

**Before the
United States Copyright Office
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Software-Enabled
Consumer Products Study

Docket No. 2015–6

**COMMENTS OF PUBLIC KNOWLEDGE
AND NEW AMERICA'S OPEN TECHNOLOGY INSTITUTE**

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I. Introduction

The mere addition of software to a consumer product should not provide an opportunity to reduce consumer rights. Many of the policy difficulties that could arise in the embedded software context can be eliminated by simply following the text of the Copyright Act and disregarding attempts by rightsholders to claim new rights never granted them by Congress, at the expense of users. Public Knowledge and New America's Open Technology Institute present these comments in the hope that, first and foremost, a commonsense approach to software copyright law that is based on the text of the statute and time-tested legal principles can help protect consumer rights as more devices begin to incorporate software.

II. Distinguishing a “Pure” Software Product from a Software-Enabled Consumer Product May Be Necessary to Prevent Software-Specific Doctrines from Overrunning Other Areas of Law

The Office has asked “Whether copyright law should distinguish between software embedded in ‘everyday products’ and other types of software, and, if so, how such a distinction might be drawn in an administrable manner.... [w]hether ‘everyday products’ can be distinguished from other products that contain software, such as general purpose computers—essentially how to define ‘everyday products’ [and] [i]f distinguishing between software embedded in ‘everyday products’ and other types of software is impracticable...”

While copyright law is of general applicability, there are circumstances where courts and legislators have already decided to treat software as different than other classes of copyrighted work, and embedded software as different than other kinds of software. At a minimum, there may be value in continuing to distinguish between embedded software and “pure” software, to prevent existing software-specific doctrines from overrunning other areas of law.

This distinction is not difficult to make. A consumer who buys software on magnetic, optical, or flash media is just purchasing a copy of software.¹ A consumer who buys a device with software embedded in it, by contrast, is not. Thus a consumer who buys a laptop computer, tablet, car, health device, thermostat, or any other product that may contain software is purchasing a software-enabled consumer product,² and the law that applies to such products

¹ A consumer who purchases a download of software pays the rightsholder to create a new copy of software on her existing computing device. If the consumer owns the computing device and its storage media, then she owns a copy of software after the download completes the same as if she purchased a DVD at a retail store.

² This is the same distinction drawn by Congress in 17 U.S.C. § 109, when it exempted “a computer program which is embodied in a machine or product and which cannot be copied during the ordinary operation or use of the machine or product” from the exemption to the first sale doctrine for the rental of computer software. Only “pure” software as discussed above can be copied in its ordinary operation. However, it should be noted that the focus on copy-ability

should be the law that applies to general consumer products, instead of software-specific doctrines that could remove user rights.

Distinguishing between different kinds of products beyond this—for example, putting smartphones in one category and “everyday” products such as software-enabled rice cookers and thermostats in another—would be a mistake. Consumer products such as wristwatches or smoke alarms today may contain more computing power and more sophisticated software than personal computers did 20 years ago. Consumers now perform many functions that once required dedicated devices on general-purpose platforms; for example they take photographs, write letters, and make voice calls from their smartphones. At the same time, some functions that once required a general-purpose computer (ordering from Amazon, for instance) can now be performed with dedicated devices (the Amazon Dash). Creating different legal rules for general-purpose computing platforms and single-purpose devices could create a perverse incentive for manufacturers or developers to conform their products to one category or the other. Consumer demand, creative vision, and business considerations should factor into what new products come to market—not arcane copyright distinctions.

III. Embedded Software Raises Minimal Infringement Concerns

The Office has asked for comment on the “rationale and proper scope of copyright protection for software embedded in everyday products, including the extent to which copyright infringement is a concern with respect to such software.”

As Congress recognized, embedded software does not raise the same concerns about infringement that have driven software copyright policy in other areas. When it limited software rentals, for example, it specified that this limitation does not apply to a “computer program which is embodied in a machine or product and which cannot be copied during the ordinary operation or use of the machine or product.”³ This demonstrates both that Congress believed that copyright should not impose restrictions on the alienability of embedded software, and that this freedom would not prejudice the rightsholder’s legitimate interests.

