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# UNLOCKING WILL GET YOU LOCKED UP: A RECENT CHANGE TO THE DMCA MAKES UNLOCKING CELL PHONES ILLEGAL

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## I. INTRODUCTION

As of January 2014, 90% of American adults own a cell phone with 58% of those being a smartphone.<sup>1</sup> The cell phone has evolved from a heavy device only capable of making telephone calls to the multi-purpose smartphone; one of the most popular is the Ap-

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<sup>1</sup> See *Device Ownership Over Time*, PEW RESEARCH INTERNET PROJECT (Jan. 2014), archived at <http://perma.cc/S8ZT-32H5> (summarizing the findings of the Pew research survey of mobile device ownership); see also Ronak Patel, *Taking it Easy on Teen Pornographers: States Respond to Minors' Sexting*, 13 J. HIGH TECH. L. 574 (2013) (stating that in 2009, seventy-one percent of teens in America had a cell phone).

ple iPhone.<sup>2</sup> The June 29, 2007 release of the iPhone was a much-publicized event and the iPhone sold over a million headsets in seventy-four days.<sup>3</sup> Apple and AT&T had signed an exclusivity agreement from the iPhone's release in 2007 until 2010, therefore limiting iPhones to AT&T customers who quickly became displeased with the quality of AT&T's service and were looking for ways to use the iPhone on a more reliable network.<sup>4</sup> Although cell phone unlocking was a common practice before the iPhone, the tremendous excitement of the iPhone and its release on a single network started a race to unlock iPhones for use on different wireless service providers.<sup>5</sup>

Most cell phones are bought pre-programmed with the service provider's software, making it unusable on another provider's network if a person wishes to change service providers.<sup>6</sup> An unlocked cell phone provides users with the choice of using their cell phone on a different network than the network it was purchased from and programmed for.<sup>7</sup> Wireless service providers use software locks, hard-

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<sup>2</sup> See Brianna L. Reed, *Mobilizing Payments: Behind the Screen of the Latest Payment Trend*, 14 J. HIGH TECH. L. 451, 452 (2014) (describing the evolution of the 2.2 pound cell phone with limited capabilities to the five ounce smartphone that is capable of web browsing, emailing, texting, and running applications).

<sup>3</sup> See Daniel J. Corbett, *Would You Like That iPhone Locked Or Unlocked?: Reconciling Apple's Anticircumvention Measures With The DMCA*, 8 U. PITT. J. TECH. L. & POL'Y 8, 8 (2008) (explaining the fanfare surrounding the announcement of the iPhone by Steve Jobs); see also Owen Thomas, *Apple: Hello, iPhone*, CNNMONEY (Jan. 9, 2007), archived at <http://perma.cc/YM6W-MNLY> (detailing the new Apple iPhone's bells and whistles as well as the 8% raise in Apple stocks when the iPhone release was announced).

<sup>4</sup> See Dan Frommer, *AT&T Trying To Extend iPhone Exclusive Until 2011*, BUSINESS INSIDER (Apr. 14, 2009), archived at <http://perma.cc/5YWL-TNB5> (explaining that it made sense for Apple to sign an exclusivity agreement with AT&T even though such an agreement may not make as much sense in today's marketplace); Thomas, *supra* note 3 (explaining AT&T will be the sole United States provider of iPhones).

<sup>5</sup> See John Haubenreich, *The iPhone and the DMCA: Locking the Hands of Consumers*, 61 VAND. L. REV. 1507, 1509 (2008) (articulating unlocked iPhones can be used on different networks); Rob Kelley, *iPhone mania hits flagship stores*, CNNMONEY (June 29, 2007), archived at <http://perma.cc/U4JY-8DX8> (stating that customers lined up as early as Tuesday for the phones debut Friday because of the excitement that surrounded the launch of the iPhone).

<sup>6</sup> See *Cell Phone Unlocking FAQ*, WIRELESS REVOLUTION, archived at <http://perma.cc/YS76-KH2X> (describing how a cell phone lock tethers a user to the mobile service provider that the consumer bought the phone from).

<sup>7</sup> See Ed Grabianowski, *How to Unlock a Cell Phone or Smartphone*, HOWSTUFFWORKS, archived at <http://perma.cc/8GVT-46L2> (describing how cell phone providers, as part of their business plan, tether a user to their network for the

ware locks, or a combination of both to lock mobile phones and keep customers on their network.<sup>8</sup> Wireless providers have the ability to unlock cell phones, but generally will not do so for a consumer.<sup>9</sup> While unlocking cell phones was protected under an exemption to the Digital Millennium Copyright Act (DMCA), in January 2013, the Librarian of Congress eliminated the exemption for cell phone firmware or software, making it illegal to unlock a cell phone.<sup>10</sup>

This Note argues that unlocking of cell phones should be legal. This can be achieved by the Librarian of Congress reinstating the exemption to the DMCA that allows unlocking of cell phones or by passing legislation that will allow for cell phones to be unlocked legally. The Note will begin by explaining how cell phone locking works and offer a brief history of the evolution of the DMCA leading to the prohibition of unlocking cell phones.<sup>11</sup> The Note will then use Congress's and the President's position to argue that the DMCA

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life of the mobile phone); *see also* *Cell Phone Unlocking FAQ*, *supra* note 6 (describing the benefits of unlocking a mobile phone).

<sup>8</sup> *See* Huabenreich, *supra* note 5, at 1508-09 (explaining that hardware and software locks disable cell phones from being used on other networks unless they are unlocked either by the wireless provider or by the user); *see also* Brad Stone, *With Software and Soldering, a Non-AT&T iPhone*, N.Y. TIMES (Aug. 25, 2007), *archived at* <http://perma.cc/6426-GMUZ> (describing how mobile service providers keep users on their networks with multiyear contracts and complex phone locks).

<sup>9</sup> *See* Stone, *supra* note 8 (detailing that people who work on unlocking cell phones may do so in order for a consumer to use it on networks in different countries which makes wireless service much more affordable for the consumer).

<sup>10</sup> *See* 17 U.S.C. § 1201 (2013) ("No person shall circumvent a technological measure that effectively controls access to a work protected under this title."); 37 C.F.R. § 201.40 (2013) (listing exemptions to the DCMA which no longer includes the exemption for cell phone firmware or software). *But see* U.S. Copyright Office, *Section 1201 Exemptions to Prohibition Against Circumvention of Technological Measures Protecting Copyrighted Works* (2006 and 2010) ("Copyright Act, which provides that, upon the recommendation of the Register of Copyrights, the Librarian of Congress may designate certain classes of works as exempt from the prohibition against circumvention of technological measures that control access to copyrighted works."). The explanation of the exemption underscored the following exception:

Computer programs, in the form of firmware or software, that enable used wireless telephone handsets to connect to a wireless telecommunications network, when circumvention is initiated by the owner of the copy of the computer program solely in order to connect to a wireless telecommunications network and access to the network is authorized by the operator of the network. *Id.*

<sup>11</sup> *See infra* section II.

should have an exemption for cell phones or that legislation should be passed to permanently permit unlocking cell phones instead of a temporary legal status, and demonstrate how it is not copyright infringement to unlock a cell phone.<sup>12</sup>

## II. HISTORY

### A. An Overview of Cell Phone Locking

There are two distinct technologies used for the operation of mobile phones; Verizon and Sprint use Code Division Multiple Access (CDMA), while AT&T and T-Mobile use Global System for Mobile Communications (GSM).<sup>13</sup> Verizon controls all phones on its network because CDMA uses a serial number that corresponds to the network interface.<sup>14</sup> The other CDMA provider, Sprint, hesitantly allows other mobile phones not purchased from Sprint.<sup>15</sup> GSM network phones, such as AT&T and T-Mobile, use Subscriber Identity Module (SIM) cards to connect to the network.<sup>16</sup> By purchasing a mobile phone from a network that uses SIM cards, users can switch out the SIM card to change networks; this is extremely beneficial for out of country travel as users will not incur roaming charges while still using the mobile phones that they already own.<sup>17</sup> Cell phone

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<sup>12</sup> See *infra* section III.

<sup>13</sup> See David Cline, *Consumer Choice: Is there an App For That?*, 10 J. TELECOMM. & HIGH TECH. L. 147, 150 (2012) (comparing the technology of CDMA carriers to GSM carriers and noting that cell phones made for one carrier cannot be used on the other carriers' networks even when unlocked).

<sup>14</sup> See *id.* (stating that Verizon, using the CDMA technology, knows exactly which phone is on the network because it is tracked by a serial number, and not by a SIM card).

