ENTROPY ECONOMICS
GLOBAL INNOVATION + TECHNOLOGY RESEARCH

BRET SWANSON
PRESIDENT

November 25, 2013

The Honorable Edith Ramirez
Chairwoman
Federal Trade Commission
600 Pennsylvania Avenue, NW
Washington, DC 20580

Re: Public Comments on Patent Assertion Entity Activities

Dear Chairwoman Ramirez:

As observers and analysts of the digital economy, we welcome the FTC's inquiry into the activities of Patent Assertion Entities (PAEs). The technology products and platforms in question are a crucial foundation of today's knowledge economy. Rapid innovation in these markets is important to sustain productivity advances and economic growth across the landscape.

Intellectual property itself is a crucial foundation of our economy. Today, however, some of the most aggressive practitioners of IP law are undermining the practical functioning – and even the basic idea – of IP. At a minimum, PAE abuses impose large, unwarranted costs on real investors and innovators. At worst, these practices threaten to slow the pace of innovation in the digital arena and erode trust in the concept of IP itself.

Please find attached two articles that summarize our views on the important PAE topic.

Respectfully submitted,

Bret T. Swanson

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MPEG-LA Shows Need To Rebuild IP Foundations

by Bret Swanson / Forbes.com / April 30, 2013

The “world spinning out of control” category swells by the day and often gets good stories from the arena of intellectual property. Several years ago, my favorite was the Green Bay Packers, who became targets of software patent litigation merely because their website used a graphic called a JPEG. Before that was the case of the “patented” graphic known as the online shopping cart. Today, app makers and podcasters are being sued for making apps and podcasting.

The important concept of intellectual property is being undermined by some of its most aggressive practitioners. In 2012, “patent trolls” — firms that don’t make anything but own IP — brought 61% of all patent lawsuits. And companies like Apple and Google, who do produce real technologies and products, spent more on IP lawyers and acquiring IP than they did on research — mostly in a defensive effort to fend off predictably unpredictable left-field litigation.

The knowledge economy is built on ideas, only some of which are formalized as patents and copyrights. Not all ideas are property, yet property, or ownership, remains an underpinning of all successful capitalism. Today, however, property is under attack — and not just by those long skeptical of it. The intellectual property ecosystem has become so convoluted and disconnected from reality — 40,000 new software patents granted each year — that even some defenders of enterprise and liberty are throwing up their hands and asking if we shouldn’t abandon patents altogether.

This would be a mistake. If we want an IP system that rewards innovation and comports with common sense, we don’t need to abandon property. We do, however, desperately need to weed out abusive actors.

Frustration with our IP system is exemplified by the case of MPEG-LA, a sort of co-op set up in the 1990s to manage digital video patents. MPEG-2 is a technical standard for digital video used in DVDs and streaming media. MPEG-2 codecs (coders and decoders) are used in cable set-top boxes, computers, and across the digital media world. The many patents that initially went into the MPEG-2 standard, however, were owned by many different companies — 27 firms in all. So in 1996 the firms agreed to pool the necessary IP in one entity so users could more easily license it. In 1997, the Department of Justice blessed the MPEG-LA pool with an antitrust exemption, provided it continued to operate under its original charter as an MPEG-2 one-stop-shop.

MPEG-LA, however, is now imposing terms on licensees as if it were an innovator with a unique product, rather than a passive holding company or co-op. Despite the fact that most of the original MPEG-2 patents have expired, or soon will, MPEG-LA is still charging $2 for each unit sold. MPEG-LA began as a caretaker but has become an aggressive exploiter of its special government-granted status.

Highly complex systems like computer chips or smartphones contain thousands of ideas, building on untold ideas from previous generations. Cooperation is often needed to avoid never ending litigation wars that could grind firms — or even industries — to a halt.

The semiconductor industry is a good example. Every year we pack more components, circuits, and algorithms onto each tiny chip. Integration has been the watchword of the industry for half a century. From the manufacture of the physical transistors and gates to the design of the analog and logic circuits, we integrate ever more ideas into single products. These many ideas, however, may have originated in distinct minds at different firms in disparate nations. How do we sort out "whose" property makes up that little slice of silicon?

The semiconductor industry long ago adopted a widespread practice of cross-licensing. Firms would agree to license each other's IP and refrain from litigation. It was a pragmatic solution that has served the industry well.

The MPEG-2 patent pool was another pragmatic solution meant to simplify a complex web of IP claims by a large number of firms. Around 1,400 companies have licensed the MPEG-2 pool to produce the products that unleashed an exaflood of digital media over the past two decades. When the manager of the passive IP pool becomes an aggressor in the marketplace, however, the system fails. It can slow innovation across the digital ecosystem. It sets a bad precedent for future cooperative arrangements. It can lead to suspicion of intellectual property itself.

Of the 818 MPEG-2 patents, some 400 expired in 2012. Half of the remaining patents expire by 2014, and 90% will expire by 2015. All of Mitsubishi Electric's 117 patents in the MPEG-2 pool, for example, have expired. So have all 63 of Sony Corp.'s. These companies no longer have relevant protected IP, yet MPEG-LA is still charging full prices.

There is an analogy with our financial system. Finance is a foundation of our economy — little would happen without it. But it is not the whole economy. In recent years, some financial engineers abstracted markets to such a degree that many securities and trades were severed from the real world. Much of finance turned into a self-contained, zero-sum game of paper shuffling and digital gotcha rather than a means to allocate capital and help fund innovation. Along the way, it helped ferment a deep distrust of a crucial industry.