Unfortunately, many attempts to use copyright to control uses of consumer products do not serve to combat infringement, but about restricting user rights. For instance, copyright may be invoked to restrict secondary markets, limit modifications and repairs, or disclaim liability. As discussed below, policymakers should discourage attempts to use copyright for these purposes.

relates to Congress’ wish to prevent rental copies of software from being easily used to create infringing copies of software; that criterion is not germane with respect to the broader policy questions relating to embedded software, such as product liability or the right to repair.

³ 17 U.S.C. § 109; NOI at I(B).

IV. Owners of Software-Enabled Consumer Products Own “Copies” of the Embedded Software They Contain

The Office asked for comment on the “state of contract law vis-à-vis software embedded in everyday products, and how contracts such as end user license agreements impact investment in and the dissemination and use of everyday products, including whether any legislative action in this area is needed.” This is a complex topic. As will be discussed in this section, unnecessary confusion between licenses and contracts, and what it means for a consumer to own a *copy* of a copyrighted work (as distinct from owning copyrights in a work) has made the status of user rights generally unclear with embedded software devices, and software products generally.

A. *Copy Ownership and Copyright Ownership Are Distinct Concepts*

Many advocates for industry put forward a vision of copyright law that has no connection to either the text or purpose of copyright law. They conflate the ownership of copies with the ownership of copyrights to justify the practice of rightsholders purportedly retaining title to the copies of software they sell. Defenders of this practice even act as though they believe that the sale of copies is the same as a transfer of intellectual property rights. GM, for example, has written that advocates of the view that ownership of a car is the same as ownership of any copies of software that it embodies “incorrectly conflate ownership of a vehicle with ownership of the underlying computer software in a vehicle.”⁴ But a passing acquaintance with the text and structure of the Copyright Act reveals these positions as absurd. No court has ever said that it is possible for a user to own a material object but not own the copies of software it may embody. The cases that advocates like GM rely on—though flawed in themselves⁵—nonetheless concern the title to material objects, such as optical disks. The law does not support a vision where “copy ownership” is distinct from the ownership of the material object embodying the copy.

One can own the copyright to a work, or own a copy of a work. “‘Copies’ are **material objects** ... in which a work is fixed by any method now known or later developed, and from which the work can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.” 17 U.S.C. § 101 (emphasis added). A person who owns the material object in which a copy is embedded necessarily owns a copy of the copyrighted work. Ownership of a copy of a work does not grant the owner any copyright interest in the underlying

⁴ Comments of General Motors, Copyright Office Docket No. 2014-07, Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, Proposed Class 21: Vehicle Software – Diagnosis, Repair, or Modification, at 10, http://copyright.gov/1201/2015/comments-032715/class%2021/General_Motors_Class21_1201_2014.pdf

⁵ See discussion of *Vernor*, *infra*.

work, nor does it permit the owner to infringe the copyright of the underlying work. In the software context particularly, the distinction between copy ownership, and copyright ownership, has several ramifications.

For most copyrighted works, no special license is needed to use the work in ordinary ways—to read a book, or to listen to a musical recording—whether or not the user owns the copy of the work in question. In the case of software, the owner of a copy does not need a license to execute a copy of that program or install it on a computer. For any copyrighted work, a user only needs a license—granted statutorily or from the rightsholder—for uses that would otherwise conflict with an exclusive right under Section 106 of the Copyright Act.⁶

B. Conditions on Unnecessary Licenses Have No Effect

This distinction between copy ownership and copyright ownership is basic, as are the circumstances in which a user must obtain a license. Yet it is necessary to review these points to put many of the practices of the software industry into context. If a user does not need permission to do something, then restrictions on an unnecessary grant of permission have no effect. If a movie theater wants to publicly perform a movie, it needs permission. It is therefore bound by conditions that may be put on that permission. Since it had no right to publicly perform the movie absent a license, when it violates the license, it violates copyright.

By contrast, no one needs a special “license” to read a book, to lend a friend a CD, or to look at a painting. Therefore an attempt to grant a “license” for such activities must fail. If a reader reads a book in violation of conditions put on an ineffective license, she does not violate copyright law. Conditions on a license only apply in cases where licenses are necessary. Similarly, pages-long “licensing agreements” which purport to use copyright law to impose limitations on how consumers may use the products they buy or give up certain legal rights may be of questionable legal efficacy.

