MAY 8, 2015 **FORTUNE**

Why America's patent system is not killing innovation

U.S. laws over intellectual property give companies the incentive to invest billions in research and development of new products and services. Contrary to what some might think, innovation in America is thriving thanks for laws protecting intellectual property.



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"Never let the facts get in the way of a good story." The old saying, often attributed to Mark Twain, is as applicable today as in his time. And in the intellectual property arena, a "good story" has been going around recounting the death of American innovation at the hands of an outmoded and obstructive patent system. But, again to paraphrase Twain, rumors of innovation's death have been greatly exaggerated. In fact, American innovation is thriving—and not in spite of patents but because of them.

When we look beyond the fairytales and examine the facts concerning the value of the American patent system, the real story is that patents have a demonstrably positive impact on American jobs, the economy and the innovation ecosystem. Opposition to the system is nothing new; the notion of granting exclusivity over ideas strikes some as inherently undemocratic. Yet the founders recognized that the extraordinary knowledge-sharing benefits far outweigh the detriments of a time-limited monopoly — so much so that the patent system is provided for directly by the Constitution, the very document on which American democracy was built.

The founders would certainly be impressed, if not surprised, by the extent to which knowledge is shared in our modern economy. The open innovation model, by which distinct (sometimes even competing) entities share information, research and expertise to develop new inventions and products, is an illustrative example of how patents encourage knowledge-sharing and create value. According to recent research, firms that harness information from multiple sources enhance innovation and provide additional value for customers. Though some storytellers portray patents as necessarily anti-collaboration, in practice it is quite the opposite.

Patents play a vital dual role in fostering open innovation: they simultaneously protect, and disclose, the inventor's contribution to the knowledge pool. As public documents, patents help firms to identify potentially useful technologies, knowledge and partners, facilitating formal and informal collaboration. Such collaboration would not be practical without some assurance of protection for the original innovator, as potential collaborators (particularly competitors) would otherwise have a strong incentive to free-ride off the investments of others.

The patent system provides innovators the opportunity to recoup their often enormous R&D expenses, and reinvest the surplus in still further innovation. Take, for example, Microsoft (MSFT ▲ 2.08%). In 2014, the company invested \$11.4 billion in R&D. This significant figure is protected by its high-quality patents and fuels the ongoing cycle of innovation at the company. Or pharmaceutical company Pfizer (AKAM ▲ 1.33%), which has an R&D budget of over \$7 billion. With estimates ranging from \$1.8 to \$2.6 billion to bring a new drug to market, patents are indispensable bulwarks that protect ideas during the development phase and beyond.

This risk-reward cycle is pivotal to bring products to market. To the extent an innovator is rewarded for successful innovation, others share in the reward by getting access to inventions and, as industries develop at a faster clip, consumers ultimately achieve greater access to better

In today's innovation landscape, even the most skilled companies recognize the immense benefits of reaching outside their enterprises in search of collaborators who can accelerate their efforts to bring the best products and services to market. GE's (GE & 1.57%) collaboration with Quirky is a prime example, where an industry leader partnered with an agile crowd-sourcer to quickly bring to market its internet connected light bulb. But for the open innovation model to work, there must be a vehicle-a currency-that can capture and quantify the "stuff" each party brings to the collaborative effort. That vehicle is the patent system, and patents themselves are the currency of innovation.

The patent system works effectively in combination with the open innovation model for companies of all sizes.

Small software company ManyWorlds also relies on its portfolio of 30 patents to protect its inventions and enable collaboration with industry partners. ManyWorlds's machine learning software relies on a collaborative, open application programming interface (API) enabling customers and developers to work with and customize its products. Absent patent protection, competitors could appropriate Many Worlds's inventions without any of the value flowing back to ManyWorlds-or could restrict ManyWorlds's ability to offer an open API at all. Patents are an equalizer, enabling companies large and small to sustain a competitive balance, ensuring collaboration is a fruitful enterprise for all participants.

So the notion of patents as the enemy of open innovation feeds into a ready-made narrative, even if the facts disagree. Fortunately, the real story that is unfolding-in which patents and open innovation have forged a vibrant partnership-shows that, with continued support of the greatest innovation engine the world has known, there is a happy ending. Already, this partnership between patents and innovation supports a \$5 trillion economic output (a full third of America's GDP) and 40 million American jobs. Sometimes the facts get in the way of a good story, only to tell an even better one.

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