

Patents and Technology

The patent system was designed to promote intellectual innovation and to protect inventions from being stolen, allowing small companies to thrive if their ideas are new and innovative. The founding fathers thought it was so important to “promote the Progress of Science and useful Arts” that they wrote it directly into the U.S. Constitution (US Constitution, 8). However in recent years, with patents on programming algorithms and different electronic components, the patent system has started to inhibit innovation. The current methodology of the US patent system does not promote intellectual inventions in software and technology, but instead allows companies to abuse the patent system. Companies misuse the patent system to make money through lawsuits rather than innovation, hurting businesses and ultimately the consumer. Slowly, through the judicial court, things are beginning to shape up but the United States is still a long way away from a patent system that actually does promote intellectual innovation.

One large company that uses the broken patent system to their advantage is Intellectual Ventures, a company that attempts to help small time inventors protect their intellectual property by buying their patents, a move they call investing in their inventions. Unfortunately, this is not how it usually plays out, and Intellectual Ventures ends up selling patents to companies who attempt to make money purely by suing other companies who are infringing on the patents that they just bought. Many companies that Intellectual Ventures sells patents to are not even companies, but individuals pretending to be a company who will then use those patents to sue actual companies to make quick and easy money. The other companies that fall victim to the

patent infringement are forced to settle because “sometimes it makes more sense to settle and pay a license fee than to spend \$2 million to \$5 million on a court case” (Blumberg, 89). Companies that develop the strategy of buying patents to sue other companies are known as patent trolls. Even Intellectual Ventures is considered a patent troll because they hold “one of the largest patent portfolios in existence and is going around to technology companies demanding money to license these patents” (Blumberg, 5). If companies do not give money to Intellectual Ventures, then they will most likely be sued for patent infringement. No company actually admits to this because of the power that Intellectual Ventures has over them with their patent portfolio and they do not want to be made a target (Blumberg, 8).

These patent trolls exist because of how patents for technology are awarded. . “About 30 percent of U.S. patents are essentially on things that have already been invented” (Blumberg, 30). On top of that, many of the patents given for technology are very broad, making everyone guilty of infringement, “We're at a point in the state of intellectual property where existing patents probably cover every behavior that's happening on the Internet or our mobile phones today,” says Chris Sacca, the venture capitalist. “[T]he average Silicon Valley start-up or even medium sized company, no matter how truly innovative they are, I have no doubt that aspects of what they're doing violate patents right now. And that's what's fundamentally broken about this system right now” (Blumberg, 45). Formerly the patent office did not issue patents for software because it is considered a language (words or phrases cannot be patented); soon after authorizing the idea of patents for software, a flood of patents came, leading to the broken patent system known today.

The flood of software patents ends up hindering technological progress in a variety of ways. The broadness of many of the patents hinders any technological progression since

anything one company may try to create is already covered broadly by another patent. Also, a majority of patents that are being held by patent trolls will never see the light of day because non-technological companies are buying them for the sole purpose of suing another company that is infringing on a technology similar to it. Therefore, innovators cannot utilize these patented notions that could advance technology and it stops anyone else from innovating in the same or a similar way. “IV says it has invented a nuclear technology that's safer and greener than existing technologies. A cooler that can keep vaccines cold for months without electricity... [but] nothing that's come out of this lab — not the mosquito zapper, not the nuclear technology — has made it into commercial use” (Blumberg, 15). Instead, it is more profitable for the companies to hold onto the patents rather than create the product that has the potential to improve the world. These patents are not only infringing on the technological progress, but they are also hindering other ethical areas such as global warming, disease prevention and the economy, and changing the way businesses operate.

Big businesses are forced to buy thousands of patents in order to beef up their patent portfolio to protect themselves from potential patent infringement. With a large patent portfolio, businesses do not need to worry about infringing on a patent held by another technological company because it is very likely that the other company will also be infringing on one of their patents, given the broadness of patents. This practice is leading to businesses such as Google “willing to pay more than \$3 billion” for the patent portfolio of Nortel, but instead “got outbid by a consortium of tech giants, including Apple and Microsoft, which paid \$4.5 billion” (Goldstein, 8). It was also a huge factor in Google buying Motorola Mobility for \$12.5 billion dollars to acquire their 17,000 patents. These businesses are willing to spend huge sums of money just for the protection that it might offer them in the future against businesses like Intellectual Ventures

and the various companies that find it beneficial to have a large patent portfolio. It is not for the sake of innovation, since many of the patents are being held for protection rather than for the products they would help to create.