C. Owners of Copies of Software Do Not Need a License from the Rightsholder to Use the Copies They Own

Certain software-specific doctrines make the analysis of whether a license is needed to use a copy of software more complicated than it is for books. Yet the overall contours are the same. At the end of the analysis, owners of copies of software do not need licenses to use that software, meaning that licenses that purport to restrict owner rights are, at best, on shaky legal ground.

⁶ This includes fair use, since, fair uses are not “excused infringements,” but non-infringements. 17 U.S.C. 107 (“the fair use of a copyrighted work ...is not an infringement of copyright.”).

While software is generally governed by the same copyright law as any other class of copyrighted work, the statute carves out several exemptions for software. For example, software rentals are disallowed,⁷ because of the fear that commercial rentals of boxed copies of software would facilitate infringement. At the same time, the owners of copies of software are specifically granted certain rights; *e.g.*, they are expressly authorized to create archival copies of that software.⁸ What's more, owners of copies of software are permitted to make whatever new copies of software that are "an essential step in the utilization of the computer program in conjunction with a machine."⁹ Thus, if a person buys a copy of software on a physical medium such as a DVD, and it is necessary to "install" that software on a computer before using it, that person does not need a license to install the software.¹⁰

A prevailing view is that merely operating a computer involves making a new legally relevant copy of whatever software is involved in its operation.¹¹ Assuming this arguably dubious¹² proposition to be true, to the extent that the user of a computer owns (or is authorized by the owner of) the computer, including the flash memory, ROM, or hard drive that embodies copies of any software, the user does not infringe copyright in its operation, and does not need a license from the rightsholder. Under the statutory scheme Congress adopted, while it may be the case that using software involves making various copies, lawful owners of copies of software no more need a license to use those copies than the owner of a book needs a license to read it.

To circumvent Congress's intent in this matter, some rightsholders hit upon a clever legal ploy, which has since become nearly universal in the software industry. Since the "essential step" license only applies to owners of copies of software, they would declare that software users did not own, but merely "licensed" copies. If this legal stratagem succeeds, then, contrary to

⁷ 17 U.S.C. 109(b).

⁸ 17 U.S.C. 117(a)(2).

⁹ 17 U.S.C. 117(a)(1).

¹⁰ Nor does she have to argue for fair use.

¹¹ See *MAI Systems Corp. v. Peak Computer, Inc.*, 991 F.2d 511 (9th Cir. 1993). Congress specifically enacted Title III of the Digital Millennium Copyright Act to overturn the 9th Circuit's decision in MAI Systems. Aaron Schwabach, *Internet and the Law: Technology, Society, and Compromises*, 2nd Edition (ABC-CLIO 2014) 89. However, it chose the path of creating a statutory license to create "RAM copies" in some circumstances instead of questioning the assumption that "RAM copies" constitute a "reproduction" under the Copyright Act.

¹² It may be a better view to view the transitory RAM copies of software involving in using a computer as *de minimis*, unfixed, lacking substantial similarity, or otherwise not legally "copies" at all.

Congressional intent, users may need a license merely to operate a copy of the software.¹³ This provides the rightsholder with the opportunity to condition the license on the user's surrender of legal rights (e.g., legal recourse for a defective product) that she would otherwise have.

On its face, this practice is absurd. It is not possible to “license” a physical copy of software, any more than it is possible to “license” a cinder block. As Nimmer explained, “[t]he question of ownership under the first sale doctrine deals with physical goods. Reference to a ‘license’ of a ‘product’ is, at best, ambiguous to its physical reference.”¹⁴ To attempt to “license” a material object is a category error. One can sell, lease, or gift physical property. By contrast, a license grants licensees legal rights they would not otherwise have.

But however counterintuitive it may be that a rightsholder can “license” a material item like an optical disk, extending this practice to the realm of consumer products such as appliances, cars, medical devices, and smartphones yields the conclusion that users don't even own the products they buy. One example of this is the Nest End User License Agreement,¹⁵ which is representative of the agreements associated with embedded software devices. First, the Agreement states that it “grants to you a limited and nonexclusive license (without the right to sublicense) to execute one (1) copy of the Product Software, in executable object code form only, solely on the Product that you own or control.” It also states that “The Product Software (and all copies thereof) is licensed to you, not sold, under this EULA.” But this is contradictory: the Agreement recognizes that a user might own the “Product,” then the user necessarily owns a copy of the software the product contains. There is no way to own the physical media software is embedded in, and not own a copy of that software. The product—or a portion of it—simply *is* the copy.¹⁶ This means that the user should not need a license at all “to execute one (1) copy of

¹³ Similarly, the first sale doctrine can be circumvented if the copyright holder somehow retains title to the physical copies of a work it releases into the world.

