Green Technology and Patent Protection

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While the U.S. Environmental Protection Agency classification of carbon dioxide as a pollutant earned considerable media coverage in late 2009, the patent community was more interested in the United States Patent & Trademark Office ("USPTO") announcement regarding the "Green Technology Pilot Program" ("GTPP").

BACKGROUND ON THE PATENTING PROCESS

The granting of patents by the USPTO is often seen as an indicator of the effectiveness of research & development investments. Patents are considered to be such an indicator, because to be awarded a patent, it requires not only the efforts of inventors to develop new and non-obvious innovations but also successful handling by patent counsel to shepherd a patent application through the USPTO. Thus, the granting of a patent is an indicator that efforts at innovation have been successful and that an innovation had enough perceived value to justify the time and expense in procuring the patent. With that said, Green Technology will either prosper or perish based on the amount of available investment money and the ability to give the inventor the right to keep others out of a given competitive space. In the U.S., as in many other countries, the best way to do that is through the patent system which is neither inexpensive, quick nor a certainty with the latest USPTO statistics revealing an average patent allowance rate of around 44%.

Filing a patent application is all about development of the claim or claims. The claims are what are examined and allowed or rejected. It is the claim or claims that must be present in the accused device/method/process in an infringement action. Thus, the claim drafting is critically important. While there are several varieties of U.S. patents, namely utility, design, and plant patents; this article will address only utility applications as they are the most applicable to the majority of Green Technology inventions. A utility patent application essentially covers the useful aspects of an invention. The drafting of a patent application, and in particular the claims, is a delicate dance that can have profound ramifications in later years. The reason for this is that, over the 20 year term of a utility patent, competitors will work diligently to design around the patented technology to avoid infringing the patent claims. Obviously the broader the scope of the patent claims, the more valuable the patent is from the standpoint of commercialization and enforcement.

The application begins when documents are filed with the USPTO identifying the invention, providing an enabling disclosure that reveals the best mode of producing the apparatus or employing the process or method. Once the application is filed the applicant can start marking their products with "patent pending." Once the application is examined, the USPTO will send an official communication called an "Office Action" if claims are rejected or objected to and the basis for the rejection/objection. The latest USPTO statistics reveal an average pendency of 25.6 months before receiving the first office action and office statistics reveal that roughly 88% of the applications are rejected as unpatentable at this first office action. There is time, typically up to six months, to respond with arguments seeking to rebut the patent office position or amend claims, but no new matter may be added to the application as filed.

This process is called the prosecution and it is the back and forth negotiation process. The process is very complex, often requiring administrative appeals or continued applications. But if claims are allowed that the applicant is willing to accept, an issue fee is paid and a patent will issue on the allowed claims. The latest USPTO statistics reveal that the average total pendency of a U.S. application is 32.2 months, meaning the average application filed on April 1, 2010, would not be allowed, presuming it

satisfied the statutory requirements of novelty, usefulness and nonobviousness, until around December 7, 2012.

In an effort to address the long prosecution timelines associated with patent applications, in early December 2009, the USPTO announced an initiative to speed up the patenting process for inventions directed to green technology.

BACKGROUND ON THE GREEN TECHNOLOGY PATENT PROGRAM

On December 8, 2009, the USPTO implemented a pilot program to expedite the examination of green technology patent applications. Patent applications are normally taken up for examination in the order they are filed, although the USPTO has a procedure under which an application will be advanced out of turn if the applicant files a "petition to make special" with the appropriate documentation detailing why the application fits into one of the categories set aside for petitions to make special. The program will last for 12 months, requiring that any petition to make special filed under the Green Technology Pilot Program ("GTPP") be filed prior to Dec. 8, 2010.

Under the GTPP inventors who have previously submitted patent applications will be able to file such petitions for accelerated examination in technologies that "materially contribute" to the discovery or development of renewable energy resources, energy efficiency utilization, or greenhouse gas reduction. Though the GTPP currently requires that an application must have already been on file with the USPTO in order to participate in this program, in this author's opinion there is a high probability that the Patent Office will extend the accelerated review to Green Technology applications that are later filed. Precisely when this adjustment to the GTPP will occur is difficult to predict so those interested in utilization of this program should regularly check the USPTO website for announcements.

It is estimated that applications accepted into the GTPP will save about a year of examination time, a hypothetical application that may have issued as a patent in three years under the normal examination procedure would issue in two years via the GTPP route. By reducing processing time by an average of 12 months for these applications, the USPTO will enable promising green technologies to come to market sooner, spurring investment and creating green jobs. In the first four weeks following the announcement of the GTPP several hundred petitions were filed suggesting the program has gained considerable traction with the inventing community.

The Clean Energy Patent Growth Index report tracks the granting of U.S. patents for the following sub-components: Solar, Wind, Hybrid/electric vehicles, Fuel Cells, Hydroelectric, Tidal/wave, Geothermal, Biomass/ biofuels and other clean renewable energy. More clean energy patents were issued in 2009 than in any year since the data has been tracked and according to the Clean Energy Patent Growth Index report, fuel cell patents at 629 account for the highest proportion of the newly-issued patents, while there was also substantial growth in the number of wind patents. Also on the rise were patents issued in hydroelectric, tidal, and geothermal technologies. Contrary to what some commentators have asserted, recent academic research on this issue has shown that the protection and enforcement of intellectual property are important drivers of international technology transfer.

CONCLUSION

According to a 2009 report titled "Towards a Global Green Recovery," world governments intend to inject $400 billion in green technology stimulus funding. Couple the world government funding with venture capital funding in green or sustainable technologies in the third quarter of 2008 at $2.6 billion and it is clear that technology advancements are to follow. As mentioned at the beginning of this article, Green Technology will either prosper or perish based on the amount of available investment money and the ability to give the entrepreneur the right to keep others out of a given competitive space. The GTPP is an intriguing first step by the USPTO to accelerate the protection of the green entrepreneur's competitive space.

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