Unfortunately, the system hits small businesses even harder because they do not have the money to buy all of these patents and thus have no protection against patent infringement. This leads to small businesses having to spend an enormous amount of money and time in the legal system fighting for their creations instead of being able to flourish. The patents that were designed to defend small businesses are now being used by larger corporations or patent trolls to attack and destroy small companies. Apple recently claimed patent infringement on a company called NT-K over their tablet devices that Apple claimed to be too similar. Apple requested that NT-K destroy all of their tablets with no recourse to justice for their alleged plagiarism of Apple's iPad and will denounce NT-K a criminal otherwise. NT-K, when talking about the situation, responded saying that they were a small company like so many others in this time of crisis just trying to get ahead, and it seems grossly unfair that a company the caliber of Apple has to use its dominant influence (NT-K, 8). More often than not, the small businesses cannot survive the patent war or it significantly hinders them, regardless of how innovative, new, or better their products are compared to the other company's patents or technology.

The conflict does not stop with big businesses attacking small businesses. The big businesses are also fighting amongst each other. The large patent portfolios are being used as a weapon instead of protecting businesses as the big businesses will often say in their public statements. This conflict amongst the big companies, including Google, Microsoft, and Apple, to try and get ahead of each other has created a patent war. In their phone divisions alone, Microsoft is requiring mobile phone companies that create Android devices to pay Microsoft a

royalty for each Android device they sell and they will lessen the price of the royalty if the company agrees to make more Windows phones. They have been largely successful at this, and have used this power to make the competition, Android devices, more expensive. At the same time, they are also ensuring that these companies would find it more beneficial to make phones for Microsoft because then they would not have to pay the royalty. It is not helping businesses protect their intellectual property, but instead is being used as a tool to line the pockets of big businesses and to improve their own self interests.

These conflicts do more than hurt the businesses being targeted in the patent war, because they also end up hurting the consumers. The royalties on products, the huge sums of money that these companies spend on beefing up their patent portfolio, all adds up to more expensive and less innovative products for the consumer. Nortel's selling of 6,000 patents for \$4.5 billion dollars has many drastic consequences on society. "That's \$4.5 billion on patents that these companies almost certainly don't want for their technical secrets. That \$4.5 billion won't build anything new, won't bring new products to the shelves, won't open up new factories that can hire people who need jobs. That's \$4.5 billion dollars that adds to the price of every product these companies sell you. That's \$4.5 billion dollars buying arms for an ongoing patent war" (Blumberg, 96). This war is not looking to stop anytime soon, with businesses still suing each other very frequently. The only real way to fix this problem seems to be to change the way patents cover and govern technological innovations. Until then, consumers, businesses, and society as a whole will continue to suffer for the greed that exists amongst the patent trolls and businesses.

Fortunately, some work is being done to fix the broken patent system that exists, due to patent troll cases reaching the Supreme Court, showing the government just how broken the

current patent system is. They can see the companies that are claiming infringement and see that they are not actually trying to produce a product, and are just trying to make money quickly with little effort. An example can be seen in the case eBay Inc. vs. Merc Exchange L.L.C. In this case, the ruling took away some of the power from the patent trolls by making it more difficult to get a permanent injunction against a company. A permanent injunction is where the company has to stop using the technology completely, which at times could completely ruin the product or company. The infringement case revolved around Merc Exchange L.L.C. suing eBay for patent infringement on the technology that eBay used on their auction website. They claimed patent infringement on technologies, such as the “Buy it Now” function on the eBay website using U.S. Patent 5,845,265, with the many different patents that they owned (Holzer, 4). The case started with the District Court, which ruled in favor of eBay on the basis Merc Exchange was an NPE and wasn’t using any of the patents so hadn’t had irreversible damage done to it due to patent infringement. The Federal Court overruled the District Court’s ruling and granted a permanent injunction on eBay. The Federal Court’s ruling would effectively dismantle eBay’s website and business because Merc Exchange had the patent rights to many of the websites features. EBay appealed the case to the Supreme Court by eBay to overturn the permanent injunction placed upon them.