¹⁴ 2 NIMMER ON COPYRIGHT § 8.12[B][1][d][ii].

¹⁵ Nest EULA, <https://nest.com/legal/eula>.

¹⁶ One clarifying point is in order. A legal fiction where a consumer owns the physical good itself but not the portion of the physical good that embodies the software—where the consumer owns, for instance, her fire alarm, but not that part of the fire alarm (e.g. the ROM chip or NAND card) that contains copyrighted software—is not sustainable. In addition to making a mockery of the law, there would be no reason to confine this analysis to the world of software. Various sellers have already tried to use the pretext of copyrighted material (e.g. a copyrighted image of a globe on the back of a watch) to attempt to restrict the resale of physical goods. *See, e.g.,* the plaintiff's claims in *Omega S.A. v. Costco Wholesale Corp.*, 541 F.3d 982 (9th Cir. 2008). Therefore, if a consumer owns a consumer product that has embedded software in it, it necessarily follows that she owns a copy of that software. Said another way, the consumer product itself *is* the copy.

the Product Software.” But proceeding from this contradiction and assuming that users require a “license” to use a product they apparently both own and do not own, the license takes away user rights in a series of numbered paragraphs, labelled “Warranty Disclaimer,” “Limitation of Liability,” “Confidentiality,” “Governing Law; Venue” and so on. If these provisions are enforceable, it should not be part of a purported software license, since Nest owners do not need a license to operate the \$250 thermostat they paid for, and bought like any other consumer product. A Nest owner should not have fewer protections under the law than the owner of a Honeywell T87K1007 mechanical thermostat because of a non-negotiated boilerplate “license.”

D. Contracts are Distinct from Licenses

It is, of course, possible to sell a copy of a copyrighted work subject to a sales contract where the buyer agrees to give up rights she would otherwise have. Such a sales contract may even be labelled a “license” or a “license agreement”—nevertheless, licenses and contracts are analytically distinct, and have different legal consequences.¹⁷ Perhaps—though this is unlikely—a potential Nest purchaser in a Home Depot first negotiated or signed a contract with Nest, agreeing to waive various rights, before paying money for it and taking it home. Of course, a given sales contract may be unenforceable, but that is a matter for contract law, not copyright law. Contract law has built-in safeguards addressing unconscionable contracts or contracts that are against public policy. Contracts may also be invalid due to a failure of consideration, a failure of mutual assent, and so on. Contracts also require privity between the parties. Licenses, by contrast, have none of these limitations. A rightsholder can put whatever it likes as a condition on a license, and there need not be privity (or a valid contract of any kind) between a licensor and a licensee. While it is important for policymakers to protect the public by ensuring that contract law itself remains fair to consumers, this is not a matter for the Copyright Office. Nevertheless there are still copyright implications of contracts to consider.

¹⁷ In *MDY Indust., LLC v. Blizzard Entertainment, Inc.*, 629 F. 3d 928, 939-943 (9th Cir. 2010), the 9th Circuit described how, when a single document is both a license and a contract, it may be necessary to distinguish between conditions on a license, and covenants on a contract. It held that a term is a condition when there is “a nexus between the condition and the licensor’s exclusive rights of copyright.” 941. Only violation of a condition, not of a covenant, can lead to copyright violation. (The remedy for breach of a covenant is in contract law, not copyright.) An analysis of this sort is necessary to prevent any breach of a term in a complex agreement from resulting in copyright infringement. However, *MDY* first follows *Vernor* in finding that the software users in question were “licensees,” not owners of copies. As discussed in a later footnote, *Vernor* was wrongly decided, and the software users there, as in *MDY*, should be considered owners of copies of software under copyright law. Thus under the facts of *MDY* it would not be necessary to distinguish between a condition and a covenant, since owners of copies cannot infringe copyright by making essential step copies. That being said, there are other circumstances where distinguishing between a license condition and a contractual covenant in a legal document may be necessary.