<sup>15</sup> See *id.* (discussing how Sprint discourages the use of phones bought on other networks by refusing to offer technical support for those devices); Michael T Hoeker, *From Carterfone to iPhone: Consumer Choice in the Wireless Telecommunications Marketplace*, 17 COMM'LAW CONSPECTUS 187, 203 (2008) (emphasizing that Sprint will only allow unlocking after 90 days on the network and termination fees will still be incurred if consumer leaves network while under contract; this helps subsidize the cost of the cell phone).

<sup>16</sup> See Cline, *supra* note 13, at 150 (explaining how SIM card switching process works which can save travelers a lot of money by purchasing prepaid minutes when in other countries).

<sup>17</sup> See Haubenreich, *supra* note 5, at 1509 (describing how an unlocked phone provides ease and cost savings by giving the consumer much more affordable wireless service especially while traveling).

locks make this seemingly simple process of changing SIM cards extremely difficult.<sup>18</sup>

A locked cell phone has been programmed for use on the network that user purchased the phone from and may only be used with that network. Wireless providers have continuously attempted to justify conditioned access to their networks on two grounds.<sup>19</sup> Firstly, providers maintain that wireless service is made more affordable to the consumer by subsidizing mobile cell phone handsets, thus lowering the consumers initial cost to obtain wireless service.<sup>20</sup> Wireless providers subsidize the cost of new phones hoping to recoup the subsidy over the term of the contract.<sup>21</sup> If a customer has the ability to unlock a phone after buying it at a discount and then to use it with a competitor's wireless network, the wireless provider that sold the subsidized phone would take a loss.<sup>22</sup> Secondly, wireless providers assert that handsets must meet specific criteria to provide secure and reliable service.<sup>23</sup>

Although cell phone unlocking has been around for a while, the release of the iPhone exclusively on AT&T ushered in a new era

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<sup>18</sup> See Haubenreich, *supra* note 5, at 1509 (describing how just changing one mobile service providers SIM card with another mobile service providers SIM card will not work unless the mobile phone is unlocked); see also *Cell Phone Unlocking FAQ*, *supra* note 6 (explaining how mobile phone locks with SIM cards work).

<sup>19</sup> See Mark Defeo, *Unlocking the iPhone: How Antitrust Law Can Save Consumers From the Inadequacies of Copyright Law*, 49 B.C. L. REV. 1037, 1042 (2008) (stating that wireless carriers have historically based their argument that conditions access to their wireless network on two specific, distinct grounds which include affordability and reliability).

<sup>20</sup> See *In re Wireless Tel. Servs. Antitrust Litig.*, 385 F. Supp. 2d 403, 410 (S.D.N.Y. 2005) (stating that "subsidizing [cell phone headsets], 'continue to open up markets and make it affordable' for consumers to obtain wireless service").

<sup>21</sup> See Timothy J. Maun, *iHack, Therefore iBrick: Cellular Contract Law, the Apple iPhone, and Apple's Extraordinary Remedy for Breach*, 2008 WIS. L. REV. 747, 757 (2008) (summarizing the business model that allows for heavily subsidized headsets where the price is recouped by the wireless provider over a one or two year contract and therefore necessitates phone locking mechanisms).

<sup>22</sup> See *id.* (stating that the mobile phone provider's business model would not be profitable if users who purchased subsidized cell phones were able to unlock cell phones to switch mobile service providers).

<sup>23</sup> See *In re Wireless*, 385 F. Supp. 2d at 409 (propositioning handsets developed by manufacturers in collaboration with wireless service providers are important to the quality of that subscriber's service and the service of all other subscriber's on the wireless network); Defeo, *supra* note 19, at 1042 (stating that wireless handsets must meet certain specifications for wireless providers to provide efficient and secure wireless service).

of widespread unlocking attempts.<sup>24</sup> The first person to unlock an iPhone was seventeen-year old George Hotz, which he completed with 500 hours of labor, a soldering gun, and software tools.<sup>25</sup> Hotz then put the cell phone he had unlocked up for auction on eBay, which had bids well over the \$499 retail price at the Apple Store.<sup>26</sup> With the money Hotz made selling on the unlocked iPhone on eBay he was able to buy a car and three new iPhones.<sup>27</sup> Soon after this, software developers began crafting programs to recreate Hotz's process that was more user friendly.<sup>28</sup> Apple CEO Steve Jobs was then asked if iPhone unlocking concerned him and he said, "[i]t's a constant cat and mouse game. We try to stay ahead. People will try to break in, and it's our job to stop them from breaking in."<sup>29</sup> The unlocked iPhone threatened Apple's and AT&T's business model—the Apple-AT&T agreement involved unprecedented revenue sharing, which came with an obligation that Apple must prevent consumers from using the iPhone on networks other than the AT&T network that iPhones were designed to be used on.<sup>30</sup>

Both Apple and AT&T responded to the iPhone unlocking, AT&T with lawyers and Apple with software.<sup>31</sup> Before making ver-

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<sup>24</sup> See Maun, *supra* note 21, at 747 (prompting groups to unlock the iPhone less than two months after its release so users could use the phone on different networks because it was only available on one network which consumers did not feel was reliable).

<sup>25</sup> See Patrick J. Cleary, *The Apple Cat and the Fanboy Mouse: Unlocking the Apple iPhone*, 9 N.C. J.L. & TECH. 295, 300-01 (2008) (describing the labor intensive seventeen step process Hotz used to unlock the iPhone); Defeo, *supra* note 19, at 1038 (emphasizing Hotz's laborious unlocking process, using a soldering gun, software tools, and 500 hours of labor); Stone, *supra* note 8 (stating that 17 year old Hotz was the first person to successfully unlock an iPhone).

<sup>26</sup> See Stone, *supra* note 8 (stating that a few days after posting it on eBay the bids for the unlocked iPhone were reached thousands of dollars).

<sup>27</sup> See Cleary, *supra* note 25, at 301 (describing the high market value for unlocked phones).

<sup>28</sup> See Cleary, *supra* note 25, at 300-01 (stating programmers made user friendly programs, which did not require soldering or user programing to make unlocking available to more consumers, who were unhappy with their wireless provider, but wanted to keep their technologically advanced mobile phones).

<sup>29</sup> See Gregg Keizer, *Jobs Says Apple Will Fight; Phone Unlocking Hacks*, COMPUTER WORLD (Sept. 18, 2007), archived at <http://perma.cc/H79M-YWT8> (announcing Apple's position for the first time that they would try to deter iPhone unlocking and stay one step ahead of the hackers).

<sup>30</sup> See Maun, *supra* note 21, at 752-53 (summarizing the unprecedented Apple-AT&T revenue sharing agreement).

<sup>31</sup> See Haubenreich, *supra* note 5, at 1510 (stating AT&T sent cease-and-desist letters to individuals who were publishing methods, techniques, or software used to

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sion 1.1.1 firmware available for iPhone users to update their software, Apple released the following statement: “Apple has discovered that many of the unauthorized iPhone locking programs available on the internet cause irreplaceable damage to the iPhone’s software, which will likely result in the modified iPhone becoming permanently inoperable when a future Apple-supplied iPhone software update is installed.”<sup>32</sup> Apple continued by stating that “unauthorized modifications” voided the warranty as well as violating the iPhone software-license agreement stating “the permanent inability to use an iPhone due to installing unlocking software is not covered under the iPhone’s warranty.”<sup>33</sup>

When the version 1.1.1 update for the iPhone was released the warnings given by Apple came true. Unlocked iPhones had been completely disabled, or “bricked.”<sup>34</sup> Users with “iBricks” began going to Apple for help but their attempts were unsuccessful because the warranty had been voided.<sup>35</sup> Initially, there were reports that some Apple Stores were able to fix bricked iPhones, but Jennifer Bowcock, a spokesperson for Apple, stated “the inability to use your phone after making unauthorized modifications isn’t covered under the iPhone warranty...[i]f the damage was due to use of an unauthorized software application, voiding their warranty, they should purchase a new iPhone.”<sup>36</sup> Some hackers were able to create a process that restored bricked iPhones, but this was a complex process that did

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unlock the iPhone which were grounded in section 1201(a)(2) of the Digital Millennium Copyright Act of 1998).

<sup>32</sup> See Mark Hachman, *Update: Apple Issues Warning on iPhone Hacking*, PC MAG (Sept. 24, 2007), archived at <http://perma.cc/7PH4-2XEL> (characterizing the consequences of iPhone hacking when updating software on the iPhone).

