

Copyright's Role In The Internet Of Things

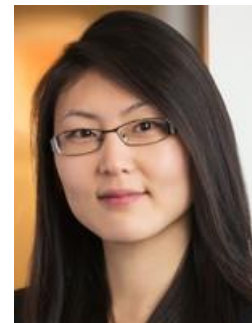
Law360, New York (October 24, 2016, 12:21 PM EDT) -- The internet-of-things revolution encompasses the emerging technological landscape of physical objects that are embedded with software allowing for network interconnectivity. Because IoT products can connect to other networked computers and devices, they have broad capabilities to store, collect, transmit and analyze data, and can be directed to take action based upon such data. For example, a software-embedded thermostat can gather data on your energy usage and optimize temperature-regulation choices based on usage patterns. Moreover, the same device could also analyze weather forecasts and proactively suggest how your energy usage should respond. The IoT market continues to expand; the Federal Trade Commission has reported that an estimated 50 billion IoT products will be connected by 2020.[1]

As the world pivots towards software-embedded products, companies are confronting new legal questions. From a manufacturing perspective, in particular, since IoT products contain software and software is protectable under copyright, copyright law will become an increasingly prevalent means by which manufacturers look to protect their intellectual property. The protection that copyright law affords software-embedded products may be an incentive to develop IoT products. While patents and trade secrets remain available and important means of protection for consumer goods, a copyright registration is relatively inexpensive to obtain; does not require a showing of innovation, reasonable secrecy or economic value (though a threshold amount of creativity is constitutionally required); and, through treaties and international conventions, leads to protection recognized across much of the globe.

The increased prevalence of potential copyright disputes over IoT products is already impacting the legal landscape for consumers. When consumers buy software-enabled products, in addition to owning the physical product, they also need to use the underlying software. Usually, the sale of the physical product also includes a license for the software. Most often, a consumer has to agree to the terms of the license before using the product; from a copyright perspective, a license defines the scope of permissible copying.



John A. Polito



Lucy Wang



Spencer H. Wan

Many potential issues may arise as to the scope of such licenses: Are consumers and third parties allowed access to the software directly to provide maintenance and perform repairs? Can a consumer reproduce, modify, distribute or publicly display the software? These are questions that manufacturers of physical goods may not have had to answer previously. Many manufacturers license and embed software — including open-source software — from third parties, further complicating these discussions and raising important issues as to warranties, indemnities and limitations on liability. In addition to issues arising during the licensing stage, practitioners will likely encounter more litigation involving software licenses that govern the access and usage of software-embedded products.

Beyond the scope of the license, IoT products introduce a host of interrelated legal issues. For example, a counterfeiter of IoT products may be subject to criminal copyright liability. Companies may also bring customs actions and requests for U.S. International Trade Commission exclusion orders as to goods in international trade embedded with copies of (or derivative works based upon) the original product's underlying software. When IoT products intersect with government contracts or heavily regulated industries, copyright, licensing and regulatory issues need to be harmonized. Existing consumer protection laws may also protect some user data generated by IoT devices. Because the software in IoT products is typically licensed even when the products in which the software is embedded are sold, corporate acquisitions, bankruptcies and other restructurings, and tax planning have become more complicated as to entities in the IoT product space.

Congress has directed the U.S. Copyright Office to keep a watchful eye on the internet of things. Sen. Charles E. Grassley, R-Iowa, and Sen. Patrick Leahy, D-Vt., (the chairman and ranking member, respectively, of the Senate Committee on the Judiciary) have asked the Copyright Office to conduct a study on copyright issues in everyday software-enabled consumer products. In an Oct. 22, 2015, letter to Register of Copyrights Maria Pallante, the senators identified five specific topics for investigation:

- “the provisions of the copyright law that are implicated by the ubiquity of copyrighted software in everyday products”;
- “whether, and to what extent, the design, distribution, and legitimate uses of products are being enabled and/or frustrated by the application of existing copyright law to software in everyday products”;
- “whether, and to what extent, innovative services are being enabled and/or frustrated by the application of existing copyright law to software in everyday products”;
- “whether, and to what extent, legitimate interests or business models for copyright owners and users could be undermined or improved by changes to the copyright law in this area”; and
- “key issues in how the copyright law intersects with other areas of law in establishing how products that rely on software to function can be lawfully used.”[2]

Within a few months, the Copyright Office began its investigation, issuing a notice and request for public comment in December 2015 that asked for input on the five topics identified by Sens. Grassley and Leahy and on several additional issues.[3] In May 2016, the Copyright Office held public roundtable discussions in San Francisco and Washington, D.C., on copyright law and IoT products. Participants discussed the proper role of copyright law in protecting IoT products, and explored whether software in IoT products should or could be distinguished from software in other contexts under the law. The panel (which included representatives from industry and advocacy groups) and representatives of the Copyright Office also discussed the interplay of copyright law and concepts of ownership in light of the rise of IoT products. Last, speakers explored the application of limitations and exceptions to copyright protection that exist in current law and regulation to IoT products. The Copyright Office is due to report back to the Senate Judiciary Committee by Dec. 15, 2016, just before the last working session of the 114th Congress is scheduled to commence. The Copyright Office's report may ultimately lead to the proposal of legislation or regulations that target IoT products.

As the world moves toward greater interconnectivity, lawyers too are becoming more connected as they respond to the possibilities and challenges presented by the internet of things. Many law firms are creating interdisciplinary task forces, empowering lawyers with expertise in copyright and software licensing to collaborate with other specialized practitioners and with their clients to develop strategic, creative approaches to emerging challenges presented by this important phenomenon.

—By John A. Polito, Lucy Wang and Spencer H. Wan, Morgan Lewis & Bockius LLP

John Polito is a partner in Morgan Lewis' San Francisco office and a former software engineer. Lucy Wang and Spencer Wan are associates in the firm's San Francisco office.

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[1] See FTC Staff Report, Internet of Things: Privacy and Security in a Connected World (Jan. 2015), available at <https://www.ftc.gov/system/files/documents/reports/federal-trade-commission-staff-report-november-2013-workshop-entitled-internet-things-privacy/150127iotrpt.pdf>.

[2] Letter from Sen. Charles E. Grassley and Sen. Patrick Leahy to the Hon. Maria A. Pallante (Oct. 22, 2015), available at http://www.copyright.gov/policy/software/grassley_leahy-software-study-request-10222015.pdf.

[3] Software-Enabled Consumer Products Study: Notice and Request for Public Comment, 80 Fed. Reg. 77,668 (Dec. 15, 2015).