First is that contract law cannot expand the scope of Section 106 rights. If a reader purchases a book subject to some contract whereby she agrees to give up her fair use rights with respect to that book in exchange for being allowed to read it, and then breaks that contract, neither the reading of the book, nor any fair uses would infringe copyright law. This is because it is not possible to infringe copyright law by reading a book, since “reading” is not one of the rights granted to copyright holders under Section 106, and because fair use “is not an infringement of copyright.”¹⁸ The reader may be subject to some remedy under contract law, but contract law cannot change the contours of copyright. Two parties cannot agree between themselves to change copyright law such that a noninfringing action is infringing. Similarly, if a user owns a copy of software, she cannot be liable for copyright infringement for making “essential step” copies.

The second and more complex question is the extent to which contracting parties can determine the ownership of a material object which, as discussed above, has copyright implications for software. Obviously, contracts for the sale of goods happen all the time, and those contracts transfer title from the seller to the buyer. Likewise, two parties can easily enter a leasing arrangement where title remains with the lessor. However, it does not follow that two parties can enter into sham agreements that eschew economic realities in favor of magic words. See *Microsoft Corp. v. DAK Indus., Inc.*, 66 F.3d 1091, 1905 n.2 (9th Cir. 1995) (“Because we look to the economic realities of the agreement, the fact that the agreement labels itself a ‘license’ . . . does not control our analysis.”). Later cases, unfortunately, have muddied this picture and have given rightsholders expanded rights to retain title to the material items (software copies) they “sell.”¹⁹ But as the *Krause* court recognized, owner of a title in a material item need

¹⁸ 17 U.S.C. § 107. Importantly, regardless of how it must be pleaded, fair use is not an affirmative defense or an “excused infringement.” *Lenz v. Universal Music Corp.*, 801 F.3d 1126, 1113 (2015).

¹⁹ In the view of these commenters, *Vernor v. Autodesk, Inc.*, 621 F. 3d 1102 (9th Cir. 2010), a later case to address this issue, was wrongly decided. 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.” 1111. Under *Vernor*, an agreement can’t just *declare* that a sale is a non-sale—it must impose “restrictions.” This is an attempt to square the circle, outlining circumstances where a user owns a copy of software for all practical purposes, except for those the copyright holder wishes to restrict, such as secondary sales. In practice—as the result in *Vernor* itself demonstrated—this means that a copyright owner can turn a sale into a “license” by simply being clearer up front with some of the consequences of this legal distinction, regardless of other economic realities. Under this reasoning a person can exchange money for a physical good and be given permanent physical control of that good and yet not be its owner, merely because the vendor said so, and has prohibited sales on the secondary market or repairs. Contra *Vernor*, an analysis of whether or not a buyer of a good is truly its owner or merely a “licensee” should focus on who retains custody of the physical good itself and whether the seller can or

not be the same as the “owner” or rightful possessor of an item for copyright purposes. *Krause* recommend that “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 § 117(a),” instead. *Krause v. Titleserv, Inc.*, 402 F. 3d 119, 124 (2nd Cir. 2005). To the extent, however, that contract law controls the question of ownership, copyright law should have no bearing on whether it is possible to impose what amount to restrictive covenants on chattels.²⁰

E. Understanding that Owners of Products Also Own Copies of Embedded Software Protects User Rights in a Number of Areas

1. Owners Can Freely Resell and Repair Products They Own

The first sale doctrine ensures that copyright law cannot be used to restrict further distributions of copies of copyrighted works. Any lawful owner of a copy of a work is free to sell it or otherwise dispose of, and licenses which purport to give users rights they already have cannot restrict this.

Thus, because owners of software-enabled products almost certainly own copies of the software they contain, it follows that they are entitled to sell or otherwise dispose of those products without needing permission from the copyright owner. (Additionally, in most cases, because the software in consumer products will be “computer program[s] ... embodied in a machine or product and which cannot be copied during the ordinary operation or use of the machine or product,”²¹ the restriction on the rental of copies of computer programs will not apply.) With this understanding, embedded software should not affect consumers’ ability to buy and sell devices on secondary markets.

does reclaim physical possession of it—not boilerplate recitations or contractual restrictions. Indeed, there should not be a different way to determine who is the owner of a material item, simply because the item contains copyrighted material. But to the extent that courts or other policymakers want to follow *Vernor*’s mental gymnastics, this should be limited to pure software products, for example as sold on optical disks or flash media, and not be extended to general consumer products.