<sup>33</sup> See *id.* (citing a recent public statement by Apple spokesperson, Natalie Kerris, during which she underscored Apple’s disapproval of unlocking). Apple stated and Kerris reaffirmed by email to Hachman that the user’s unauthorized changes to the phone’s software constitute a violation of their software license agreement and void the warranty. *Id.* Apple’s public statement further explained that the “bricking,” an unlocked iPhone rendered inoperable after Apple’s software update, is not covered by the iPhone’s warranty). *Id.*

<sup>34</sup> See Katie Hafner, *Altered iPhones Freeze Up*, N.Y. TIMES (Sept. 29, 2007), archived at <http://perma.cc/WXT5-6KCQ> (describing that iPhones that had been unlocked are now as useless as a brick).

<sup>35</sup> See *id.* (commenting that Apple offered no help to those users who did not heed their warnings that were published before the software update was released).

<sup>36</sup> See *id.* (commenting that Apple established a very aggressive policy for unlocked iPhones, which become completely disabled, or “bricked,” after the software update, in that the user’s only resolution is to purchase a new iPhone).

not always work.<sup>37</sup> This led users, who had been bricked to file a legitimate legal complaint, which included two class-action lawsuits in state and federal court alleging antitrust violations, unfair competition, and breach of express and implied warranties.<sup>38</sup>

## B. The Digital Millennium Copyright Act (DMCA)

The DMCA was passed by Congress to restrict copyright piracy that new technologies made possible in the 1990s.<sup>39</sup> To implement guidelines recommended by the World Trade Organization (WTO), Congress passed the DMCA in 1998.<sup>40</sup> As stated in the House Report:

The treaties do not require any change in the substance of copyright rights or exceptions in U.S. law. They do, however, require two technological adjuncts to the copyright law, intended to ensure a thriving electronic marketplace for copyrighted works on the Internet. The treaties address the problems posed by the possible circumvention of technologies, such as encryption, which will be used to protect copyrighted works in the digital environment and to secure on-line licensing systems. To comply with the treaties, the U.S. must make it unlawful to defeat technological protections used by copyright owners to protect their works. This would include preventing unauthorized access as well

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<sup>37</sup> See Maun, *supra* note 21, at 753 (detailing that the un-bricking procedure was a 19 step process that only worked for iPhones unlocked with certain software and was not widely available to many phones that were completely disabled by Apple's update).

<sup>38</sup> See Maun, *supra* note 21, at 754 n.48 (identifying the complaint for treble damages, injunctive relief, as well as accounting for the federal class action suit).

<sup>39</sup> See Haubenreich, *supra* note 5, at 1510 (stating that once people began publishing methods and software of unlocking the iPhone, AT&T turned to the DMCA when sending out cease-and-desist letters).

<sup>40</sup> See H.R. REP. NO. 105-796 (1998) (stating that the DMCA is in compliance with the World Trade Organization); see also H.R. REP. NO. 105-551, pt. 1 at 9 (1998) ("The successful negotiation of the treaties brings with it the need for domestic implementing legislation. Title I of this bill contains two substantive additions to U.S. domestic law, in addition to some technical changes, to bring the law into compliance with the treaties so that they may be ratified appropriately."); Cleary, *supra* note 25, at 303 (stating Congress passed the DMCA to implement guidelines from the WTO).

as the manufacture and sale of devices primarily designed to decode encrypted copyrighted material.<sup>41</sup>

Subsections 1201(a)(1)(C) and (D) of the DMCA allow the Librarian of Congress to hear submissions from interested parties every three years and declare certain uses of copyrighted works legal for the following three years.<sup>42</sup> As stated by Haubenreich, “for cell

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<sup>41</sup> See H.R. REP. NO. 105-551, pt. 1 at 9-10 (1998). When copyrighted material is adequately protected in the digital environment, a plethora of works will be distributed and performed over the Internet. In order to protect the owner, copyrighted works will most likely be encrypted and made available to consumers once payment is made for access to a copy of the work. There will be those who will try to profit from the works of others by decoding the encrypted codes protecting copyrighted works, or engaging in the business of providing devices or services to enable others to do so. A new “Section 1201” to the Copyright Act is required by both WIPO Treaties to make it unlawful to engage in such activity. *Id.* at 10; see also Cleary, *supra* note 25, at 303 (describing two new areas of extensions and penalties that the DMCA now provides including (1) circumvention of technological measures used by copyright owners to protect their works, and (2) tampering with copyright management information); Sheri Archidacono, *Intellectual Property: Piracy for Sale: Vicarious and Contributory Copyright Infringement: Arista Records v. Flea World*, 356 F. Supp. 2d 411 (2005) 6 J. HIGH TECH. L. 315 (2006) (discussing the WIPO treaties).

<sup>42</sup> See 17 U.S.C. § 1201(a)(1)(C)-(D) (quoting in relevant part)

(C) During the 2-year period described in subparagraph (A), and during each succeeding 3-year period, the Librarian of Congress, upon the recommendation of the Register of Copyrights, who shall consult with the Assistant Secretary for Communications and Information of the Department of Commerce and report and comment on his or her views in making such recommendation, shall make the determination in a rulemaking proceeding for purposes of subparagraph (B) of whether persons who are users of a copyrighted work are, or are likely to be in the succeeding 3-year period, adversely affected by the prohibition under subparagraph (A) in their ability to make noninfringing uses under this title of a particular class of copyrighted works. In conducting such rulemaking, the Librarian shall examine--

- (i) the availability for use of copyrighted works;
- (ii) the availability for use of works for nonprofit archival, preservation, and educational purposes;
- (iii) the impact that the prohibition on the circumvention of technological measures applied to copyrighted works has on criticism, comment, news reporting, teaching, scholarship, or research;
- (iv) the effect of circumvention of technological measures on the market for or value of copyrighted works; and

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.”<sup>43</sup> The largest prepaid service provider, TracFone, argues that they have actively taken protective measures to protect against copyright infringement by locking their cell phones.<sup>44</sup>

Over 100 comments or replies were submitted regarding proposed exemptions to the Librarian for the 2006 exemption decision.<sup>45</sup>

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(v) such other factors as the Librarian considers appropriate.

(D) The Librarian shall publish any class of copyrighted works for which the Librarian has determined, pursuant to the rulemaking conducted under subparagraph (C), that noninfringing uses by persons who are users of a copyrighted work are, or are likely to be, adversely affected, and the prohibition contained in subparagraph (A) shall not apply to such users with respect to such class of works for the ensuing 3-year period.

<sup>43</sup> Haubenreich, *supra* note 5, at 1510.

<sup>44</sup> See *TracFone Wireless Inc. v. Dixon*, 475 F. Supp. 2d 1236, 1237 (M.D. Fla. 2007) (stating that the purpose of unlocking, also known as reflashing, is to remove the copyrighted software that has been programmed on the phone by the mobile service provider).

<sup>45</sup> See *Rulemaking on Exemptions from Prohibition on Circumvention of Technological Measures that Control Access to Copyrighted Works*, UNITED STATES COPYRIGHT OFFICE (2006), archived at <http://perma.cc/3YQP-UWW3> (portraying information used in making the 2006 exemption decision); see also Jonathan R. Newman & Robert Pinkerton, *Notice of Inquiry in Re Exemption to Prohibition on Circumvention of Copyright Protection Systems For Access Control Technologies Before the Library of Congress Copyright Office* (2006), archived at <http://perma.cc/PY39-JGKH> (presenting the comment of The Wireless Alliance, LLC and Robert Pinkerton which argues in favor of the exemption to anticircumvention technology).

The Wireless Alliance helps the environment by repurposing used phones and recycling those that cannot be reused. The Wireless Alliance sells between 20-60,000 phones per month, including CDMA, TDMA, Analog, and GSM. By working with industry, refurbishers, the Environmental Protection Agency and charities, The Wireless Alliance both reduces toxic waste and helps bridge the digital divide between the United States and third world countries.

