be held liable for unauthorized access if the copyright holder cannot also show that there has been copyright infringement of some kind.\textsuperscript{243} This conclusion stands in stark contrast to the arguments of the copyright holder, who argued that mere unauthorized access (or trafficking in technology that facilitated unauthorized access) created per se liability under section 1201.\textsuperscript{244}

This decision is incredibly important for consumer advocates who hope to win cases grounded in copyright. One commentator concludes that the decision might be important for users of copyrighted film and music because the circumvention controls in section 1201 cannot be invoked if the consumers are conducting noninfringing activity, such as transferring content onto different platforms.\textsuperscript{245} In the same way, if consumer advocates establish in court that cell phone unlockers did not engage in infringing activity by unlocking the phones (a more or less defensible position, depending on what the unlocker did to the software in order to switch the phone's network), then Chamberlain might support an argument that section 1201 does not make such unlockers liable and, without section 1201(a) circumvention or copyright infringement, the trafficking provisions cannot apply.\textsuperscript{246}

StorageTek, coming after Chamberlain in the Court of Appeals for the Federal Circuit, dealt with a repair company that had to make a temporary copy of copyrighted code and breach software security in order to repair computers.\textsuperscript{247} After finding that the repair provisions of 47 U.S.C. section 117(c) did apply as a defense to infringement, the

\begin{thebibliography}{9}
\bibitem{241} Id. at 1204.
\bibitem{242} Id. at 1202–04.
\bibitem{243} Id. at 1204.
\bibitem{244} Id. at 1197.
\bibitem{246} Chamberlain, 381 F.3d at 1204.
\bibitem{247} Storage Tech. Corp. v. Custom Hardware Eng'g & Consulting (StorageTek), 421 F.3d 1307, 1309–10 (Fed. Cir. 2004).
\end{thebibliography}
court addressed the DMCA claim. Relying on *Chamberlain*, the court stated, "A copyright owner alleging a violation of § 1201(a) consequently must prove that the circumvention of the technological measure either 'infringes or facilitates infringing a right protected by the Copyright Act.'"\(^{248}\) The court concluded that since the defendant's "activities do not constitute copyright infringement or facilitate copyright infringement, StorageTek is foreclosed from maintaining an action under the DMCA."\(^{249}\) Thus, both *Chamberlain* and *StorageTek* offer hope to consumer advocates seeking the right to unlock cell phones. If these advocates can prove that the circumvention of firmware locks furthers a noninfringing use, then these cases support a finding of no liability.

It is more difficult to argue that unlockers who circumvent firmware protections make noninfringing use of the copyrighted software. On a broader scale, advocates say that unlockers and consumers are merely trying to use the phone for which the software was written. Unfortunately, phone unlockers often erase the entire mobile firmware or severely modify it in order to make the phone work on other networks. Though some argue that modifying the firmware in order to make it work on another network would be covered by 17 U.S.C. section 117, this argument is untested and may be rejected in court.\(^{250}\) If a court found that the actions taken with the firmware were infringing, then the circumvention of access controls also would give rise to liability under *Chamberlain* and *StorageTek*.

Alex Curtis of Public Knowledge, a digital rights public interest group, argues that since it is legal for consumers to unlock cell phones, it should logically and impliedly be legal for others to do the unlocking.\(^{251}\) Curtis writes, "If you may lawfully circumvent, the implied right to develop and use the enabling tool must follow."\(^{252}\) Curtis bases this idea on an article written about fair use of copyrighted content by the public.\(^{253}\) The article suggests that the

\(^{248}\) *Id.* at 1318.

\(^{249}\) *Id.*

\(^{250}\) It is not infringing for users to make an adaptation of a computer program so long as the adaptation "is created as an essential step in the utilization of the computer program in conjunction with a machine and that it is used in no other manner." 17 U.S.C. § 117(a)(1) (2000).


\(^{252}\) *Id.*

DMCA implementation of the WIPO treaties is tilted heavily toward copyright owners, harming fair use of copyrights. The article proposes a "reverse notice and takedown regime," in which those who would make fair use of technically copyrighted content notify the copyright holder before doing so. In this way, consumers could make fair use of copyrights (as well as the tools that allow that fair use), but copyright holders would be protected.