²⁰As the Supreme Court found recently in *Kirtsaeng*, “A law that permits a copyright holder to control the resale or other disposition of a chattel once sold is similarly ‘against Trade and Traffi[c], and bargaining and contracting.’” *Kirtsaeng v. John Wiley & Sons*, 133 S. Ct. 1351 (2013), quoting 1 E. Coke, INSTITUTES OF THE LAWS OF ENGLAND § 360, p. 223 (1628).

²¹ 17 U.S.C. § 109.

2. It Should Not Be Easier for Vendors to Disclaim Liability for Defective Products Merely Because They Contain Software

The question of whether or not consumers own the product they think they're buying has consequences that go far beyond copyright. When considering questions of this sort policymakers should ensure they do not give sellers tools that allow them to unilaterally exempt themselves from laws put in place to protect the public.

Already, in the software industry, vendors typically disclaim liability for defects in their products through boilerplate language in sales contracts and licensing agreements. This has led to an anomalous situation where software vendors have the unique ability to exempt themselves from consumer protection laws that are otherwise universally applicable. For example, the toy company VTech has recently declared that it is not liable for defects in its products that put the safety and privacy of children at risk.²² The manufacturers of toy trains and blocks by contrast do not have the ability to put dangerous products into the market while shielding themselves from liability.

While the legal justifications that allow for such disclaimers are suspect (that shrink-, click-, or browse-wrap contract should be enforceable, or that owners of copies of software require special permission to run the software), in the case of pure software products, there may be valid policy arguments as to why software developers should perhaps not be subject to the same levels of tort liability for defects. General-purpose software may be put to uses the developer can't predict, and may run on computers of various configurations. Holding developers to a standard of, for instance, strict liability in such circumstances could chill innovation and simply deter software from being written at all.

However, to the extent that such arguments have merit when applied to software *per se*, they are inappropriate as applied to traditional product liability. A manufacturer or seller should not be able to evade what would otherwise be their responsibilities under the law merely because their products now contain software. Considering how many consumer products do or shortly will contain software, allowing vendors or manufacturers to do this would nullify decades of statutory and common law protections that were designed to protect consumers from poorly-designed or defective products and negligent commercial practices. In the context of a consumer product whether a defect is related to software should not make a difference in a liability analysis.

Importantly, because, as discussed above, the owner of a copy of software does not need a license merely to use it, a consumer should not be bound by liability-disclaiming conditions on

²² Lorenzo Franceschi-Bicchierai, *Hacked Toy Company VTech's TOS Now Says It's Not Liable for Hacks*, MOTHERBOARD (Feb 9, 2016), <http://motherboard.vice.com/read/hacked-toy-company-vtech-tos-now-says-its-not-liable-for-hacks>.

such a purported license. Such disclaims should be viewed, at most, as contractual covenants. Additionally, users of products who are not owners should not have fewer legal protection from defective products than owners, and attempts to disclaim liability for products with embedded software should be viewed skeptically, and as no different than attempts to disclaim liability for any other consumer product.

V. Misapplications of Copyright Law Can Pose Obstacles to Devices Interoperability

The Office has asked for comment on the “need to enable interoperability with software-embedded devices, including specific examples of ways in which the law frustrates or enables such interoperability.”

Copyright law can, at times, frustrate consumer expectations about product interoperability and make it impossible for third parties to produce interoperable products. This can happen in a few ways. First, interpretations of copyright law that allow software developers to claim copyright in functional interfaces such as APIs can make it impossible to create interoperable and compatible products. Second, anti-circumvention rules can create arbitrary barriers to interoperability. And third, abusive licensing agreements or sales contracts can unfairly prevent consumers from using interoperable products.

