

HISTORY OF INNOVATION

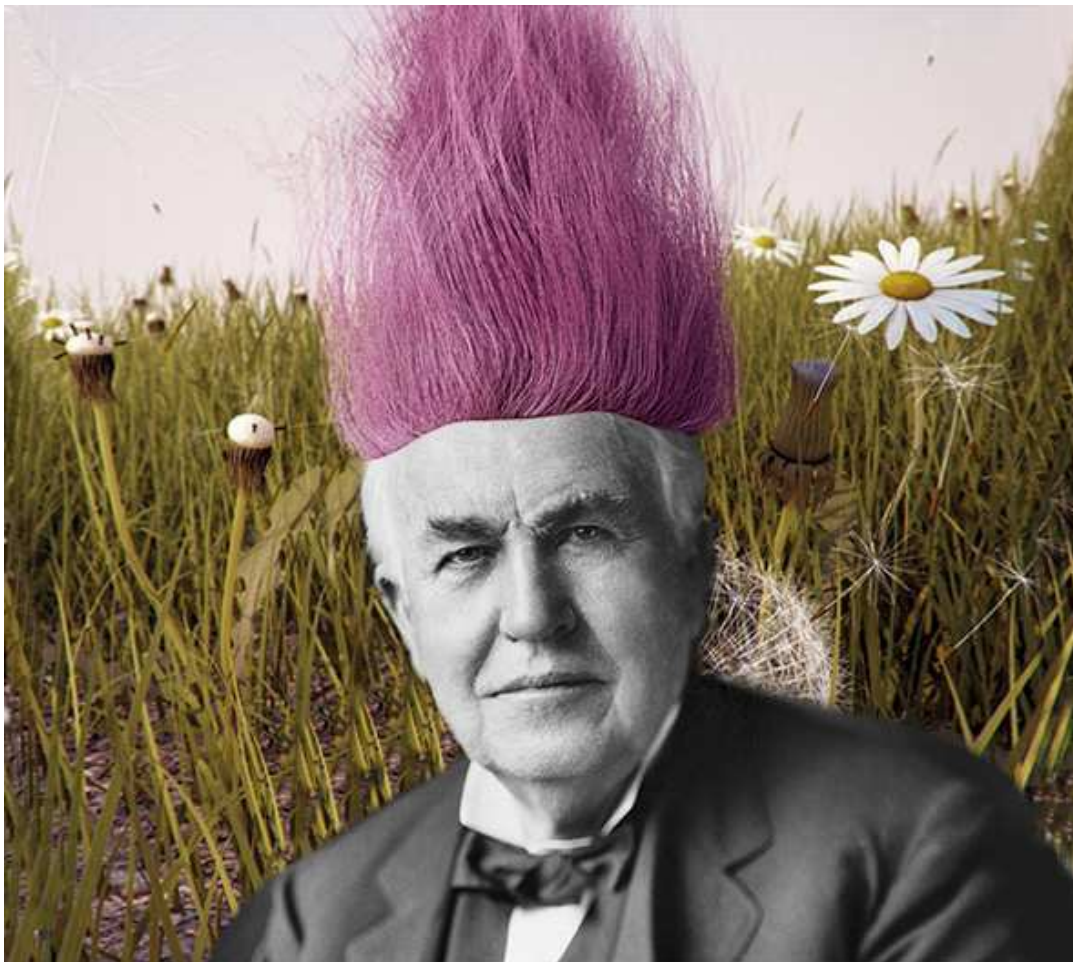
THE MAKING OF AMERICA.

MAY 19 2014 5:45 AM

Thomas Edison Was a “Patent Troll”

Patent litigation isn't nearly as new as people think it is.

By Adam Mossoff



Thomas Edison, “patent troll.”

Photo illustration by Juliana Jiménez Jaramillo. Photos courtesy of LOC/Creative Commons.

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ewspapers have reported a massive patent infringement campaign against individuals—almost 1,000 farmers were sued for patent infringement in just one courthouse in a single year! Even worse, the plaintiff is not a competing farmer or manufacturer; instead, it merely bought the patent rights and is now asserting them against unsophisticated defendants for the sole purpose of obtaining royalty payments.