One final copyright theory that consumer advocates might try in court is the doctrine of copyright misuse. As explained by the court in *Religious Technology Center v. Lerma*, "Because copyright is intended to protect only those works containing the requisite indicia of creativity and originality, casting the shadow of its virtual monopoly onto other unprotected works would constitute a 'misuse.' " Misuse usually occurs when a copyright owner forces consumers to buy other products in order to access a copyright (in a practice known as "tying"). This practice, which resembles the "bundling" of services that wireless providers offer, may serve as a defense for those accused of unlocking, but to date, most misuse claims in the technology arena have failed. As a doctrine, copyright misuse is not robust and, with its scant history of success, it should not be the primary legal argument raised against providers who lock cell phones.

C. Possible Solutions: Amending the DMCA and other Federal Actions

Though consumers could take several approaches to obtain a favorable interpretation of the DMCA, the most appropriate avenue for solving the problem of cell phone unlocking is congressional or FCC action through either: 1) a conservative approach that amends the DMCA to make phone unlocking legal; or 2) a more active approach that forces wireless carriers to open networks, unlock phones sold by the carriers after a predetermined time period, and offer unlocked phones as an alternative to locked phones sold with service.

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an excellent account of the DMCA trilogy discussed above (*Chamberlain*, *Lexmark*, and *StorageTek*). *Id.* at 1011-12, 1024-32.


256. *Id.*


258. At least one commentator, however, has argued that the doctrine of copyright misuse should be extended to cover copyright holders' misuse of the anticircumvention provisions of § 1201. Burk, *supra* note 35, at 1095-1140.

259. *See supra* Section IV.B.
The simplest approach to solving the problem would be to amend the DMCA to make cell phone unlocking legal. In effect, this would codify the Librarian's exemption. To make the exemption effective, however, the amendment also should provide that those who unlock phones, whether as a service (free or paid) or by offering directions or programs that do so, are immune from liability. This exemption for unlockers is a commonsense extension of the exemption for consumers. As discussed above, the law that gives consumers fair use or unlocking rights with regard to copyrighted materials also must legalize the technologies and processes that facilitate the exercise of those rights. By analogy, if a professor is entitled to copy portions of a video to show to a class, the technology that allows that copying must be deemed "noninfringing." Otherwise, the fair use rights granted to the professor (or consumer) are meaningless. A possible amendment might read:

17 U.S.C. section 1201(a) is amended as follows:

By adding subsection (1)(F), which reads:

"Owners of devices which connect to wireless networks are not liable under paragraph (1)(A) if they circumvent technological measures protecting computer programs in the form of firmware for the sole purpose of lawfully connecting to a wireless communication network."

By adding subsection (2)(D), which reads:

“No person shall be held liable under paragraph (2) if he manufactures, imports, offers to the public, provides, or otherwise traffics in any technology, product, service, device, component, or part thereof in order to accomplish the lawful circumvention described in paragraph (1)(A) by owners of devices that connect to wireless networks.”

Hence, the rights of consumers to circumvent cell phone locks would be protected, as would the rights of those who actually perform the unlocking.

Such an amendment, however, should only be a first step. Though it would make unlocking legal for consumers, it also would leave the cell phone locking problem in the realm of copyright law where it does not belong. Instead, a more active approach would amend 47 U.S.C. section 251, giving power to the FCC to mandate that wireless providers: 1) open their networks to allow consumers to switch providers; 2) allow previously purchased phones and devices to connect to new networks; 3) unlock phones and devices after a certain

260. See supra notes 232–34 and accompanying text.
261. This is the location of the number portability provisions of the Telecommunications Act of 1996.
period in which consumers fulfill their contracts; and 4) sell unlocked, unbundled versions of the phones that currently are bundled with service. Admittedly, these reforms are far-reaching and probably are not immediately attainable. However, the trends in settlements, network openness, and global competition all point towards these reforms. For the benefit of consumers, these changes should take effect sooner rather than later.

The first three reforms, which deal with network openness, could be added as an amendment to 47 U.S.C. section 251, the site of the number portability amendment to the Telecommunications Act of 1996. Section 251(b) describes the "obligations of all local exchange carriers." An amendment to that section might read,

47 U.S.C. section 251 is amended as follows:

By adding subsection (b)(6), which reads:

"(6) Network Openness
The duty to hold open their telecommunications networks to any device that meets nonrestrictive minimum technical and security standards, as provided by the local exchange carrier, in accordance with requirements prescribed by the Commission."

By adding subsection (b)(7), which reads:

"(7) Handset Portability
The duty to provide handset portability with requirements prescribed by the Commission."

The first amendment would force network providers to provide the kind of network openness to which Verizon has committed. The FCC would oversee the transition and would determine the level at which technical and security standards would be nonrestrictive. This grant of power to the FCC, as well as the proposed statutory language, would ensure that wireless providers could maintain the security and stability of their networks by mandating minimum technical and security standards while raising the level of innovation, competition, and consumer protections that have concerned the FCC for many years. After all, if the FCC requires wireless providers to hold open their networks, consumers quickly will migrate to the provider with the best service, forcing other providers to improve their services.