The Copyright Office should be aware of how granting copyright protection to functional elements of computer software can restrain competition. In its briefing in the *Google v. Oracle* case,²³ Public Knowledge and many others explained how the decision the Federal Circuit eventually reached could restrain competition and harm consumers, and undermine many of the premises upon which the highly competitive personal computing and consumer software markets were built on.²⁴ This precedent is already being used by litigants against competitors who make compatible products. For instance, Cisco claims that its competitor, Arista, infringes copyright by creating devices with a similar command line interface as Cisco’s products.²⁵ Following from *Google v. Oracle*, lawsuits from incumbents that seek to prevent new market entrants from

²³ *Oracle America, Inc. v. Google Inc.*, 750 F. 3d 1339 (Fed. Cir. 2014).

²⁴ See Brief of Public Knowledge On Petition for Writ of Certiorari to the United States Court of Appeals for the Federal Circuit in *Google v. Oracle*, No. 14-410, <https://www.publicknowledge.org/assets/uploads/documents/brief-oracle-v-google.pdf> (*cert denied*).

²⁵ Mark Chandler, *Protecting Innovation*, Cisco Blog (Dec 5, 2014), <http://blogs.cisco.com/news/protecting-innovation> ; Jeffrey Burt, *Cisco: SCOTUS Decision in Oracle-Google Good for Case vs. Arista*, eWeek (Jul 6, 2015) <http://www.eweek.com/networking/cisco-scotus-decision-in-oracle-google-good-for-case-vs.-arista.html>.

creating products that are interoperable with incumbent products or that seek to leverage existing user or developer expertise can be expected to increase.

Public Knowledge and Open Technology Institute have argued before the Copyright Office and the Library of Congress that anti-circumvention rules can harm consumers and restrict competition in a number of ways.²⁶ While reforms to these rules to allow for consumers to make non-infringing uses of copyright works are required across the board, the market-distorting effects of anti-circumvention rules are particularly evident when copyright is improperly invoked to take away consumer rights. For example, consumers are traditionally able to repair and modify devices, including through the use of interoperable aftermarket parts. The addition of software to consumer products should not change this.

Finally, as discussed before, unnecessary “licenses” should no more prevent interoperability than they can restrict resale or disclaim liability. In the case where users of software are not, for one reason or another, owners of copies, attempts to leverage copyright to restrict interoperability may constitute copyright abuse. To the extent that vendors or manufacturers want to use legal documents to prevent consumers from benefiting from interoperability, they should rely on standard contract law or other means, instead of using copyright law to circumvent consumer protections.

VI. Suggested Legislation

Public Knowledge has previously advocated for specific legislative reforms that would protect software user rights. For instance, Congress could specify that essential transient copies are not infringements. This would assure that users do not need licenses from rightsholders to simply to use software (which often involves the creation of RAM and network buffer copies).²⁷ Congress could also specify that “incidental” and non-consumptive copies are fair uses.²⁸

Legislation may be need to clarify the rights of owners of copies of computer programs, including that they *are* owners. Representative Blake Farenthold’s You Own Devices Act (YODA) would be an example of such legislation.²⁹ It may also be necessary to ensure that users

²⁶ See Public Knowledge and Open Technology Institute comments in Copyright Office proceeding on Section 1201 Exemptions to Prohibition Against Circumvention of Technological Measures Protecting Copyrighted Works, <http://copyright.gov/1201/2015/comments-020615>.

²⁷ Internet Blueprint, Reduce Copyright Abuse and Overreach, <http://internetblueprint.org/issues/reduce-copyright-abuse-and-overreach>.

²⁸ Internet Blueprint, Strengthen the Public’s Fair Use Rights in Copyright, <http://internetblueprint.org/issues/strengthen-the-publics-fair-use-rights-in-copyright/>.

²⁹ H.R.862, You Own Devices Act, <https://www.congress.gov/bill/114th-congress/house-bill/862>.

of products who are not owners receive the full protection of the law—for instance, by curbing abusive contracts in an embedded software context to prevent total disclaimers of liability, choice of law provisions, and so on. Congressional action may also be warranted to protect interoperability and reverse engineering, to prevent functional designs such as APIs from falling under copyright protection, and to promote secondary markets and repairability.

VII. Conclusion

Public Knowledge and Open Technology Institute thank the Copyright Office for the opportunity to submit the foregoing comments. If there are any remaining questions, please contact the undersigned attorney at the address indicated in the signature.

Respectfully submitted,

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