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POLICY & ACTION FROM CONSUMER REPORTS

**June 2, 2014**

**Comments of Consumers Union**
**To the National Telecommunications and Information Administration**
**Fostering the Advancement of the Internet of Things**
**[Docket No. 160331306-6306-01]**

Consumers Union, the policy and advocacy arm of Consumer Reports,[1] respectfully submits these comments in the above-referenced matter. We are pleased that the NTIA is engaged in the consideration of the implications for our economy and our society of the emerging Internet of Things, and we look forward to working with you to help ensure that it develops in the best interests of consumers.

The coupling of consumer products, industrial operations, and public infrastructure with remote monitoring, communication, and direction via the Internet implicates a wide range of critical issues of safety, security, privacy, and legal accountability, among others. These issues demand the sustained attention of a commensurately wide array of experts in and out of government. We are engaged in many of these issues, and intend to remain engaged. Safety must of course be at the forefront of concerns carefully monitored and vigorously addressed as we move to increasingly complex and interactive technologies. Likewise, pro-consumer data privacy and data security practices must be a top priority, for manufacturers and for policymakers; consumers should receive sufficient information to exercise informed choice, and companies should compete and be held accountable on the basis of the data privacy and security protections they incorporate into the design of their products and services. We are pleased that the NTIA recognizes the importance of these objectives.

## Potential Erosion of Longstanding Consumer Ownership Rights and Expectations

Our comments here focus on an important concern that is less explicitly highlighted in the Notice – the effects of this coupling on the incidents of ownership, dominion, and control that consumers have relied on over many generations – regarding their rights to use the products they have purchased as they see fit, and regarding the continuing functional utility and value of products once purchased.

[1] Consumers Union is the public policy and advocacy division of Consumer Reports, an expert, independent, nonprofit organization whose mission is to work for a safe, fair, and just marketplace for all consumers and to empower consumers to protect themselves. Consumers Union conducts its policy and advocacy work in the areas of telecommunications reform, health reform, food and product safety, financial reform, and other areas. Consumer Reports is the world's largest independent product-testing organization. Using its more than 50 labs, auto test center, and survey research center, the nonprofit organization rates thousands of products and services annually. Founded in 1936, Consumer Reports has over 8 million subscribers to its magazine, website, and other publications.

The embedding of software into products that controls their functioning already significantly restricts the ability of consumers to decide how those products will be used. While software can enable product functioning on a far more complex and sophisticated level, it can also take that functioning further and further out of the hands of the consumer. Consumers may lose the ability to make what once were simple adjustments in a product's operation, much less the ability to experiment or tinker with the product in innovative ways, or to make even basic repairs. Moreover, the application of traditional patent and copyright principles to cover these functions may extend these restrictions on adjustment, tinkering, and repair to independent service providers, and to independent manufacturers of replacement parts and other compatible products, throwing up roadblocks to competition and consumer choice.

The potential for business practices to undermine long-held consumer rights is heightened significantly with the Internet of Things. When the functioning of a consumer product depends on an Internet connection, the company on the other side of that connection has the power to disable the product – or even erase it – with one stroke on a remote keyboard. Even the mere delivery of the product via the Internet, in electronic form, can tether its continued existence and functionality to the seller's future whims. A consumer attempting to exercise ownership and control of a product faces not only the prospect of potentially harsh legal liability for acting outside of restrictions imposed by contract fine print and obscure applications of copyright law, but also the prospect of the seller disabling the product, through some retaliatory action over the Internet, or through simply discontinuing the Internet connection or the remote support, or downgrading it, or imposing unreasonable new fees for it.

**Our Laws Need Updating to Preserve These Rights and Expectaions**

Our laws have failed to keep up with these game-changing technological developments.

As technology has evolved, careful attention has been focused on interpreting and adjusting the laws so that the traditional expectations of *inventors* and *manufacturers* regarding their rights are preserved in the new technological environment. There has unfortunately been less attention paid to ensuring that the traditional expectations of *consumers* regarding their rights of ownership are preserved. It is time to redress this imbalance.