*Id.*; Reply Comment of the Electronic Frontier Foundation, *In the Matter of Exemption to the Prohibition of Circumvention of Copyright Protection Systems for Access Control Technologies*, Docket No. RM 2005-11 (2006), archived at <http://perma.cc/7UE9-ZCBM> (stating the “EEF supports the exemption for circumvention of access control measures used to limit ‘unlocking’ of cellular headsets”); Matt Crocker, *In Support of Comment #3 By Jennifer Granick, The Wireless Alli-*

Those who argued against the 2006 exemption to the DMCA argued that use of anticircumvention technology—phone locking—leads to greater consumer choice because greater control will lead to higher profits which will in turn raise incentives to firms to create better products.<sup>46</sup> Groups against the use of anticircumvention technology argued that the use of software locks decreases competition leading to higher costs and poorer service, increases mobile handset waste, which in turn contributes to environmental degradation, and increases the “digital divide between the United States and third world countries.”<sup>47</sup>

The Librarian declared six activities exempt from section 1201 in 2006.<sup>48</sup> Most relevant to this Note, is class number five which 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.”<sup>49</sup> The Register of Copyrights stated:

The register has concluded that the software locks are access controls that adversely affect the ability of consumer to make noninfringing use of the software on their cellular phones. Moreover, a review of the four factors enumerated in § 101(a)(1)(C)(i)-(iv) supports the conclusion that an exemption is warranted, There is nothing in the record that suggests that the availability for use of copyrighted works would be adversely affected by permitting an exemption for software locks...Nor would circumvention of software locks to

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*ance & Robert Pinkerton* (2006), archived at <http://perma.cc/66HV-JVK6> (arguing that unlocked mobile phones will help develop new products for mobile phones).

<sup>46</sup> See Corbett, *supra* note 3, at 6 (summarizing the arguments for and against the use of anticircumvention technologies used by wireless providers).

<sup>47</sup> See Newman & Pinkerton, *supra* note 45 (stating the arguments of The Wireless Alliance, LLC and Robert Pinkerton in favor of the exemption to anticircumvention technology).

<sup>48</sup> See Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 71 Fed. Reg. 68,472-80 (2006), archived at <http://perma.cc/EQ7-9WHM> (announcing the exemptions to section 1201 of the DMCA for 2006 and the following three years after hearing information for interested parties).

<sup>49</sup> See *id.* (stating the exemption that allows for cell phones to be unlocked for the sole purpose of lawfully connecting to a wireless network).

connect to alternative mobile telecommunications networks be likely to have any effect on the market for or value of copyrighted works. The reason that these four factors appears to be neutral is that in this case, the access controls do not appear to actually be deployed in order to protect the interests of the copyright owner or the value or integrity of the copyrighted work; rather, they are used by the wireless carriers to limit the ability of subscribers to switch to other carriers, a business decision that has nothing whatsoever to do with the interests protected by copyright.<sup>50</sup>

Similarly in 2010, the Librarian found that unlocking phones was not a copyright violation.<sup>51</sup> Moreover, the Librarian of Congress found that phone locking was used for the following purpose:

It seems clear that the primary purpose of the locks is to keep consumers bound to their existing networks, rather than to protect the rights of copyright owners in their capacity as copyright owners. This observation is not a criticism of the mobile phone industry's business plans and practices, which may well be justified for reasons having nothing to do with copyright law and policy, but simply a recognition of existing circumstances. Because there appear to be no copyright-based reasons why circumvention under these circumstances should not be permitted, the Register recommends that the Librarian designate a class of works similar to the class designated in 2006. The Register notes that the 2006 class, and the new one designated herein, are both narrow, apply only to claims under Section 1201(a)(1), and do not establish a general federal policy of ensuring that customers have the freedom to switch wireless communications service providers. The designated classes, both new and old,

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<sup>50</sup> *See id.* (quoting the language of the Register of Copyrights while addressing the exemption to circumvention technologies).

<sup>51</sup> *See* Cline, *supra* note 13, at 163 (pointing to the Register's statements following the 2010 decision that circumventing phone locks were not a violation of copyrighted work because they were based mainly on other issues besides copyright law and policy).

simply reflect a conclusion that unlocking a mobile phone to be used on another wireless network does not ordinarily constitute copyright infringement.<sup>52</sup>

The Librarian clearly stated that the narrow copyright exemption from the DMCA does not mean that the terms of the service contract do not apply.<sup>53</sup> The DMCA was created to help stop copyright infringement; it is hard to fathom how unlocking a phone to be used on another wireless network provider would constitute copyright infringement.<sup>54</sup>

### III. PREMISE

Starting in January 2013, it became illegal to unlock cell phones.<sup>55</sup> Punishment for unlocking cell phones could include up to \$2,500 for an individual and as much as \$500,000 and jail time for a commercial distributor.<sup>56</sup> The change in policy is due to the Librarian of Congress no longer allowing the exemption the DCMA for unlocking of cell phones after the 2012 review to the DMCA.<sup>57</sup>

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<sup>52</sup> See Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 75 Fed. Reg. 43,825, 43,831 (2010) (quoting the relevant findings by the Librarian of Congress relating to phone locking).

<sup>53</sup> See Cline, *supra* note 13, at 164 (highlighting that the copyright exemption is extremely narrow and will not help customers circumvent their service contracts when switching networks because that would be outside the powers of the Copyright Office).

<sup>54</sup> See Ian Paul, *U.S. House Passes Bill to Allow Mobile Phone Unlocking, But Details Worry Advocates*, PC WORLD (Feb. 26, 2014), archived at <http://perma.cc/QJ7E-6G6S> (detailing the purpose of the DMCA and arguing that cell phone unlocking is not copyright infringement, but rather a way to keep customers bound to their contracts).

<sup>55</sup> See Joanna Stern, *Starting Today, It's Illegal to Unlock Your Cellphone*, ABC NEWS (Jan. 26, 2013), archived at <http://perma.cc/7R89-EQZR> (explaining how a change to the exemptions to the DMCA following the 2012 period makes cell phone unlocking illegal).

<sup>56</sup> See *id.* (depicting the various types of civil and criminal actions that can now be taken when unlocking cell phones in violation of the DMCA).

<sup>57</sup> See 37 C.F.R. § 201.40 (2012) (quoting in relevant part:

Computer programs, in the form of firmware or software, that enable a wireless telephone handset originally acquired from the operator of a wireless telecommunications network or retailer no later than ninety days after the effective date of this exemption to connect to a different wireless telecommunications network, if the operator of the wireless communications network to which

Pursuant to Subsections 1201(a)(1)(C) and (D) of the DMCA, the Register of Copyrights and Librarian of Congress reviewed the exceptions to the DMCA in 2012.<sup>58</sup> Supporters of the exemption to unlock cell phones presented several theories of why these exemptions should be continued.<sup>59</sup> Furthermore, supporters argued that if

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the handset is locked has failed to unlock it within a reasonable period of time following a request by the owner of the wireless telephone handset, and when circumvention is initiated by the owner, an individual consumer, who is also the owner of the copy of the computer program in such wireless telephone handset, solely in order to connect to a different wireless telecommunications network, and such access to the network is authorized by the operator of the network.).

<sup>58</sup> See 17 U.S.C. §§ 1201(a)(1)(C)-(D) (quoting in relevant part:

(C) During the 2-year period described in subparagraph (A), and during each succeeding 3-year period, the Librarian of Congress, upon the recommendation of the Register of Copyrights, who shall consult with the Assistant Secretary for Communications and Information of the Department of Commerce and report and comment on his or her views in making such recommendation, shall make the determination in a rulemaking proceeding for purposes of subparagraph (B) of whether persons who are users of a copyrighted work are, or are likely to be in the succeeding 3-year period, adversely affected by the prohibition under subparagraph (A) in their ability to make noninfringing uses under this title of a particular class of copyrighted works. In conducting such rulemaking, the Librarian shall examine--

- (i) the availability for use of copyrighted works;
- (ii) the availability for use of works for nonprofit archival, preservation, and educational purposes;
- (iii) the impact that the prohibition on the circumvention of technological measures applied to copyrighted works has on criticism, comment, news reporting, teaching, scholarship, or research;
- (iv) the effect of circumvention of technological measures on the market for or value of copyrighted works; and
- (v) such other factors as the Librarian considers appropriate).

(D) The Librarian shall publish any class of copyrighted works for which the Librarian has determined, pursuant to the rulemaking conducted under subparagraph (C), that noninfringing uses by persons who are users of a copyrighted work are, or are likely to be, adversely affected, and the prohibition contained in subparagraph (A) shall not apply to such users with respect to such class of works for the ensuing 3-year period. *Id.*

<sup>59</sup> See Exemption to Prohibition on Circumvention: Copyright Protection Systems for Access Control Technologies, 77 Fed. Reg. 65,260, 65,264-65 (2012) (introducing proponents of the exemption's theories of why unlocking is noninfringing use);

the copyright interests are implicated, under section 117 of the Copyright Act<sup>60</sup>, the owners of cell phones are also owners of copies of the computer programs on those phones, which allow them to adapt the program to be used on different wireless networks.<sup>61</sup> Also, supporters of the exemption claim that “ending the exemption will lead to higher device prices for consumers, increased electronic waste, higher costs associated with switching service providers, and widespread mobile customer ‘lock-in.’”<sup>62</sup> The proponents of the exemption have conceded that there are widely available unlocked mobile devices, but maintain that the exemption is still needed because unlocking policies still restrict certain devices on a carrier’s network.<sup>63</sup> Thus, some of the most advanced devices that are most attractive to customers remain locked and are an impediment to an economical marketplace.<sup>64</sup> Without an exemption, proponents suggest, users would have to choose between throwing out the device or continuing with the carrier, which sold the device.<sup>65</sup>

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*see also Consumers Union, In the Matter of Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, Docket No. RM 2011-7, COPYRIGHT.GOV, archived at <http://perma.cc/Y6FW-V6QS> [hereinafter *Consumers Union*] (outlining proponent’s argument why unlocking mobile phones is noninfringing use).*

<sup>60</sup> See 17 U.S.C. § 117 (2012) (describing the limitations on exclusive rights: computer programs).

