Global Integration
Calls for Open Collaboration

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Loopholes & Patent Trolls

In its Winter 2014 issue, Consumers' Research discussed how the intellectual property (IP) protection system is designed to protect both consumers and innovators alike. While the system boasts a number of successes within the realm of consumer protection, many complain the current system is weak and littered with loopholes that allow patent trolls to reap undeserved rewards. Apple Inc. for example, made headlines in the spring for being ordered by a federal court in Texas to concede $532.9 million to Smartflash LLC, a small Texas-based licensing company. Smartflash has filed lawsuits against Samsung Electronics Co., HTC Corp., Google Inc., and has hit Apple with a second lawsuit following its win. In September, the Texas federal court granted Apple a stay on a damages retrial until Apple's appeal of the jury's determination of liability is resolved. Smartflash owner, Patrick Racz, holds fast to his assertions of IP infringement, pointing to the dates he filed for the patents he invented.

Smartflash contends that its patented software is used as an integral part of all digital-downloading, and therefore covers all music and app downloads. Because the software is so fundamental, many major digital-downloading companies have been accused of using the patented software. Apple argues that, while their software does incorporate some of the patented technology, because the software is so inherent, Apple likely came to the development of it on its own. Racz counters this, stating that his senior research and development director left to work for Apple, an untimely and questionable event that ultimately caused Racz considerable financial damages. While companies could (and do) fight back and forth about the origins of their software, the case probes a larger question. As technology becomes more and more integrated (and therefore dependent), how will intellectual property laws adjust to accommodate intellectual overlap?

Within Technology, is Sharing Caring?

When Elon Musk announced last summer that Tesla, Inc. would release its patents to the public, many were shocked. Across numerous industries, it is widely accepted that the value of one's work is determined by its rarity. For example, within the pharmaceutical industry, a drug developed by just one company is worth more than if it were produced by a range of competing companies. Similarly, the news that Tesla technology would no longer be a rarity caused many to assert Musk was limiting the future value of his vehicles. But Musk has other plans. Seeing beyond the unspoken rule of never showing your cards (or cars), Musk noted the greater potential for technology development with industry collaboration. He states,

> *"At Tesla, however, we felt compelled to create patents out of concern that the big car companies would copy our technology and then use their massive manufacturing, sales and marketing power to overwhelm Tesla… Technology leadership is not defined by patents, which history has repeatedly shown to be small protection indeed against a determined competitor, but rather by the ability of a company to attract and motivate the world's most talented engineers."*

Musk is not the only tech leader to acknowledge the progress possible from industry collaboration. Today our society is functioning more and more on technology systems. Not only can we now monitor our homes remotely, but applications, software, and systems within the home (including refrigerators) can be integrated and controlled from a single remote device. As we become more and more dependent on these integrated systems, a common platform is needed to ensure interoperability and frictionless use. In other words, unless these new technologies are easier to use than traditional tools (think, Nest versus the standard thermostat) then there is little incentive for consumers to adopt new ones.

Take Apple Pay for example. Announced in the fall of 2014 the mobile payment system was met with excitement, boasting a new way to make transactions quicker and more secure. All consumer would have to do is wave their iPhone screen across a scanner

at checkout and their account would be charged for the purchase. But Apple Pay hit a bump in the road when CVS Health Corp. and Rite Aid Corp. disabled the system due to the companies' participation in a competing mobile payment service called the Merchant Customer Exchange Program (MCX). Aptly put by Ryan Egan, writer for TechSmash:

> *"If a user has to use Apple Pay at one retailer, Google Wallet at the next, and Merchant Customer Exchange at another; that person is likely to just pull out their debit card or pay with cash. Without an industry leader to push a unified eco-system, the Internet of Things will continue to be a poor consumer experience."*

It is this unified experience that leading technology companies are pursuing. Cisco Systems Inc., Intel Corp. and Verizon Communications Inc. partnered in Fall 2014 in an attempt to create a unified platform on which all IoT systems can function. However, many argue there is no need for such a platform. Rather, some industry experts argue a network of independent, but compatible, systems of software is a more attainable goal than one overriding system. In March, Panasonic Corp. released the patents for its Internet of Things (IoT) framework and corresponding software, OpenDOF, in an attempt to foster more collaboration among IoT industry developers. By allowing other companies to utilize their patents for product development, Panasonic brings the potential for a unified IoT system much closer. While it is currently unclear which approach to the IoT system will prevail, both require the cooperation of innovators and access to independent technology patents.

Protecting a Shared Commodity

This is not a new idea. In fact, there is an entire movement dedicated to such a concept. The open patent movement (often referred to as the open source movement) seeks to build a portfolio of creations that can be freely distributed and built upon. The Free Software Foundation founded in 1985, is just one of many groups dedicated to the innovation that can arise from collaboration among experts. The group "defends and promotes computer users' right to use, study, copy, modify, and redistribute computer programs." A key point to the mission of these groups is the belief that as society becomes more and more dependent on computers, the software used to shape our lives should be accessible to all. However, with this philosophy comes the need for companies to be protected from lawsuits born out of the new software developments. Many believe that a company that chooses to release its patents in the name of progress and goodwill should be permitted to use the products created from the original technology without facing penalties. This notion has resulted in the formation of open software networks, or Open Innovation Communities (OICs), for which membership hinges on the mutual agreement to share.

According to Jason Schultz and Jennifer Urban's paper, published in the Harvard Journal of Law and Technology, "Protecting Open Innovation: The Defensive Patent License as a New Approach to Patent Threats, Transaction Costs, and Tactical Disarmament," OICs opt out of the traditional patent system because patents are expensive, patents oppose the philosophical values of OICs, and there is little guarantee patents will prevent bad actors from obtaining them and using them offensively. Defensive patents, on the other hand, are used primarily to defend a company against patent infringement lawsuits, allowing the holder to countersue when a competitor sues for infringement or even avoid patent lawsuits altogether.

Google, for example, states on its corporate website that while the company, "is committed to promoting innovation to further the overall growth and advancement of information technology and believes Free or Open Source Software is a very important tool for fostering innovation," it goes on to note,

> *"Accordingly, Google reserves the right to terminate the Pledge, to the extent Google deems necessary to protect itself, its affiliates, or its products and services ("Defensive Termination") with respect to any Pledge Recipient (or affiliate) who files a lawsuit or other legal proceeding for patent infringement or who has a direct financial interest in such lawsuit or other legal proceeding (an "Asserting Party") against Google or any entity controlled by Google or against any third party based in whole or in part on any product or service developed by or on behalf of Google or any entity controlled by Google."*

In other words, a person who uses and in turn develops software from the original Google technology cannot seek patent infringement and/or financial compensation from Google.

Patent Reform

As Thomas Jefferson said, "Nothing is troublesome that we do willingly." In essence, intellectual property laws exist to protect the consumer and the creator. But these laws are changing. As many call for the reform of outdated IP laws, questions arise regarding how the growth of technology and the reach of Internet of Things influence these matters. Moving forward, it is crucial to consider the potential of innovative collaboration, as well as the effects of new legislation on consumers and creators. ◂