The Supreme Court ruled in favor of eBay by removing the permanent injunction on the technology that was previously considered in violation of the patent. The Supreme Court said that the Federal Court had ignored the rule of equity by always granting permanent injunction against a company and that they needed to look at these patent infringements on a case by case basis. This ruling by the Supreme Court made it so that companies with patent infringement cases can no longer just appeal to the Federal Court to get a permanent injunction, they now have

to go through the court system and hope that the courts rule in their favor. Though the Supreme Court ruled in favor of eBay, there were concurrent opinions among the justices concerning the case, both for and against permanent injunction. One opinion, written by Justice Kennedy, describes the dangers of permanent injunction.

"In cases now arising trial courts should bear in mind that in many instances the nature of the patent being enforced and the economic function of the patent holder present considerations quite unlike earlier cases. An industry has developed in which firms use patents not as a basis for producing and selling goods but, instead, primarily for obtaining licensing fees. ... For these firms, an injunction, and the potentially serious sanctions arising from its violation, can be employed as a bargaining tool to charge exorbitant fees to companies that seek to buy licenses to practice the patent" (Supreme Court Case, 12).

Kennedy points out that the patent system is broken because companies are using the system as a business practice instead of promoting inventions. By making it so that each patent case now needs to be judged on an individual basis, compared to just giving the infringers a permanent injunction, it makes it so that companies don't have to scrap their project if the case is being appealed to the Federal Court. Since technology now contains hundreds of patented code and technologies, companies now have a fighting chance to stay in business. Before this ruling, companies both foreign and domestic, such as Canada's Research in Motion had to pay a patent holding company \$612.5 million dollars, just to keep their business from shutting down due to the way the patent system could be exploited (Holzer, 9). However with the Supreme Court ruling that all courts need to approach each case with equity, businesses and inventors have a chance to fight these patent companies in the legal system.

There has also been movement in the U.S. congress to help change the current patent laws, specifically court cases dealing with patent infringement. The House of Representatives is currently voting on The Patent Reform Act of 2011 and deals with adapting the current patent system to better protect companies from being sued by patent holding companies. The current patent system says that “the court may increase the damages up to three times the amount found or assessed,” for only cases where the infringer’s actions are objectively reckless (Crouch, 4). The issue is that objectively reckless has never been defined and companies have been using this to their advantage to win cases. The new bill defines a company or person as being objectively reckless when “infringement is not willful unless the claimant proves by clear and convincing evidence that the accused infringer’s conduct with respect to the patent was objectively reckless. [i.e., that] the infringer was acting despite an objectively high likelihood that his actions constituted infringement of a valid patent, and this objectively-defined risk was either known or so obvious that it should have been known to the accused infringer” (Crouch, 4). By Congress defining what it means to be objectively reckless, companies who are getting sued for infringement will not be forced to pay exorbitant amounts of money for the infringement, as long as there wasn’t enough public information released about the patents when the patent was infringed upon. In order to make a case in court, the patent holding companies need to provide sufficient amounts of information to the courts in order to prove that there has been a willful copyright infringement. Another thing that the bill does is that it makes it so that companies can’t create multiple suits for the same patent infringement. This means that patent companies have to have more in common than just having the same patent infraction (Evans, 6). Also, the courts have to take each case on an individual basis, and are unable to consolidate cases that deal with similar patents. The Patent Reform Act takes away some of the power that patent holding

corporations have in the legal system and has made it more difficult for them to mount a case of patent infringement.

The patent system, if properly used, can protect the innovations made by people and help them financially. However, when large corporations use the system just to extort other companies, with no technological innovation, it makes the entire system fall apart. These companies make it so that start-ups and small businesses have no choice but to pay a large fee, or face a legal suit that could completely shut them down, thus stifling technological innovation. These patent holding companies have made it so large corporations use the same tactics on their competition, causing the patent system to break further. Though Congress has made progress in creating laws to help protect smaller companies, the patent system still needs a lot more work in order to return it to its original purpose, to promote innovation, instead of the shakedowns that are currently happening.

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