In an increasingly rare moment of agreement, members of Congress, the president, lobbying groups, and others have found a common enemy. It's the dreaded "patent troll." Although this term has proven next to impossible to define, it usually refers to an individual or company who doesn't manufacture a patented invention but instead authorizes others to make or sell the innovative technology. In more legalistic terms, these are entities whose business model is *licensing* others to manufacture and sell patented innovation, and they do so through either contract negotiations or patent infringement lawsuits.

Recently, the patent licensing business model has taken center stage in the public policy debates in a way not seen since the 19th century (when the popular rhetorical epithet was "patent shark"). In fact, the story of massive numbers of farmers being sued for patent infringement was not torn from today's headlines—unless of course one is looking at headlines from the late 1880s.

Yet, many smart people assume that the patent licensing business model—and the buying and selling of patents themselves—is an entirely recent development. In 2006, for instance, Justice Anthony Kennedy stated as simple fact in *eBay v. MercExchange* that "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." Commentators now assert in prestigious law journals that the "patent marketplace is a relatively new secondary market." Now we're seeing calls that the patent laws should be changed in response to this "new" development by mandating that all patent owners manufacture or sell their patented innovations in the marketplace.

An 1867 article in the *Galaxy* magazine stated that "the secret of Mr. Howe's success" was that "he

The problem, as I stated in testimony before Congress in the fall, is that the "patent troll" epithet would require us to condemn famous American innovators like Thomas Edison and Charles Goodyear who contributed immensely to America's innovation economy in the 19th century. This is not hyperbole. This pejorative label has been applied to universities, such as the University of Wisconsin. It has also been applied to individual inventors who have had to sue commercial firms for infringing their patents. The reason is that they all license rather than manufacture their patented innovation. This has long been an essential feature of the

litigated himself into fortune and fame.”

American patent system in successfully and efficiently promoting new inventions and driving the innovation economy. This isn't unique to patented innovation, as Adam Smith famously recognized in 1776; it is specialization and the division of labor that are the keys to a flourishing market—in the context of patented innovation, inventors should invent and businesspeople should manufacture and sell. This is why it was embraced by Goodyear, Edison, and others in the 19th century, and for this they would be condemned today.

Still not convinced? Let the facts be submitted to a candid world (to turn a phrase from the Declaration of Independence).

Thomas Alva Edison

Thomas Edison both sold and licensed his patented innovations. As economists have reported, Edison sold many patents in his early career to fund his full-time research and development activities. Even after he became widely successful and famous—known as the “Wizard of Menlo Park”—Edison still participated in the secondary market, such as selling his patented innovation in incandescent light bulbs to the General Electric Co. (as discussed in a recent biography).

But Edison also manufactured and sold some of his patented innovations, such as his first efforts at commercially exploiting his electric light bulb and phonograph. These business ventures have been described as “shaky” and “dismal” by his biographers. The products that ultimately dominated the marketplace from Edison's initially path-breaking inventions were oftentimes produced by his competitors, such as the Victrola record player. Henry Ford famously quipped that Edison was “the world's greatest inventor and the world's worst businessman.”

Edison would have been wiser to continue to embrace market specialization—inventing in his lab and selling or licensing his patents to others to manufacture and sell his innovative products. It was doing this that brought him his fame and fortune as a young innovator at Menlo Park, and ironically it would have brought him notoriety today as a “patent troll.”

Charles Goodyear

Charles Goodyear invented the process to make vulcanized rubber in 1839 and received a patent for it in 1844, but he never manufactured or sold rubber products. Instead, Goodyear licensed his patented innovation to other individuals and firms to commercialize it. As reported by his biographers, Goodyear was basically crazy about rubber and about inventing and finding new uses for it. He even wrote a two-volume treatise on the history, invention, and uses of vulcanized rubber, called *Gum Elastic and Its Varieties*. As the archetype of the obsessive inventor,

Goodyear was not interested at all in manufacturing or selling his patented innovation. By licensing it, he left the efficient commercial exploitation of his patented innovation to the new capitalists in the early 19th century.