Specifically, as copyright, patent, and contract law are reinterpreted and applied to products and services in the Internet of Things, an important touchstone needs to be: what would the consumer's reasonable expectation have been regarding an analogous product in the pre-electronic age? And how can that expectation be carried forward and preserved?

For example, when a consumer purchased an automobile circa 1950, what legally enforceable restrictions were there on the consumer's ability to test and modify its operation or performance, or to interchange or replace its parts with other parts and other automobiles, or to re-sell it in its original condition or as modified?

When a consumer purchased a book, or a phonographic record, circa 1950, what legally enforceable restrictions were there on the consumer's ability to re-read the book, or listen to the record, months or years after purchasing it, or to re-sell or give away the book or record, or to save it as a collectible item for future resale?

The goal of preserving the inventor's and the manufacturer's rights must be pursued consistent with the no-less-important countervailing goal of preserving the consumer's rights.

One important aspect of preserving the consumer's rights lies in appropriately constraining the application of copyright law. As we have previously stated in comments to the Copyright Office, we are concerned that inconsistent and unsettled application of copyright law to software that enables and governs, and restricts, the functioning of everyday consumer products in which it is embedded, threatens to cause far-reaching harm to these consumer rights.

The reach of copyright law has expanded dramatically from when it arose a few centuries ago in response to the invention of the printing press. For many years, copyright law applied only to books, stories in periodicals, and other original writings. As the technological means available for publishing and distributing compositions evolved, copyright came to apply over time to phonograph and other audio recordings, and then to film and other video recordings. But throughout this evolution, the limiting concept remained the written expression of spoken language, or close audio-visual equivalents.

With the fateful decision to declare computer code to be a "language" for copyright purposes, the stage was set for the jarring collision we are now witnessing between this new frontier in copyright law and the core protections of a more ancient body of law, property law. The right of consumers to own property was well-established back at least as far as the ancient civilizations of Rome, Athens, Israel, and Mesopotamia.

We recognize the value of copyright law in nurturing and protecting incentives for innovation, both generally and in particular with respect to computer software. At the same time, it is important that the monopoly privileges conferred on creators by the copyright laws be kept appropriately contained, so those privileges do not spill out into broader, unjustified and counterproductive restraints on competition and consumer choice, and do not undermine consumers' long-established, fundamental ownership rights and expectations. Beyond the immediate harmful effects on consumer rights and expectations, broader innovation is impeded if a product's manufacturer is given inordinately sweeping power to control how the product can be used once it has been released into the marketplace.

While we agree with those who urge care in making significant changes to the bedrock of copyright law, we believe specific and discrete clarifications to address specific legal uncertainties that have arisen in this collision of copyright law and property law in the Digital Age are warranted. These clarifications are needed in order to preserve those long-established consumer rights and expectations, as more and more consumer products – from toys to household appliances, to medical devices, to cars and farm tractors – become part of the Internet of Things. We have recommended these clarifications to the Copyright Office, and we commend them to your attention as well.

Essentially, as referenced above, those consumer rights and expectations should be as equivalent as possible, for software-enabled consumer products, to what they have been for products containing no software. A consumer who purchases a product or otherwise lawfully acquires it should own it, and be able to use it – as he or she sees fit. That also includes selling or giving the product to someone else, complete with all its parts and contents and accessories. It

includes being able to tinker with the product, to customize it, to improve its utility or performance, to get it repaired, or to remove its parts and use them in some other product. And it includes being able to choose how to accomplish any of those things, or to choose whom to enlist or hire for assistance. Just as a dress, to give another example, can be resold in a consignment shop, or given to a friend, or donated to a thrift store; or re-hemmed, or mended, or have its buttons removed and used on another dress, either by the owner herself, or by hiring a seamstress.