So too have some intellectual property practitioners abstracted IP into a zero-sum game of litigation and extortion, far removed from the real world. If the foundation of intellectual property and enterprise is undermined by such behaviors, however, it becomes worse than zero-sum, worse than a transfer from one party to another. If our system of entrepreneurship and ownership is perverted, the whole economy can lose.

This article can be accessed at http://www.forbes.com/sites/bretswanson/2013/04/30/mpeg-la-shows-need-to-rebuild-ip-foundations/

Google, Grocers, and Gresham's Law: The Patent Wars Go Global

by Bret Swanson / Forbes.com / November 4, 2013

The smartphone patent wars get most of the ink. Last week, for instance, Rockstar, the holding company formed when Apple, Microsoft and others bought out of bankruptcy Nortel's considerable patent portfolio for $4.3 billion, sued Google and six mobile handset manufacturers.

But why are relatively low-tech American industries, like grocers, casinos, printers, airlines, and restaurants, begging for reform of the nation's patent laws? In part, because they all use software, and software patents are the favorite asymmetric weapons used by the insurgents known as patent assertion entities (PAEs) — or, more commonly, trolls.

The problem of patent trolls is by now well known. Firms that don't make anything accumulate intellectual property for the purpose of suing other firms that do. These law firms, masquerading as technology companies, target "infringers" with the hope of extorting settlements. They often do so on hypertechnical (and often secret) grounds in arenas like software patents, where the "IP" — which often is just an obvious application of commodity computer code — should never have been granted. This predatory legal business model is an increasing burden on real innovators and an obstacle to economic growth. Jon Potter, head of the Application Developers Alliance, which represents software creators, likes to highlight the plight of one of his small member firms that has five employees — and six lawyers.

Less well known is the movement by foreign governments to create their own PAEs. Japan, Korea, Taiwan, and France are all sponsoring IP holding companies with a nationalist bent. Sovereign wealth fund meets patent litigator. One stated rationale is defense — to protect native firms from foreign trolls. It's a legitimate concern. Like the rest of us, France Brevets, Taiwan's Industrial Technology Research Institute, Korea's Intellectual Discovery, and Japan's Innovation Network Corporation (INCJ) look at the patent litigation madness with alarm. Most information technology products are composed of thousands of patents, and so a patent portfolio of one's own, which might contain property the attacker is "infringing," is often the best defense.

These sovereign IP funds, however, also want to license their IP, which will inevitably tempt them to use it offensively. If this is the way the game is played, they will surmise, we can't afford to disarm. Again, a not-unreasonable presumption, so far as it goes. It's very bad news for the global economic system, however.

Perhaps the best organized is Japan's IP Bridge, which will be run by the former IP head at Sanyo. A 15-year fund with initial capital of some $2.8 billion and potential government backing of up to $20 billion, IP Bridge will accumulate dormant IP to sell, trade, license — and possibly to protect native electronics firms.

Organized around nationalism and profit instead of merely profit, public trolls could be even worse than private trolls. We've seen national and continental governments use novel (read,

bogus) theories of antitrust to unfairly target foreign technology firms. It's not a leap to see how sovereign patent funds could be used in similar fashion.

The genesis of this growing set of problems is the increasing quantity and declining quality of patents. In the old days, Gresham's law said that "bad money chases out good." Coins that had been "clipped," or shorn of a portion of their metal, and thus value, would swamp the system and thus devalue a monetary regime as a whole.

A loose analogy can be drawn with today's IP market, where low-quality patents are undermining the crucial idea of IP and the practical functioning of the IP market. Several decades ago, we began issuing far too many patents not for specific, original inventions but for obvious and vague ideas and actions — the famous shopping cart button on a website, for example.

Or take the recent and famous case of Lodsys, which is suing people across the mobile app landscape for doing something entirely unremarkable. Lodsys uses an old patent related to fax communication to target mobile app makers that deploy in-app purchases. Although both Apple and Google had already licensed the patent, Lodsys went after the app makers that use the iOS and Android in-app purchase capabilities. Most tiny app developers don't have the time or money to defend themselves, so they pay up. But in October one firm, Kaspersky Labs, said it would go to court to defend itself. And what do you know? Lodsys dropped the case. It was terrified of being exposed during discovery and trial.

Several months ago, we highlighted the case of MPEG-LA, a firm that holds lots of patents relevant in data compression and Web video. Although most of the IP has expired, or soon will, MPEG-LA is still charging overly hefty license fees. Last week we got the news that Cisco is sponsoring a creative work-around. The networking giant has agreed to make available a public high definition video (H.264) codec and pay all the licensing fees that smaller companies might normally have paid to MPEG-LA. This is a good solution to an unnecessary problem. But it's also unique. Most small firms don't have a generous great aunt willing to pay-off the circling predators.

With sovereign patent funds now investing hundreds of millions of dollars and national power into this degenerative system, reform is urgent. We should revalue intellectual property by limiting grants to real innovations. At the same time, we should encourage the prudent invalidation of obviously erroneous patents. And we should discourage IP trolls, foreign and domestic. Strengthen the disincentives for frivolous litigation, and stop this business model before nations go any further. In the current system, everyone loses. The only way to win is to change the game.

This article can be accessed at http://www.forbes.com/sites/bretswanson/2013/11/04/google-grocers-and-greshams-law-the-patent-wars-go-global/