INFORMATION TECHNOLOGY

Much of our technology-driven economy stems from software these days. In view of recent court cases, technology-oriented startups often ask whether the functionality included in their software remains protectable by patent.

This month Lawyer Monthly talks to Barry Lewin, Partner with Gottlieb, Rackman & Reisman, P.C. on the advent of this huge sector and the legal pitfalls businesses encounter each day.

Mr. Lewin tells LM about the unique challenges that inventors encounter on the way of obtaining patent protection for software-based inventions.

Is the process for obtaining patent protection for software more complex than for hardware?

Although the actual process is the same for both hardware and software-oriented inventions, it can be more challenging for software-oriented inventions. First, utility patents afford protection for functionality of the software, not the software code itself (the code is protectable from copying through copyright protection) so the claims need to be directed to the functionality. A patent could protect, for example, an automated process for delivering content to a user.

The first step in obtaining patent protection requires preparing an application. The applicant prepares a detailed description of the invention, called the specification, and a set of sentences, called claims, which are supported by the specification and define the ‘metes and bounds’ of the protection. An Examiner in the United States Patent and Trademark Office, ordinarily an expert in that technology, performs a search for relevant ‘prior art’ references which pre-date the application under examination. The Examiner then examines the claims against the references to determine if the invention is, among other criteria, novel and not obvious over those references.

Specifically with regard to software functionality, one recent threshold step is that the Patent Office needs to determine if the claims are directed to significantly more than an abstract idea. Abstract ideas and mathematical algorithms are not entitled to patent protection, so the claims need to encompass content that take them into a space that exceeds just implementation of an algorithm or automation of an abstract concept. Very often, patent claims are rejected because they are directed to broad descriptions of an abstract idea or because they do not articulate ‘significantly more’ than an abstract idea or implementation of a known algorithm. Absence of ‘significantly more’ is being used to invalidate even granted patents, such as those related to methods of performing certain financial services. It is important to take advantage of skilled and experienced practitioners to assure the invention has more than implementation of an algorithm and the claims can meet the associated test used by the Patent Office.

What are the most common challenges that arise in obtaining patent protection for software?

The most common challenges relate to overcoming prior art rejections. To obtain patent protection, an invention must be both novel and not obvious over prior inventions, whether or not those inventions have been patented. In general, software development is a huge industry these days. Many people develop and commercialize software solutions across numerous topical areas and take advantage of a growing number of available software utilities, at times resulting in similar solutions to the same problem. Consequently, such as with regard to mobile apps, the proliferation can result in many more prior art references which are relevant to any particular claim than perhaps any time in history.

Potential patent applicants historically commission searches to determine what art might exist (so as to avoid that art in preparing claims and products). But, because patent applications ordinarily are not published for 18 months, searches in such a rapidly expanding space can be less beneficial than they used to be.

In addition, the courts have been quite active in articulating reasoning resulting in limiting patentability in this space. Because the law continues to evolve and because even granted patents can later be invalidated, patent applications need to be written in anticipation of further changes in the law.

Beyond these issues, young companies (among others) can often be in a rush to have a product available commercially to customers, but doing so too early can impact their patent rights. Inventors and companies need to recognize that in many countries patent rights are unavailable unless a patent is applied for somewhere in the world before the product is publicly disclosed. It is important to remember to file for patent protection before the product is released.

You often lecture at engineering and law schools; what advice would you give the future generation of patent lawyers?

To relate to clients, it is important to understand how technology is developed and implemented. Many patent lawyers were once practicing engineers or scientists and that experience is enormously helpful as is interacting with the engineers and scientists who are patent examiners.

It is also important to stay abreast of technology. Technology changes rapidly and areas I worked on long ago that were state of the art (e.g. fiber optics or telecommunications signaling) evolve into commodities, and newer technologies and approaches are created to advance the state of the art.

Of course, a practitioner needs to stay familiar with the law as well. Both Congress and the courts have been very active in recent years and practitioners need to remain up to speed with these on-going changes.