<sup>61</sup> See 77 Fed. Reg. at 65,265 (stating that as owners of copies of computer programs on phones, they are entitled to exercise Section 117 rights); *see also Consumers Union, supra* note 59, at 1 (alleging that the aspect of mobile device computer programs that facilitates connectivity of a device to a mobile network provider may be unprotectable under U.S. Copyright law).

<sup>62</sup> See 77 Fed. Reg. at 65,265 (referencing the argument made by supporters of the exemption).

<sup>63</sup> See 77 Fed. Reg. at 65,265 (stating that some of the most technologically advanced devices sold by wireless providers are permanently locked and are usually the most popular).

<sup>64</sup> See 77 Fed. Reg. at 65,265 (stating proponents of exemption characterize phone locking as an impediment to a competitive marketplace); *see also Reply Comments of MetroPCS Communications, INC. on the Notice of Proposed Rulemaking, Docket No. 2011-07, 19, COPYRIGHT.GOV, archived at <http://perma.cc/F3JS-P295> [hereinafter *MetroPCS*] (observing that AT&T retains a blanket policy of locking wireless devices to its network including its most advanced LTE smartphones).*

<sup>65</sup> See 77 Fed. Reg. at 65,265 (stating that dilemma that consumers would face absent an exemption).

A trade association comprised of wireless network providers,<sup>66</sup> CTIA—The Wireless Association (“CTIA”), opposed the exemption allowing for unlocking of cell phones.<sup>67</sup> CTIA maintains:

An unlocking exemption is not necessary to promote competition and foster consumer choice. Wireless carriers are willing to unlock handsets in a wide variety of circumstances. For example, the largest nationwide carriers (constituting the vast majority of the cell phone market...) have liberal, publicly available unlocking policies.<sup>68</sup>

CTIA maintained that locking mobile phones is a vital part of the wireless industry’s business model, which involves subsidizing handsets that will be used on the mobile provider’s network that will be recouped by the carrier.<sup>69</sup> Subsidizing also allows the wireless provider to work with cell phone manufacturers to offer more affordable, higher quality devices.<sup>70</sup> CTIA asserted the mobile phone industry has been subject to what they call “large scale phone trafficking operations,” where large quantities of prepaid phones are bought, unlocked, repackaged and sold to be used on foreign mobile service providers, who did not sell them, and traffickers profit by essentially taking the subsidy from mobile phone providers, who have no chance to recoup the subsidized phone price.<sup>71</sup> CTIA also maintains that the

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<sup>66</sup> See Steve Largent, *Carrier Unlocking Voluntary Commitment*, CTIA (Dec. 12, 2013), archived at <http://perma.cc/J6EC-CVC9> (noting that CTIA is a trade association of wireless providers that includes the biggest five wireless network providers—AT&T, Sprint, T-Mobile, U.S. Cellular, and Verizon Wireless).

<sup>67</sup> See 77 Fed. Reg. at 65,265 (stating that CTIA—The Wireless Association objected to the proposals as drafted); see also Comments of CTIA—The Wireless Association, Docket No. RM 2008-8, at 1-2, archived at <http://perma.cc/E64M-LMP7> (outlining the argument presented by CTIA against the proponents of the exemption favoring the exemption to unlocking cell phones not be continued).

<sup>68</sup> *Consumers Union*, *supra* note 59, at 9.

<sup>69</sup> See 77 Fed. Reg. at 65,265 (explaining the wireless industry’s predominant business model, which involves subsidizing the cost of wireless handsets in exchange for a commitment that the phone will be used on the provider’s network for the term of the contract).

<sup>70</sup> See Newman & Pinkerton, *supra* note 45 (stating that without subsidies higher quality phones would not be available to many users because the cost of the phone would be higher).

<sup>71</sup> See 77 Fed. Reg. at 65,265 (describing the “large scale phone trafficking operations”); Newman & Pinkerton, *supra* note 45, at 6-7 (explaining how cell phone

exemption is not needed because unlocked phones are widely available from third parties at affordable prices.<sup>72</sup> CTIA maintains that Section 117 of the Copyright Act does not allow cell phone unlocking because owners of cell phones are not owners of the software used on the devices.<sup>73</sup>

The Register looked at two cases to determine if cell phone owners were owners of the software on the devices.<sup>74</sup> The first case, *Krause v. Titleserv, Inc.*,<sup>75</sup> was used in the 2010 exemption hearings.<sup>76</sup> The court, in *Krause*, held that:

We conclude for these reasons that formal title in a program copy is not an absolute prerequisite to qualifying for [Section] 117(a)'s affirmative defense. Instead, courts should inquire into whether the party exercises sufficient incidents of ownership over a copy of the program to be sensibly considered the owner of the copy for purposes of [Section] 117(a). The presence or absence of formal title may of course be a factor in this inquiry, but the absence of formal title may

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trafficking operations work and how mobile phone providers lose the ability to recoup their subsidy and therefore become less profitable).

<sup>72</sup> See 77 Fed. Reg. at 65,265 (summarizing CTIA's position that unlocked phones are available from third party providers). As stated by the CTIA, "[u]nlocked (un-subsidized) phones are freely available from third party providers—many at very low prices". *Id.*; see also Robert Penchuck, *Unleashing the Open Mobile Internet*, 10 J. High Tech. L. 74, n. 186 (2009) (discussing that costumers can buy unlocked cell phones); see, e.g. Best Buy, *Unlocked Phones*, archived at <http://perma.cc/5SQE-XY89> (listing over 300 unlocked mobile phones, with over 150 of them selling for \$100 or less).

<sup>73</sup> See 17 U.S.C. § 117(a) (stating that the act applies only to an owner of the software program); 77 Fed. Reg. at 65,265 (summarizing CTIA's argument regarding cell phone unlocking and Section 117); *Obama administration must explain cell phone unlocking ban*, RT, archived at <http://perma.cc/5RNX-BKFP> (depicting the view of CTIA regarding cell phone unlocking and Section 117).

<sup>74</sup> See *Krause v. Titleserv, Inc.*, 402 F.3d 119, 130 (2d Cir. 2005) (holding that adaptation did not constitute infringement as it was "created as an essential step in the utilization of the computer program in conjunction with a machine and . . . it [was] used in no other manner"); *Vernor v. Autodesk, Inc.*, 621 F.3d 1102, 1104 (9th Cir. 2010) (concluding that the first sale doctrine defense does not apply to a software licensee).

<sup>75</sup> See 402 F.3d 119.

<sup>76</sup> See 77 Fed. Reg. at 65,265 (stating the reliance on *Krause* in the 2010 exemption hearings when determining ownership of software on devices).

be outweighed by evidence that the possessor of the copy enjoys sufficiently broad rights over it to be sensibly considered its owner.<sup>77</sup>

For these reasons, the Register concluded in the 2010 proceeding that, “the record...leads to the conclusion that a substantial portion of mobile phone owners also own the copies of the software on their phones.”<sup>78</sup> Since the 2010 Recommendation, *Vernor v. Autodesk, Inc.*,<sup>79</sup> has further developed the case law regarding Section 117.<sup>80</sup> The *Vernor* court held that:

[A] software user is a licensee rather than an owner of a copy where the copyright owner (1) specifies that the user is granted a license; (2) significantly restricts the user's ability to transfer the software; and (3) imposes notable use restrictions.<sup>81</sup>

The proponents of the exemption made arguments trying to support their view of ownership<sup>82</sup> while CTIA refuted them by citing mobile service provider's agreements to prove the mobile phone's software is licensed rather than sold.<sup>83</sup> After hearing these arguments on Section 117, the Register of Copyrights concluded that the applicability of Section 117 to mobile phone software remains indeterminate because there is inconsistent precedent in merely two circuits.<sup>84</sup> Even with the applicability of Section 117, the Register of Copyrights concluded that after a 90-day exemption period, the unlocking of mobile phones would violate the DMCA.<sup>85</sup>

News of the Register of Copyright's decision to not extend the exemption period to unlock mobile phones for lawful use on dif-

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<sup>77</sup> 402 F.3d at 124.

