

Protecting Software Inventions – Trade Secret or Patent?

Software companies face competitive challenges that are inherent in the industry, such as short product life cycles, ease of entry, and a mobile work force. The strategic use of patent and trade secret protection can help to preserve the competitive advantage associated with software innovations.

Software Patent Protection

The United States was the first country to formally recognize the patentability of software as a result of the 1981 United States Supreme Court ruling in *Diamond v. Diehr*, 450 U.S. 175 (1981) at 185 (U.S.S.C.). In this case, it was proclaimed that computer-related machines and processes were not to be regarded any differently under the patent laws than traditional machines and processes just because a computer program was used to perform the claimed novel apparatus functions or method steps.

In Europe, software inventions must possess "technical character" in order to be considered patentable subject matter. In Japan, a software-related invention is patentable subject matter provided that the information processed by the software is "concretely realized" by using hardware resources. In Canada, software inventions must have a "practical application in industry, trade or commerce" in order to be considered patentable subject matter. The Canadian Patent Office is planning to introduce new Canadian Manual of Patent Office Practice

(MOPOP) Guidelines for software patents in the fall of 2004 to provide clarity on Canadian standards for software patentability.

While the international landscape on software patents is still evolving, it is clear that software inventions are now considered patentable subject matter in most jurisdictions. Since patents can protect the broader functional aspects of an inventive software program, they can be effectively used to stop competitive activities such as reverse engineering and independent development.

Trade Secret Protection

Elements of a software invention can be protected as trade secrets if they are not generally known and if "reasonable measures" are taken by the trade secret holder to maintain their confidentiality. Trade secret law only prevents improper taking or using of information. Independent developers cannot be restrained from using such information unless improper conduct is involved.

The "reasonable measures" requirement can be met at least in part by limiting the amount of disclosure (perhaps only on a need to know basis), by ensuring that all employees, contractors and others who receive disclosure, first execute confidentiality agreements, and that reasonable in-house physical security measures are adopted.

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Bereskin & Parr has set up shop in Waterloo

The Waterloo office provides a full range of intellectual property services with a focus on patents and intellectual property management for technology companies in the Waterloo region. For more information, please contact a member of the Waterloo office.

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If a software invention cannot be easily obtained through reverse engineering, it is unlikely to be independently discovered, and can be maintained secret through in-house procedures, then the software invention may be best protected as a trade secret. The risk will always be that if the same or similar information is independently developed and patent protection obtained, the entity holding a trade secret on the information may be prevented from further use of the information.

The Best of Both Worlds

While there is a natural tension between maintaining a software invention as a trade secret, and filing a patent application that discloses the software invention, it is possible to strategically utilize both types of protection by considering the character and long-term prospects of a software innovation.

The process of obtaining international patent protection takes several years. If it contemplated that a software innovation will only be valuable for a short period of time or if substantial improvements are expected, then the patent applied-for technology may be rendered obsolete before a patent issues and may be better protected as a trade secret. On the other hand if a 'pioneering' software innovation has been developed, if heavy competitive activity in the field is contemplated, and/or if there is longer-term potential licensing value, patent protection can be critical to the ultimate business value of the software innovation.

Although a patent application requires complete disclosure of the invention, actual implementation code does not need to be disclosed. The description of the invention only needs to enable a skilled programmer to draft a workable program without undue experimentation (although in the U.S. the "best mode" must be disclosed). Accordingly, it is sometimes possible to obtain patent protection for the "high level" features of the software innovation while maintaining the underlying logic, structure and organization as trade secrets.

Finally, in some countries (e.g. Canada and Europe), an invention is patentable as long as it has not been "made available to the public" before the application filing date. In those countries, it is possible to obtain patent protection for a software invention even after commercialization, as long as the innovation cannot be inferred from the commercially available product. However, it should be borne in mind that if the software invention has been in public use or on sale for more than one year in the United States, then patent protection for the software invention cannot be obtained in the United States, even if the software invention has not been disclosed by such public use.

Miriam Paton and Isis E. Caulder

Speaking of IP....

We are speaking and participating in a number of conferences and seminars. We hope to see you this fall!

Sam Frost spoke at the Image-guided Therapy and Surgery Dialog: Collaborations - from Concept to Commercialization Workshop hosted by the Ontario Consortium for Image-guided Therapy and Surgery (OCITS) on Friday, September 13, 2003. For more information on this organization go to www.ocits.com.

Isis Caulder spoke on "Software and Business Method Patents - The Latest Developments" on Friday, October 24th at The Seventh Annual Canadian IT Law Association Conference hosted by The Canadian IT Law Association (IT.can) at Le Meridien King Edward Hotel, Toronto. Victor Krichker and Kendrick Lo also attended. For more information go to www.it-can.ca.

Sam Frost, Tim Sinnott, Isis Caulder, Kendrick Lo and Jay Millman attended the American Intellectual Property Law Association (AIPLA) Annual Meeting in Washington D.C. from October 30 to November 1, 2003. For more information go to www.aipla.org.

Isis Caulder spoke on "Intellectual Property Due Diligence" on Thursday, November 13th at the Osgoode Professional Development Centre, Professional Development Program, Continuing Legal Education - 1 Dundas Street West, Suite 2602, Toronto. For more information go to www.law.yorku.ca/pdp/cle.

Bereskin & Parr is hosting a complimentary breakfast seminar on December 4th in Waterloo entitled "Intellectual Property Issues for the Technology Industry". For more information go to www.bereskinparr.com.

Edited by **Isis E. Caulder**. Please send feedback and suggestions to Isis at icaulder@bereskinparr.com.

The contents of this update are informational only, and do not constitute legal or other professional advice. To obtain such advice, please contact one of our group members.

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