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Inventing for The Green Age

Green laws will push for more invention, but is the patent world ready?

By KARI HAMANAKA , CREJ Staff Writer

A patent attorney in the San Francisco office of **Gordon & Rees LLP** says innovation will be developers' and builders' new ally in the war on global warming. "We have to invent our way out of this problem that we're in with buildings and retrofitting existing ones," said David Heckadon, a partner in the San Francisco office of Gordon & Rees' intellectual property group and green technology and climate change practice group. "We can't just put up a futuristic tower. Those are great, but most of the buildings out there are not those. There has to be inventions and improvements on the existing front."

And enter the patent attorney whose role it would be to secure an inventor's monopoly on an invention. But questions abound from a legal standpoint about the extent to which green rating systems may or may not make something patentable and how well the U.S. Patent and Trade Office, which already suffers from a backlog in applications and attorneys, would be at handling a potential surge in green patent applications.

"We are seeing an uptick in the amount of patent applications or inventions being pursued that are directed to energy-efficient devices be it power generation systems or thermal saving devices, and that's been over the past year or so," said Michael Dixon, a shareholder and member of the intellectual property practice group in the West Palm Beach, Fla. office of **Akerman Senterfitt**.

Regardless of the unanswered questions, Heckadon said green is the direction the state is headed in, and potential innovators may as well educate themselves about the process. "As this LEED [Leadership in Energy and Environmental Design] becomes more legislated, when you get that statutory stuff on the books, you have to do some logical advances to make it work," Heckadon said. "I just want people working on those things to realize, hey, this may be a good idea and maybe we should get a patent on it."

The potential for a builder, architect or developer to profit from the green movement is there, and it helps that professionals in those industries are already versed in what does not currently exist in the market and what would be useful to the building process. "If you're going to patent a green building invention, be aware that you've got a leg up as a builder or mechanical-type person," Heckadon said. Additionally, as more inventors step forward, LEED or other green point systems could be useful in distinguishing something as patentable or not. "I think that the arguments that you use to get LEED points are the same kinds of things that would, in my mind, speak to something being patentable," Heckadon said. However, he said he has yet to actually see someone apply for a patent on that sort of basis. "A patent attorney will sit and fight about solar modulars and talk about technical things," Heckadon said. "LEED APs [Accredited Professionals] will go through a building and try to get you points and try to minimize the environmental impacts and improve a building. I don't think anyone's linked these things up yet in a real official way."

Green Linkage

To actually link such ratings systems as LEED, Green Globes or GreenPoint to a patentable product will not get an application far at the patent office some say. Dixon said obtaining a patent on the basis that it conforms to a specific green standards system is not something an applicant would normally do. "If you're drafting a patent

application for an energy saving device, you're not going to say that it conforms with a particular code or LEED requirement, because most requirements are going to change on an annual basis," Dixon said. "It's a good likelihood that [standard] will change by the time the patent comes out." For example, someone might try to patent a new insulation material or new way of joining a window to a building to prevent the leakage of air, and the patent application would need to be directed to the actual invention itself. "You might have it [the standard] in mind, when drafting [the application], but it's rare that you're going to make it that explicit," Dixon said.

Robert Saltzberg, a partner in the San Francisco office of **Morrison & Foerster LLP**, said tying something to LEED or making a claim that something is LEED-certified in a patent application is too ambiguous to make something patentable. "That's too vague," Saltzberg said. "The [patent] claim would be for the technology that enables the energy savings or environmental advantages." Saltzberg, who leads the firm's electronics patent practice and electronics venture intellectual property group, pointed to the example of a dual flush toilet with two different handles (to be used depending on the type of waste going into the toilet). If such a product is patentable, the claim would be based on how the toilet is implemented, Saltzberg said. The toilet's advantage of reduced water usage, which may earn a building LEED points, would just be a result of the invention. Saltzberg, who said he is dealing with a client right now that builds low-energy-usage housing, said he finds clients in the building industry who may have something patentable often are unfamiliar with the process. "These clients are not used to dealing with patent attorneys," Saltzberg said. "You need to inform them of what do to secure their rights."

