## U.S. patent system may be biggest obstacle for inventors



By Bruce Berman August 14, 2016

1 Print Article

Is it possible that the biggest impediment that innovators face today is the U.S. patent system — the very system that was created to protect them?



Tory Norred

Is the U.S. patent system the biggest impediment to success faced by innovators today? That is one of questions posed in an unsettling article recently published in *Popular Mechanics*, by investigative reporter, Scott Eden.

In *How the U.S. Patent System Got So Screwed Up*, Eden, an award-winning reporter, whose credits include the *Wall Street Journal*, ESPN and *TheStreet*, examines the negative impact of recent changes to the patent system by focusing on an inventor who got screwed by it.

The NPR-style article tells the story of Tory Norred, a fellow in the cardiology program at the University of Missouri, who in 1998 came up with the idea for a collapsible prosthetic aortic valve that could be fished up through an artery with a catheter and implanted in the hearts of patients who suffered from failing aortic valves. Unlike previous valves, Norred's stent disperses the force needed to hold it in place against the aorta's walls, requiring no sutures.

In November 2002 he received <u>U.S. Patent No. 6,482,228</u>, "Percutaneous Aortic Valve Replacement." Norred knew that he was on to something important, but that was not the beginning of success, it was the start of a nightmare that led to repeated frustration.

## "That's my valve!"

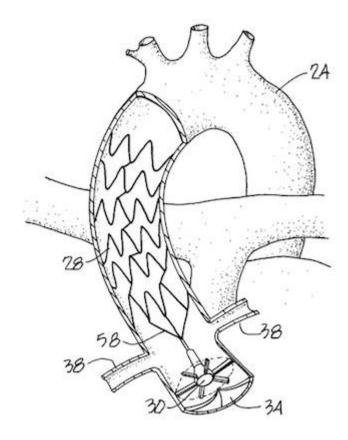


Figure 4 of U.S. Patent No. 6,482,228.

Norred spent the next four years talking to venture capitalists, medical products companies and consultants, in an effort to finance his invention. Despite many quality meetings, no one was interested in providing capital or product development — including the product-development people he signed non-disclosure agreements with at Medtronic, Edwards Lifesciences, Johnson & Johnson, and Guidant.

"By September 2003," writes Eden, "Norred had all but given up on his dream when he and a colleague were strolling the exhibition hall at an important cardiology congress held annually in Washington, D.C. They came upon a booth occupied by a California startup called CoreValve. With increasing alarm, Norred studied the materials at the booth. He turned to his colleague: 'That's my valve!'"

The rest of the story is not unfamiliar: CoreVale basically ignored him, and Norred settled into private practice. Then, in 2009, Norred saw the news online: CoreValve had sold itself to Medtronic for \$775 million in cash and future payments.

In fact, collapsible prosthetic valves fished up through an artery with a catheter and implanted in the aorta are well on their way to becoming the standard method of replacing worn-out heart valves. The annual market has already surpassed \$1.5 billion and is expected to grow.

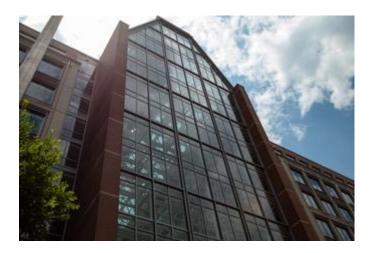
## **Immediate Suspicion**

The remainder of *How the U.S. Patent System Got So Screwed Up* is devoted to the slow decline of the patents system over the past decade, and how a handful of "patent trolls" have been used as the reason to systematically dismantle much of the patent system. The same system that was the envy of the free-world and spawned many breakthrough inventions and successful businesses that employ millions.

"Norred wasn't a troll," continues the article, "and the decision to sue did not come easily for him. His lawyer told him that the cost to litigate could exceed half a million dollars. Norred did not have half a million dollars. He considered letting it drop and moving on with his life, but in the end he couldn't. 'It's hard to give up on something you've worked so hard on,' he said."

"Whenever an independent inventor sues for infringement today, an immediate suspicion attaches to the case," states Eden. "The anti-patent feeling is such that to assert one is to become stigmatized as a troll or, worse, a con artist or a quack. But there's another way to look at these litigants. It could be that an inventor-plaintiff is a modern-day <a href="Bob Kearns">Bob Kearns</a>, the Michigan engineer who spent decades fighting the global automobile manufacturing industry over the intermittent windshield wiper. They made a movie about it called *Flash of Genius*. "

## **Greater Uncertainty**



USPTO headquarters, Alexandria, Virginia.

Inter partes reviews (IPRs) were supposed to clear up much of the uncertainty surrounding patents that are thought to be infringed, by determining which if any of their claims are valid in the first place. But IPRs also have had an unfortunate side effect. IPR tribunals make it easier for sophisticated defendants to kill patents held by legitimate inventors.

"The IPR isn't an effort to figure out whether an inventor invented something," says Ron Epstein, a former Intel attorney. "It has turned into a process where you use every i-dot and t-cross in the law to try to blow up patents." He adds, "There isn't a patent that doesn't have some potential area of ambiguity. If you set up the office so that no ambiguity is allowed, no patents will survive."

The names of some of the great inventors adorn the halls of the United States Patent and Trademark Office (USPTO), in Alexandria, VA – Fermi, Marconi, Tesla, Disney, Pasteur. If Tory Norred's experience is any indication, we can expect fewer new names to join them.

Go here for the full article, "How the U.S. Patent System Got So Screwed Up."

\*\*\*\*

*Popular Mechanics* is the classic magazine of popular technology. First published on January 11, 1902, it has been known for over a century as the monthly bible of the independent inventor.

In 2011, two of Scott Eden's pieces received "Best in Business" awards from the <u>Society of American Business Editors and Writers</u> (one for investigative reporting and one for feature writing). Eden is former staff reporter for *TheStreet* and *Dow Jones Newswires*.