

## Clean Energy Patent Boom Sets Stage For IP Wars

By **Keith Goldberg**

*Law360, New York (October 30, 2013, 6:09 PM ET)* -- Thanks to its relative youth, the renewable energy industry hasn't been a hotbed for patent litigation, but attorneys say the skyrocketing rate of new clean energy patents will soon spur a rush to the courthouse by patent holders looking to protect their increasingly lucrative innovations.

The number of renewable energy patents issued in the U.S. ballooned from 200 per year between 1975 and 2000 to 1,000 per year between 2000 and 2009, according to a study released earlier this month by the Massachusetts Institute of Technology and the Santa Fe Institute. Most of the growth has come from solar and wind, whose annual growth rates have approached or surpassed the growth rates of new patents for other technologies such as semiconductors and digital communications, according to the study.

The renewable patent explosion has been fueled by a flood of research and development investment as well as federal and state government policies designed to encourage — and in some cases, bankroll — renewable energy development, and attorneys don't expect the push for new renewable patents to subside anytime soon.

"Everyone is scrambling to stake out their territory and nobody knows how valuable the technology will be," said C. Erik Hawes, a partner in Morgan Lewis & Bockius LLP's litigation and intellectual property practice. "I think those two factors have combined to create a gold rush on renewable patents, and you don't know which claim will hit the mother lode."

That current dearth of highly profitable renewable technologies is one reason why the burst of new patents hasn't yet translated into a burst of litigation, attorneys say.

"At this point it's easier for people to stay out of each other's way," Hawes said. "At the point when technologies become lucrative, you will really see an explosion in patent litigation. I think it's going to be startling how many patent cases we'll see in the near future."

Not only does renewable patent litigation need a lucrative market to thrive, it needs a crowded market as well, attorneys say.

"There is a natural limit on competitor suits at least in part due to the fact that there are a limited number of big players," Ropes & Gray LLP partner William McCabe said. "Once they build the market, they will become targets of the smaller players and nonpracticing entities who would not find economic value in an injunction."

Given that solar and wind energy are the largest and most well-established renewable energy markets, they're the areas most ripe for a spike in patent litigation, attorneys say.

There have already been some notable IP fights in the solar and wind space. In May, a Texas federal judge enforced a \$170 million jury verdict against Mitsubishi Heavy Industries Ltd. for infringing a wind turbine patent held by General Electric Co. Meanwhile, Westinghouse Solar Inc. and Zep Solar Inc. waged a nearly three-year patent battle in federal court and the U.S. International Trade Commission over solar panel and mounting system technologies before settling their differences last year.

"Wind and photovoltaic solar are very complex technologies that require large capital investments by the equipment manufacturers," McCabe said. "Those manufacturers tend to be very large, sophisticated companies who tend to protect their IP rights and who don't seem timid about protecting them via enforcement."

The development of distributed solar technology, such as rooftop solar panels, that can be marketed on a mass scale makes solar power the most fertile ground for increased renewable patent litigation, according to Shane Nichols, a partner in Alston & Bird LLP's intellectual property litigation group.

"You can have lots of startups that get off the ground, and there's a lot of value in protecting the patents in what they've got," Nichols said.

Although attorneys say patent litigation for less mature renewable energy industries, such as biofuels and energy storage, might be further off, that hasn't stopped the push for new patents in those sectors.

"My experience has been in biofuel activity, and there's been a remarkable number of new companies that have been successful in that area — they've all been placing applications for new patents and getting those patents approved," Squire Sanders partner Rahul Pathak said. "If there are any legal battles, they'll be over how these renewable fuels are made, what techniques are used to produce these fuels, or the substances — like living organisms — that are capable of making fuels."

However, there are things that could stem the tide of renewable patent litigation, attorneys say. One is if the rate of new patents starts to drop off as the initial wave of R&D investment subsides, according to Foley & Lardner LLP partner Scott Anderson, a member of the firm's green energy technologies practice.

"It'll be interesting to see if the patent activity maintains this growth rate based on market pull," Anderson said. "Government and venture capital investment won't last forever."

Another potential roadblock is the U.S. oil and gas boom that has led to rock-bottom natural gas prices and the nation becoming the world's largest oil producer, according to Nichols.

"If it turns out that this re-emergence of oil and gas delays our use of renewable energy sources, I think it will also delay the rise in litigation," Nichols said.

--Editing by Jeremy Barker and Chris Yates.