263. 47 U.S.C. § 251(b). Among these obligations is that of § 251(b)(2): "The duty to provide, to the extent technically feasible, number portability in accordance with requirements prescribed by the Commission." Id. at § 251(b)(2).
264. See supra note 196 and accompanying text.
Inventors and entrepreneurs would have the freedom they need to create new devices that utilize the improved networks.

The second provision of the above amendment would allow the FCC to require providers to sell unlocked phones, thereby removing the anticompetitive obstacles for consumers who want to switch wireless providers. "Handset portability" would be defined as "the ability to disconnect from one wireless network and use the same device to connect to any other compatible wireless network, subject to contractual terms and obligations." The FCC could create rules governing phone unlocking, such as mandating that wireless providers either sell unlocked phones or unlock them at consumers' requests.

The final reform could come in the form of an FCC rule, but it probably would occur organically if the previous reforms were put into place. Once network openness and handset portability are established, wireless providers, considering their business interests, would sell unlocked versions of the bundled phones that they offer at higher prices. Since wireless providers would still be the largest marketplace for new phones, they would have the opportunity to profit separately from the service and the phones instead of tying the two together. Of course, even in the face of regulations establishing openness and portability, wireless providers might make exclusivity deals. A perfect example of this phenomenon occurred in Germany where T-Mobile gained exclusive rights to carry the iPhone. Challenged in a German court by rival provider Vodafone, T-Mobile initially lost when its exclusivity deal was invalidated by a lower court (mandating that T-Mobile sell an unlocked version of the iPhone). Eventually, however, that decision was overturned by an appellate court.265 Thus, even in the face of open markets and portability mandates, exclusivity deals might survive. Such deals would be rare, however, and consumers would still reap the benefits of quick and easy unlocking as well as open and robust networks. Finally, wireless providers still could make exclusivity deals with phone manufacturers such as Apple, reaping the benefits of being the only store in town to sell a new product.

V. CONCLUSION

The introduction of the iPhone in the U.S. wireless market provoked a flurry of activity and new scrutiny of the ability of wireless

265. See Victoria Shannon, iPhone Must Be Offered Without Contract Restrictions, German Court Rules, N.Y. TIMES, Nov. 21, 2007 at C4 (describing the German case which mandated that T-Mobile sell an unlocked version of the iPhone). But see Paul Betts, Chris Hughes, & Joe Leahy, Vodafone Tactics Backfire, FIN. TIMES (London), Dec. 6, 2007, at 16 (describing the reversal of the initial decision).
providers to lock phones, an issue that had lain dormant for years. The year before the iPhone was introduced, the Librarian of Congress passed an exemption allowing consumers to unlock their own phones, but the widespread and competitive attempts to unlock the iPhone caught the media's and consumer population's attention in ways that the 2006 exemption process and numerous lawsuits had not.

In 2007, at least two lawsuits related to handset locking claims in California settled, as did suits against handset unlockers and resellers in Florida and Texas, among other places. A congressional subcommittee held hearings, the iPhone was introduced worldwide, and a wireless company, Verizon, vowed to open its network. Taken together, these developments represent a storm of controversy surrounding handset locking and network openness.

Over the course of the last few years, many litigants, reporters, and scholars have come to realize that the debate over handset locking is largely (if not exclusively) governed by the DMCA, a copyright bill. Though the class action lawsuits in California are based on unfair business practice claims, it is copyright law that currently determines the course of handset locking litigation. This Note has examined the applicable copyright law, the process behind the creation of that law (in the form of the DMCA), and the process of exempting consumers from portions of that law.

Copyright law is not the most appropriate venue for this debate. The Register of Copyrights has concluded that locking handsets is a product of a business model rather than a practice designed to protect copyrights. Though Congress should amend the DMCA to allow consumers to unlock phones and to protect the actual unlockers, such an amendment is not the best possible solution. Instead, Congress and scholars should look to established telecommunications law to lead the way in resolving the jumble of rights and responsibilities that currently surrounds handset locks. Congress and the FCC should amend telecommunications law to sweep away uncompetitive barriers created by wireless providers and promote competition, innovation, and consumer protection. In the long run, destroying these barriers will lead to a more robust telecommunications network in the United States, more innovation in network and wireless device technology, and better and more competitive U.S. telecommunications companies, which are goals that should be embraced by the government, corporations, and consumers alike.
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