And as more products collect and store data as one of their core functions, or in connection with those functions, the consumer's ownership rights should also include ownership of that data, and the right to access it. Just as a consumer can store paper photographs and term papers and lists and letters securely in a trunk, where he is free to retrieve them at any time, or keep notes on a pad in the glove compartment of a vehicle or in a kitchen drawer.

Casual expansion of patent law principles could create similar undue restrictions on competition and consumer choice. For example, a legal fight has been raging for many years between automobile manufacturers and independent replacement parts manufacturers on how far patent law goes – and how far it should go – in protecting the manufacturers against competition from the independents. As with copyright law, the extension of patent law principles into the realm of the Internet of Things warrants careful consideration, to ensure that the interests of inventors are appropriately balanced against the interests of consumers.

There is perhaps a natural inclination for courts and policymakers to be intimidated by the complexities of computer and digital technology, and to give undue deference to industry claims that products containing this complex technology require different treatment, to be left more under the control of the manufacturer or original inventor. That inclination should be resisted. There is no reason that consumers should have to surrender their rights just because products have become more technologically complex.

**Ownership of a Product Should Include Ownership of Its Parts and Contents**

The consumer rights issues at stake here were illuminated further for Consumers Union through our experience in recent years advocating for the right for consumers to unlock their mobile phones, to enable them to be used for connection to a different wireless network, under contract with a different service provider. We have litigated and re-litigated the justifications for protecting the consumer's right to access the software in the mobile phone to accomplish that unlocking – to remove the legal cloud over the right of consumers to keep phone manufacturers and wireless providers from arbitrarily turning useful phones into worthless junk.

In the course of our efforts to restore that right for consumers, the potential for rote application of traditional copyright principles to undermine consumer rights in surprising ways was vividly illuminated. In the most recent previous Copyright Office order granting that right under the Digital Millennium Copyright Act, the right had not been granted to the consumer who owned the phone, but had instead been limited to "the owner of the copy of the computer program" inside the phone. This meant that, if we had simply restored the right as it had most recently existed, the phone manufacturers and the wireless service providers could have easily nullified the right. They could simply have slipped a sentence into the fine print of the standard-

form contract that consumers are supposedly agreeing to when they click the "I agree" box as directed by the sales clerk. That sentence would state that the provider and the manufacturer were retaining legal ownership of the technology inside the phone, and would specify that the consumer was being granted only a "license" to use the technology. It would have come as a surprise to most consumers that the phone they purchased was not really a phone, but merely the shell of a phone.

We were able to get this hidden trap fixed in the legislation restoring the right to unlock, and to get it fixed permanently, so that the right to unlock is held by the owner of the phone. That's consistent with common-sense consumer expectations of what ownership means.

This same kind of hidden trap is potentially lurking in all software-enabled consumer product sales, and we believe it should be clarified for all of them. If you buy the product, or otherwise lawfully acquire it, you own it, and that should mean owning not just the shell of the product, or its packaging, but its contents, what makes it function, and the fruits of its use. Those contents are yours to do with as you see fit. And when you resell or give away or donate the product to someone else, the ownership rights to the contents of the product, including the software that makes it run, stay with it – unless, as in the case of personal data the product collects, you decide to remove that data and keep ownership.

That wouldn't mean, as some suggest, that owning the copy of the software inside the product means having an unlimited right to make copies of the software, and use the software in other products or sell it multiple times. There is an essential, categorical difference between owning a copy of the software inside your product, and owning a copyright interest in it. However, we do believe that the consumer should have the right to transfer that single copy of the software into a different product for use there, as long as the copy does not remain in (or is no longer used in) the original product in which it was contained – just as a button may be removed from one dress and sewn onto another.

Nor would it mean, as some suggest, that a service agreement must always travel with the product. If someone sells or gives you an electric hair dryer, you still have to pay for electric power. But you do own the electric plug at the end of the cord, which enables you to interconnect to access the electric power; the same principle should hold for more technologically complex interfaces that enable the operation and interconnection desired by the consumer. In addition, whatever software updates and error correction patches are provided to the original purchaser of the product, whether pursuant to the sales agreement or pursuant to company policy, should be provided on the same terms to the person who acquires the product from the original purchaser. That's an essential element of full, meaningful transferability of ownership of the product, a right inherent in ownership.