<sup>78</sup> 77 Fed. Reg. at 65,265.

<sup>79</sup> See 621 F.3d 1102 (9th Cir. 2010).

<sup>80</sup> See 77 Fed. Reg. at 65,265 (emphasizing the development of Section 117 case law since the ruling the by Register of Copyrights in 2010).

<sup>81</sup> 621 F.3d at 1111.

<sup>82</sup> See 77 Fed. Reg. at 65,265 (stating the proponents attempt to try and distinguish mobile phone software ownership from *Vernor*).

<sup>83</sup> See Newman & Pinkerton, *supra* note 45 (listing the agreements of AT&T, Sprint, TMobile, and Verizon that specifically state that mobile phone software is licensed and not sold to the phones owner).

<sup>84</sup> See 77 Fed. Reg. at 65,265 (concluding that the applicability to Section 117 is a much closer call than CTIA's argument states).

<sup>85</sup> See *supra* note 48 and accompanying text.

ferent providers has become widespread.<sup>86</sup> This encouraged over 114,000 people to sign a petition indicating their support for legalization of cell phone unlocking and requesting that the Obama Administration implement a change in policy.<sup>87</sup> This prompted an official response from the Obama Administration stating:

The White House agrees with the 114,000+ of you who believe that consumers should be able to unlock their cell phones without risking criminal or other penalties. In fact, we believe the same principle should also apply to tablets, which are increasingly similar to smart phones. And if you have paid for your mobile device, and aren't bound by a service agreement or other obligation, you should be able to use it on another network. It's common sense, crucial for protecting consumer choice, and important for ensuring we continue to have the vibrant, competitive wireless market that delivers innovative products and solid service to meet consumers' needs.<sup>88</sup>

Furthermore, legislation has been passed in the Senate<sup>89</sup> and passed in the House of Representatives<sup>90</sup> that will legalize cell phone unlock-

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<sup>86</sup> See Stern, *supra* note 55 (discussing the new regulations preventing lawful unlocking of cell phones); see also Marguerite Reardon, *What The DMCA Cell Phone Unlock Ban Means To You (FAQ)*, CNET (Mar. 5, 2013), archived at <http://perma.cc/7BQC-J6TY> (answering questions about the changes in regulation making cell phone unlocking illegal); Adi Robertson, *Unlocking Your Cellphone Is Still Illegal, and the FCC Still Doesn't Like It*, THE VERGE (Aug. 22, 2013, 5:20 PM), archived at <http://perma.cc/C6DY-YPSP> (alerting the readers to the FCC statement that unlocking cellphones is still illegal); Dave Smith, *Phone Unlocking More Popular Than Ever Since Becoming Illegal In January*, INTERNATIONAL BUSINESS TIMES (Aug. 13, 2013, 10:53 AM), archived at <http://perma.cc/LB6B-435A> (stating that since unlocking became illegal, the popularity of unlocking cell phones has gone up).

<sup>87</sup> See *Make Unlocking Cell Phones Legal*, WHITEHOUSE.GOV (Jan. 24, 2013), archived at <http://perma.cc/F8GF-KHK3> (discussing the petition to the White House with over 114,000 signatures requesting cell phone unlocking to become legal).

<sup>88</sup> See R. David Edelman, *It's Time to Legalize Cell Phone Unlocking*, WHITEHOUSE.GOV, archived at <http://perma.cc/F8GF-KHK3> (summarizing the legal issues of the petition to lawfully unlock cellphones).

<sup>89</sup> See Unlocking Consumer Choice and Wireless Competition Act, S. 517, 113th Cong. (2014) (enacted) (articulating the bill that promotes consumer choice and

ing.<sup>91</sup> On August 1, 2014, President Obama signed into law the Unlocking Consumer Choice and Wireless Competition Act which temporarily makes it legal for consumers to unlock cell phones.<sup>92</sup> Federal Communications Commission (FCC) Chairman Tom Wheeler has also put pressure on CTIA to reform cell phone unlocking procedures.<sup>93</sup> In response, CTIA has published a set of voluntary principles regarding unlocking consumer mobile cell phones.<sup>94</sup>

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wireless competition by permitting consumers to unlock mobile wireless devices albeit only temporarily).

<sup>90</sup> See Unlocking Consumer Choice and Wireless Competition Act, H.R. 1123, 113th Cong. (2014) (enacted) (describing the Unlocking Consumer Choice and Wireless Competition Act which promotes consumer choice and wireless competition by permitting consumers to unlock mobile wireless devices); see also H.R. 1123, 113th Cong. (2014) (describing the purpose of the Unlocking Consumer Choice and Wireless Competition Act is to repeal a Library of Congress determination made upon the recommendation of the Register of Copyrights to no longer allow the exemption for unlocking cell phones and summarizing the “Unlocking Consumer Choice and Wireless Competition Act”).

<sup>91</sup> See Robertson, *supra* note 86 (stating that several legislators have introduced bills that would make unlocking cell phones legal); see also Corynne McSherry, *The Wrong Tool For the Job: Cell Phone Unlocking Bill Creates New Problems*, ELECTRONIC FRONTIER FOUNDATION (Feb. 23, 2014), archived at <http://perma.cc/AQP8-C4P3> (discussing the possible problems the new “Unlocking Consumer Choice and Wireless Competition Act” may create by not allowing for bulk unlocking and is only valid until the next exemption hearing period which is less than two years away); Ian Paul, *U.S. House passes bill to allow mobile phone unlocking, but details worry advocates*, PC WORLD (Feb. 26, 2014), archived at <http://perma.cc/JT5H-FKTS> (announcing the bill to unlock mobile phones passed in the U.S. House of Representatives by a vote of 295-114; but clarifying the U.S. Senate has yet to vote on the bill’s fate).

<sup>92</sup> See Salvador Rodriguez, *Unlocking cellphones is legal again; here's the skinny on the law*, L.A. TIMES (Aug. 1, 2014), archived at <http://perma.cc/DSP2-4FRT> (summarizing the Unlocking Consumer Choice and Wireless Competition Act as signed into law by President Obama).

<sup>93</sup> See Stephen Lawson, *FCC chief pressures carriers on cellphone unlocking*, TECHLIVE (Nov. 15, 2013) archived at <http://perma.cc/GA8Y-KJT3> (stating that FCC Chairman wrote a letter to the President of CTIA to voluntarily ease cellphone unlocking restrictions or risk being forced to do so by the FCC); see also Tom Wheeler, *Letter to Steve Largent*, FEDERAL COMMUNICATIONS COMMISSION (Nov. 14, 2013), archived at <http://perma.cc/Y9UZ-4N4A> (presenting the letter from Tom Wheeler to Steve Largent, in which Wheeler states, “[w]e are anxious to work with you and your members to resolve this matter expeditiously. Enough time has passed, and it is now time for the industry to act voluntarily or for the FCC to regulate.”).

<sup>94</sup> See Florence Ion, *All five major US carriers agree to let you unlock your phone anytime you want*, TECHHIVE (Dec. 12, 2013), archived at <http://perma.cc/W73A-AUPN> (stating that the voluntary principles provide some guidance but the real

#### IV. ANALYSIS

There are two different technologies that wireless providers use for mobile phone operation, Code Division Multiple Access (CDMA)—used by Verizon and Sprint—and Global System for Mobile Communications (GSM)—used by AT&T and T-Mobile.<sup>95</sup> Wireless providers typically use hardware locks, software locks or a combination of the two to lock cell phones and force customers to stay on their network.<sup>96</sup> A locked cell phone requires use on the network it was programmed for and cannot be used on another network without being unlocked and although wireless providers have the ability to unlock phones, they generally do not do so.<sup>97</sup>

Cost and security are the two main reasons that wireless providers defend cell phone locking.<sup>98</sup> First, subsidizing mobile cell phones makes it easier for more people to obtain wireless service.<sup>99</sup> Second, in order for wireless carriers to provide secure and reliable service, they must require mobile phones to meet specific criteria, and therefore, locking devices insures only mobile phones made specifically for the network are used on the mobile network.<sup>100</sup> The release of the iPhone exclusively on AT&T ushered in a new era of unlocking attempts to which both AT&T and Apple promptly

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resolution needs to be from Congress so consumers can unlock a device without consulting with their network service provider); *see also* Largent, *supra* note 66 (articulating that the six voluntary unlocking principles include 1) disclosure; 2) Postpaid Unlocking Policy; 3) Prepaid Unlocking Policy; 4) Notice; 5) Response Time and 6) Deployed Personnel Unlocking Policy).