And every patent attorney strongly advises clients, regardless of whether the innovation is green or not, to have employees sign nondisclosure agreements to prevent leaks of ideas. "If the leak is substantial enough, then you may be precluded from filing a patent application," Saltzberg warned. In the United States, an inventor cannot patent something that has either been in the public use or on sale for longer than a year. Rules outside of the country are much more stringent and preclude anything that has been on sale or known at all from being patented. "After the patent application has been filed, but before the patent issues, the inventor does not have any enforceable rights and thus cannot prevent others from making, using, selling or importing the invention," Dixon explained if a nondisclosure agreement is not signed.

While Saltzberg, like Dixon, is seeing an increase in interest to patent green products, he said prior art, or already-existing technology, impacts everything, which is where the challenge lies in patenting something. "The general rule, the super simplified rule for a patent, is something that is new and not obvious," said Stefan Kirchanski, a partner in the Los Angeles office of **Venable LLP**. The latter qualifier means that something new is not similar to what has already been done before.

The Inverse Problem

But Kirchanski, along with Matthew Spark, an associate in the same office at Venable, said builders should also be aware of the inverse problem that arises with patented green products. "All the stuff we've talked about up to this point is if you have a wonderful new product, how do you go about protecting the intellectual property? But, what about the inverse?" Kirchanski said. "Let's say you're building a green building and someone comes up and says we've got a new installation system or a new solar panel system and we cost 25 percent less than the competition. Doesn't that sound great? But it's possible you could wind up buying something made according to someone else's patent." In such a case the builder would have a product infringing on the patent and a serious liability. "I've never heard anyone talk about that," Kirchanski said. "It could happen in any building just as well, but they have to make sure they're not running into patent infringement. It would be unfortunate to build something with solar panels and then find out it's someone else's patent on it." This is why it is important to make sure insurance covers such a liability. "If you're buying a component or a design, you would want to cover that," Spark said. "If you are the architect or developer, and you think you've come up with a new way of doing something, it might behoove you to take a quick look to see if there's other patents that cover that."

The liabilities of infringing on someone else's patent is what makes the World Business Council for Sustainable Development's Eco-Patent Commons concept all the more appealing. However, the patents made available in the Commons' public domain are given up at a patent owner's discretion. All patents available for use are in some way environmentally friendly and listed on the Council's Web site and are available for sharing. In order to join the Commons, members have to contribute a patent to the Commons database. Started in January 2008, the most recent additions to the Commons in March were Ricoh Co. Ltd. and **Taisei Corp**. Ricoh pledged a

patent it has on technology that helps reduce waste from imaging cartridges. Taisei donated two patents, including one on a construction method that helps improve the quality of water.

Although guaranteeing a building product does not infringe on an existing patent can be expensive, the alternative would be to do a search on the U.S. Patent and Trademark Office Web site. "The one good thing about patents is they eventually expire," Spark said. "Somebody could have had a patent issued 40 years ago, which is now in the public domain."

The movement toward more green building patents in the future is all the more reason to argue in favor of why patent attorneys may want to consider the LEED AP designation, something Heckadon at Gordon & Rees obtained last year. But obtaining a LEED AP designation is not necessarily something patent attorneys are moving in droves to do.

"I have not heard of anyone doing that," Saltzberg said. And Kirchanski and Spark said LEED AP attorneys at Venable are usually in other practice groups. "Most of our certifications are more common in a lot of other areas," Kirchanski said.

And Heckadon said he has yet to meet a patent attorney that also has a LEED AP designation. "Usually, I'm met with blank stares," Heckadon said. "I look in the mirror and give myself a blank stare and ask am I approaching it the right way, because there doesn't seem to be anyone else doing this." But as green continues to be legislated, understanding the green rating systems could become more helpful in arguing one's case for a green building patent before the USPTO. "I thought it just makes sense to have a patent attorney go after these green inventions," Heckadon said. "The farther you step off to new, inventive creations from an architect or an engineer, the more risk they may run into."

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