**Ownership of a Product Should Include the Right to Its Intended Lawful Use**

Another uncertainty in consumer rights was illuminated in our efforts to restore the right to unlock mobile phones: how the law treats the fact that often the engagement of computer software in a product, simply in order to operate the product, technically entails temporarily copying the software, within the product, as part of its operation. In the context of restoring the right under the DMCA, this issue was resolved implicitly as part of the restoration of the right to

unlock. But it needs to be resolved explicitly, and definitively, for all products. This is not "copying" in the copyright infringement sense, and should not require the user of the product to obtain permission from the holder of the copyright in the software.

In the Internet of Things, where the seller can disable or disrupt the product by remote control, an additional set of consumer rights needs to be developed. If a manufacturer is not under a legal obligation to support its product's interactivity with competing products, the manufacturer should at least not be permitted to obstruct others from developing those interactivity capabilities. If the seller is not obligated to maintain high-quality, state-of-the-art online support for the product, the seller should at least not be permitted to obstruct others from stepping in to do so.

**Addressing Uncertainty in the Law**

These two principles – that a product includes its component parts and contents, and that being able to use the product is an inherent right of having lawfully acquired it – would seem beyond dispute. They are embodied in some of our earliest copyright law precedents, including the doctrines of fair use and first sale, and they have been recently reaffirmed in the specific context of computer software.[2] Congress has attempted to further clarify their applicability to computer software in section 117 of the Copyright Act, as amended on several occasions. And yet in the software world, they continue to be litigated and re-litigated, keeping them in legal limbo. It is time for a determined effort to lay them to rest.

Making these two discrete clarifications, what many believe to be re-affirmations of well-established principles of copyright law, would go far toward addressing the concerns that have been voiced regarding the appropriate and balanced application of those principles to software-enabled and Internet-enhanced consumer products, in the best interests of consumers, and in the best interests of competition and innovation, which benefits both consumers and the overall economy. Although in an ideal world, these clarifications might be accomplished in the courts, legislation may be warranted to accomplish them expeditiously. One possible approach for clarifying the issues surrounding ownership and transferability of these consumer products, for example, is embodied in the You Own Devices Act, or YODA, H.R. 862.

We have urged the Copyright Office to support these important clarifications in the law, and we would urge you to support them as well.

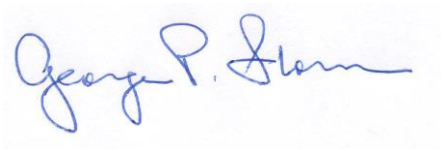
**Conclusion**

As Internet of Things technology revolutionizes our economy, our infrastructure, and the way we live, there are numerous critical policy areas – safety, security, privacy, and legal accountability, among others – that need attention from the full complement of experts in and out of government.

[2] *See, e.g.*, Kirtsaeng v. John Wiley & Sons, 568 U.S. __, 133 S. Ct. 1351 (2013); Adobe Systems v. Christenson, __ F.3d __ (9th Cir., Dec. 30, 2015); Krause v. Titleserv, 402 F.3d 119 (2d Cir. 2005); Chamberlain Group v. Skylink Technologies, 381 F.3d 1178 (Fed. Cir. 2004).

For consumer products in particular, it is also critical that our laws keep pace to preserve the pillars of consumer ownership. There is no need to undermine or weaken long-held understandings of ownership rights in order to preserve legitimate copyright or contract interests. A few modest, common-sense clarifications will help ensure that consumers continue to have the rights to exercise the incidents of ownership, dominion, and control over the products and services they have paid for or have otherwise lawfully acquired, as they have come to understand and rely on those rights based on centuries of experience.

Respectfully,



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