<sup>95</sup> *See* Cline, *supra* note 13, at 150 (explaining different technologies used by mobile phone carriers).

<sup>96</sup> *See* Haubenreich, *supra* note 5, at 1509 (discussing how locked cell phones prevent users from switching networks on their mobile devices).

<sup>97</sup> *See* Haubenreich, *supra* note 5, at 1509 (stating that while unlocking cell phones may be extremely beneficial for those traveling to different countries, wireless carriers typically will not unlock cell phones even though they have the ability to do so).

<sup>98</sup> *See* Defeo, *supra* note 19, at 1042 (detailing the two distinct grounds wireless carriers have historically based locking mobile phones on).

<sup>99</sup> *See In re Wireless*, 385 F. Supp. 2d at 410 (explaining that subsidizing mobile phones makes it more affordable for consumers to obtain wireless service).

<sup>100</sup> *See* Defeo, *supra* note 19, at 1042 (articulating efficient and secure wireless service requires handsets to meet certain specifications).

responded.<sup>101</sup> Apple also responded by permanently disabling—also known as “bricking”—unlocked iPhones.<sup>102</sup>

The DMCA was passed by Congress to restrict copyright piracy that new technologies made possible in the 1990s.<sup>103</sup> The Librarian of Congress can hear submissions every three years from interested parties to declare certain uses of copyrighted works legal for the following three years.<sup>104</sup> For mobile phones, the copyrighted work at issue is the firmware—software that runs mobile phones—and the technological measure is the anticircumvention software installed by the wireless provider.<sup>105</sup> In 2006, the Librarian of Congress declared six activities exempt from the DMCA, most relevant to this Note is class number five which 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.”<sup>106</sup> Similarly in 2010, the Librarian of Congress again found that unlocking cell phones was not a copyright violation and specifically stated, “[i]t seems clear that the primary purpose of the locks is to keep consumers bound to their existing networks, rather than to protect the rights of copyright owners in their capacity as copyright owners.”<sup>107</sup> The Librarian of Congress reviewed the exemptions to the DMCA in 2012—pursuant to subsections 1201(a)(1)(C) and (D) of the

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<sup>101</sup> See Haubenreich, *supra* note 5, at 1510 (stating AT&T sent cease-and-desist letters to individuals who published methods and techniques of unlocking the iPhone which were grounds in section 1201(a)(2) of the DMCA).

<sup>102</sup> See Hachman, *supra* note 32 (discussing the consequences of iPhone unlocking when updating Apple released software which causes “bricking”).

<sup>103</sup> See 17 U.S.C. §§ 1201(a)(1)(A) (pointing to the purpose of enacting the Digital Millennium Copyright Act).

<sup>104</sup> See 17 U.S.C. §§ 1201 and accompanying text (quoting the relevant part of the DMCA which allows the Librarian of Congress to review the DMCA).

<sup>105</sup> See Haubenreich, *supra* note 5, at 1510 (explaining the “copyrighted work” and the “technological measure” at issue with unlocking cell phones and the DMCA).

<sup>106</sup> Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 71 Fed. Reg. at 68,480 (Nov. 27, 2006) (to be codified at 37 C.F.R. pt. 201) (declaring the exemption that allows cell phones to be unlocked for the purpose of lawfully connecting to a wireless network).

<sup>107</sup> See 75 Fed. Reg. 143, 825-30 (stating the relevant findings by the Librarian of Congress regarding mobile phone unlocking and the DMCA); see also Cline, *supra* note 13, at 163 (discussing the Register of Copyrights findings regarding the cell phone unlocking exemption to the DMCA in 2010).

DMCA—and no longer provided for the exception allowing unlocking cell phones.<sup>108</sup>

The Librarian of Congress should have continued to allow for the exemption to unlock cell phones like it did in 2006 and 2010. In 2010, the Librarian of Congress noted that cell phone locks were not principally used to protect copyrights owners.<sup>109</sup> Further, the Librarian stated, the primary purpose of cell phone locks appears to be part of the mobile carrier's business plan to keep users tied to their current mobile carrier.<sup>110</sup> The Librarian concluded that unlocking a mobile phone to use on another wireless provider is not ordinarily construed as copyright infringement.<sup>111</sup> Also, the narrow copyright exemption that allowed unlocking a mobile phone does not establish a federal policy of ensuring customers can switch wireless providers and does not mean that the terms of the service contract would not apply.<sup>112</sup>

The Librarian of Congress looked to different factors than she did in previous exemption hearing periods and therefore was inconsistent with the 2006 and 2010 decisions. In 2006 and 2010, the Librarian of Congress found in favor of the proponents of the exemption because it appeared the primary purpose of the phone lock was to keep mobile users with their current mobile phone carrier.<sup>113</sup> In fact,

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<sup>108</sup> See 17 U.S.C. §§ 1201(a)(1)(C)-(D) (codifying the process by which the Librarian of Congress may make determinations of noninfringing uses of copyrighted work); 37 C.F.R. § 201 (stating that there is only a ninety day exemption period for unlocking cell phones following the current ruling from the Register of Copyrights).

<sup>109</sup> See Exemption to Prohibition on Circumvention: Copyright Protection Systems for Access Control Technologies, 75 Fed. Reg. 43,826, 43,826 (Jul. 27, 2010) (to be codified at 37 C.F.R. pt. 201) (finding that although one purpose of cell phone locking may be to protect copyright owners in their capacity as copyright owners, it is not the primary purpose of locking cell phones).

<sup>110</sup> See *id.* at 43,830 (observing the mobile carriers business plan and the benefits it receives from mobile phone locking software, hardware, and a combination of both and may be justified for other reasons not having to do with copyright law and policy).

<sup>111</sup> See *id.* at 43,831 (stating that there to be no copyright based reasons circumvention of phone locking should not be permitted).

<sup>112</sup> See Cline, *supra* note 13, at 164 (highlighting that the copyright exemption is extremely narrow and will not help customers circumvent their services contracts when switching networks because that would be outside the powers of the Copyright Office).

<sup>113</sup> See Exemption to Prohibition on Circumvention: Copyright Protection Systems for Access Control Technologies, 75 Fed. Reg. at 43,830 (finding that although one

the Register of Copyrights recommended in 2010 that an exemption similar to the 2006 period by stating:

The primary purpose of the locks is to keep consumers bound to their existing networks, rather than to protect the rights of copyright owners in their capacity as copyright owners. This observation is not a criticism of the mobile phone industry's business plans and practices, which may well be justified for reasons having nothing to do with copyright law and policy, but simply a recognition of existing circumstances. Because there appear to be no copyright-based reasons why circumvention under these circumstances should not be permitted.<sup>114</sup>

But, the Librarian of Congress, in 2012 exemption period, considered evidence demonstrating that there are other avenues, which provide alternatives to circumvention, such as purchasing one of the widely available unlocked phones.<sup>115</sup> Because of this, the Register of Copyrights suggested that proponents of the exemption “had not satisfied their burden of showing adverse effects related to a technological protection measure.”<sup>116</sup> Although proponents concede that there are devices widely available unlocked, they argue that the most technological devices remain locked and therefore the exemption is needed so they will not be restricted on one carrier's network.<sup>117</sup> This logic of the Register of Copyrights still seems like a departure from the Librarian of Congress statements in the 2010 exemption period, which have nothing to do with copyright law and policy, or protecting copyright owners in their capacity as copyright owners; rather, the Librar-

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purpose of cell phone locking may be to protect copyright owners in their capacity as copyright owners, it is not the primary purpose of locking cell phones).

<sup>114</sup> *Id.* at 43,831.

<sup>115</sup> See Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 77 Fed. Reg. at 65,265 (stating that although not all mobile phones are available unlocked there is a wide variety of unlocked phones in the marketplace that can be purchased).

<sup>116</sup> *Id.*

<sup>117</sup> See *id.* (stating that some devices sold by wireless providers remain permanently locked).

ian of Congress is protecting a business model, not a copyright, in her recent ruling.<sup>118</sup>

CTIA's argument that locking cell phones ensures affordable mobile headsets by recouping the cost in the service plan ignores the fact that the exemption allowing cell phone unlocking does not mean terms of the service contract—including early termination fees—are not valid. CTIA maintains that locking mobile devices is part of the wireless industry's business model, in which they wireless provider subsidizes headsets that will be used on that carrier's network and the cost will be recouped by the carrier.<sup>119</sup> CTIA states that subsidizing wireless devices allows the wireless provider to cooperate with cell phone producers and create more affordable, higher quality devices.<sup>120</sup> CTIA's argument ignores the fact that an exemption allowing cell phone unlocking—like the 2006 and 2010 exemptions—would still allow for subsidizing mobile phones because it would not allow users to escape from contract agreements or from paying early termination fees; it would simply allow users to switch networks, while using the same mobile device after their contract was up or after incurring an early termination fee.<sup>121</sup> Therefore, with subsidizing still available and while having the ability to unlock cell phones, this argument seems to fail.