Of course, by selling his patent rights to others, including even to businesspeople who themselves embraced the patent licensing business model, Goodyear would be attacked today as a “patent troll,” just as inventors today have been attacked for this same commercial activity. In fact, one of Goodyear’s own licensees engaged in a massive litigation campaign against hundreds of dentists, suing them for royalties on unauthorized uses of rubber dental implants. Similar to the farmers in the late 1880s, this was a patent infringement campaign brought by a patent licensing company against unsophisticated end-users of a new technology. Not only did this occur more than 150 years before today’s complaints about similar litigation practices, it also means that Goodyear would be hit with another pejorative label if he were alive today and engaging in these same licensing practices: “patent privateering” (the practice of selling patents or patent rights to “patent trolls” for the purpose of their bringing lawsuits).

Many people don’t know any of this because they mistakenly think that Goodyear founded the Goodyear Tire & Rubber Co. In reality, the company was formed almost four decades after Goodyear’s death and was only named after the famous inventor.

Elias Howe Jr.

In the 1840s, Elias Howe Jr. invented and patented the lockstitch mechanism used in sewing machines. Like Goodyear, Howe also licensed his patented innovation for most of his life. Similar to many patent licensing companies today, Howe often entered into royalty agreements only after suing commercial firms that were infringing his patent rights. One historian referred to Howe “suing the infringers of his patent for royalties” as his “main occupation” for “several years.” Howe’s assertion of his patents against noncompliant infringers who refused his licensing offers precipitated the very first “patent war” in the American patent system—similar to the “smartphone war” today, it was even called the “sewing machine war.”

Howe’s lawsuit tactics were both innovative and the source of much controversy. Since he was destitute when he began filing his mass lawsuits, he found investors to provide third-party financing for his litigation campaign. He also joined the Sewing Machine Combination of 1856, the very first patent pool formed in American history, which successfully ended the sewing machine war. (A “patent pool” is a special corporate entity in which numerous owners of patents that cover a single product license one another so that the product can efficiently be brought to market, such as a sewing machine, a DVD, MPEG video, and thousands of other products brought

to market.) Howe's licensing and litigation practices were criticized in his day; an article in an 1867 issue of the *Galaxy* magazine stated that "the secret of Mr. Howe's success" was that "he litigated himself into fortune and fame" (quoted here).

Other famous 19th-century inventors also extensively licensed their rights in their patented innovations, in addition to engaging in manufacturing and other commercial activities. The list includes, among many others, Samuel Morse (telegraph), William Woodworth (planing machine), Thomas Blanchard (lathe), and Obed Hussey and Cyrus McCormick (mechanical reaper). The specialists who assisted these 19th-century inventors in selling or licensing their patented innovations were known as "patent agents." Newspapers and magazines were littered with advertisements for their services; here are just two illustrative ads taken from an 1869 issue of *Scientific American*:

A PATENT ON A FARM GATE TO SELL
or Exchange for a No. 1 3-horse power Portable
Steam Engine. Address C. H. EMBREE,
West Dresden, Yates Co., N. Y.

BENT, GOODNOW & CO.,
Boston, Mass., Agents for the sale of Patents. FOR
SALE—A variety of very valuable "Rights." Send stamp
for THE PATENT STAR,
Containing descriptions of each.

PATENT RIGHTS SOLD ON COMMIS-
SION, and Valuable Inventions introduced by the
most experienced Patent Salesmen in the Union. Can
refer to over one hundred inventors for whom we have
acted. E. K. ROBERTS & CO.,
Consulting Engineers, 15 Wall st., New York.

Of course, today's innovation economy is vastly different from the 19th-century one. But the myriad business models for bringing patented innovations to the marketplace have not fundamentally changed, including the sale and purchase of patents in secondary markets and the licensing of patented innovations. Such commercial practices continued into the 20th century and continue to this day in such innovative companies as Bell Labs, IBM, Apple, and Nokia, among many others.

Top Comment

I am completely gobsmacked by this article, and by the fact that an outlet I generally consider reputable, Slate, is publishing it. [More...](#)
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In fact, the long history of the patent licensing business model and of the secondary markets that made this business model possible is unsurprising. These commercial activities reflect the basic economic principle of the division of labor that Adam Smith famously recognized as essential to a successful free market and flourishing economy—in this context, it is the division of

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labor between inventors and businesspeople. As award-winning economic historian Zorina Khan has explained, this has been essential to how the patent system has been a driver of America's innovation economy for more than two centuries. It is concerning that if the rhetoric of today's patent policy debates were applied consistently, it would require us to condemn great American innovators like Edison, Goodyear, Howe, and many others as "patent trolls."

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