The Librarian of Congress may not be in the best position to determine if there should be an exemption to the DMCA to allow for legal cell phone unlocking. After the 2012 exemption hearings, over 114,000 people petitioned the Obama Administration indicating their support for legalizing cell phone unlocking.<sup>122</sup> The Obama Administration responded by agreeing with petitioners and saying consumers of cell phones and tablets should be able to use them on another

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<sup>118</sup> See McSherry, *supra* note 91 (presenting the argument that phone locking is designed to protect a business model and the DMCA is being used to protect that business model).

<sup>119</sup> See 77 Fed. Reg. at 65,265 (describing the industry's prominent business plan "which involves subsidizing the cost of wireless handsets in exchange for a commitment . . . that the phone will be used on [the wireless provider's network]").

<sup>120</sup> See Newman & Pinkerton, *supra* note 45, at 12 (inferring that high quality phones would not be available to many users without subsidizing the cost).

<sup>121</sup> See Cline, *supra* note 13, at 164 (highlighting that the copyright exemption is extremely narrow and will not help customers circumvent their services contracts when switching networks because that would be outside the powers of the Copyright Office).

<sup>122</sup> See *Make Unlocking Cell Phones Legal*, *supra* note 87 (depicting the petition to the Whitehouse containing over 114,000 signatures).

network if the device has been paid for and the user is not bound by a service agreement.<sup>123</sup> The Obama Administration continued by saying “[i]t is common sense, crucial for protecting consumer choice, and important for ensuring we continue to have a vibrant, competitive wireless market that delivers innovative products.”<sup>124</sup> Congress has also responded by introducing bills that would legalize cell phone unlocking.<sup>125</sup> The Librarian of Congress may not have been in the best position to determine the legality of unlocking cell phones because it encompasses so many other issues besides copyright law and policy and Congress should be working to provide a solution.<sup>126</sup>

The voluntary industry principles for consumer unlocking of mobile wireless phones and tablets that are is still not the best solution for consumers. By relying on the industry principles, consumers will still need to contact their wireless provider to be able to unlock the device that they have purchased.<sup>127</sup> Furthermore, the principles state that notice will be given when the device is eligible for unlocking.<sup>128</sup> Notice to prepaid costumers may be given at the point of sale, but others will receive notice when eligible or through a statement on the carrier’s website.<sup>129</sup> This notice system fails to inform consumers that they could be eligible to unlock device with time on their contract so long as they pay an early termination fee.<sup>130</sup> Also, the new

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<sup>123</sup> See *Make Unlocking Cell Phones Legal*, *supra* note 87 (articulating the view of the Obama Administration which believes the exemption should be expanded to include tablets).

<sup>124</sup> See *Make Unlocking Cell Phones Legal*, *supra* note 87 (illustrating the statements by R. David Edelman, Senior Advisor for Internet, Innovations & Privacy).

<sup>125</sup> See S. Res. 517, 113th Cong. (2014) (outlining the Unlocking Consumer Choice and Wireless Competition Act in the Senate); H.R. 1123, 113th Cong. (2014) (outlining the Unlocking Consumer Choice and Wireless Competition Act in the House of Representatives); see also Robertson, *supra* note 86 (stating several legislators have introduced bills that would make unlocking cell phones legal).

<sup>126</sup> See Ion, *supra* note 94 (arguing that the solution to the locked mobile phone dilemma should come from Congress rather than the wireless network providers).

<sup>127</sup> See Ion, *supra* note 94 (stating the proposition “if you’ve bought something you should be able to do whatever you want with it, whether its modifying it, or unlocking it. You shouldn’t need a massive corporations permission.”).

<sup>128</sup> See Largent, *supra* note 66 (describing how notice will be given to consumers when they are eligible for their device to be unlocked).

<sup>129</sup> See Largent, *supra* note 66 (detailing the ways that notice can be given to consumers who may be interested in unlocking their mobile devices).

<sup>130</sup> See Largent, *supra* note 66 (informing that carriers “will unlock mobile wireless devices or provide the necessary information to unlock their devices for their customers...after the fulfillment of the applicable postpaid service contract, device financing plan or payment of an applicable early termination fee.”).

exemption period is less than two years away, and the voluntary principles state they will “implement three of the standards articulated about within 3 months of this commitment and to implements this commitment in its entirety within 12 months of adoption.”<sup>131</sup> Wireless providers still have the ability to deny unlocking in certain cases, not unlock the phone and give instructions, or given reasons why the carrier needs additional time to process the consumer’s request.<sup>132</sup>

The Unlocking Consumer Choice and Wireless Competition Act also is not a suitable alternative for consumers who want to unlock their phones and feel as if the voluntary industry principles for consumer unlocking of mobile wireless phones and tablets will not suffice. The Act will allow a person to unlock their personal cell phone legally, but also explicitly prevents unlocking mobile phones for bulk resale purposes.<sup>133</sup> Bulk unlockers procure phones from many different sources, unlock them, and then resell them.<sup>134</sup> The Unlocking Consumer Choice and Wireless Competition Act, which does not allow for bulk unlocking, creates a two-fold problem.<sup>135</sup> The first is that Congress acquiesced to assertions of copyright infringement or limitation of certain business models, even if there is no copyright infringement taking place.<sup>136</sup> Second, Congress is unaware of the collateral damage the DMCA causes not only in prohibit-

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<sup>131</sup> See Largent, *supra* note 66 (discussing the implementation of the voluntary industry principles for consumer unlocking of mobile wireless phones); *see also* Ion, *supra* note 94 (articulating the time frame for the implementation of the voluntary industry principles for consumer unlocking of mobile wireless phones).

<sup>132</sup> See Largent, *supra* note 66 (stating that unlocking will be denied if the wireless provider believes the request is fraudulent or the phone is stolen).

<sup>133</sup> See H.R. 1123, 113th Cong. (2014) (stating, in most relevant part, unlocking a cell phone is permissible if it is “initiated by the owner... by another person at the direction of the owner, or by a provider of a commercial mobile radio service or a commercial mobile data service” and also stating “[n]othing in this subsection shall be construed to permit the unlocking of wireless handsets or other wireless devices, for the purpose of bulk resale, or to authorize the Librarian of Congress to authorize circumvention for such purpose under this Act,... or any other provision of law”); *see also* Paul, *supra* note 54 (emphasizing the bulk resale businesses will not fall within the bill that has been proposed).

<sup>134</sup> See McSherry, *supra* note 91 (articulating what a bulk resale business consists of).

<sup>135</sup> See McSherry, *supra* note 91 (stating the two main problems that Congress is proposing with The Unlocking Consumer Choice and Wireless Competition Act).

<sup>136</sup> See McSherry, *supra* note 91 (proposing that it is difficult to see the how unlocking a phone is copyright infringement, and therefore excluding bulk unlocking cannot be based on copyright infringement).

ing consumers from accessing the benefits of unlocking, but also in prohibiting legal bulk unlocking which could avert environmental damage.<sup>137</sup>

## V. CONCLUSION

The decision reached by the Librarian of Congress in the 2012 exemption hearing period departed from precedent established in the 2006 and 2010 hearings, by not continuing the exemption from the DMCA that allowed for unlocking cell phones. The decision made unlocking cell phones illegal, and seems to not be based on copyright law and policy issues, but mainly on the fact that there are some unlocked phones available in the marketplace. Because of the Librarian's decision, the Obama Administration and Congress have supported legislation that will make cell phone unlocking legal and will further support a competitive wireless marketplace. This will not be a permanent solution because the Unlocking Consumer Choice and Wireless Competition Act will only allow consumers to unlock cell phones after their service contract has run and because the Act itself expires when the Librarian of Congress reviews exemptions to the DMCA in 2015.

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<sup>137</sup> See McSherry, *supra* note 91 (stating that bulk unlockers help reduce the amount of electronic waste from mobile phones); see also Paul, *supra* note 54 (stating, "bulk resellers of unlocked phones help extend the useful life of old handsets reducing electronic waste" and limiting this business is limiting a business that does not infringe on copyrights but in fact just promotes the mobile service providers business plan).