Discussion Items for SOFTIC Symposium

by Frederick Boehm and Marc Sandy Block

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Comments on U.S. Legislative System Regarding Invalidity

To be valid, a patented invention must be novel (35 USC 102), useful (35 USC 101), nonobvious to one of ordinary skill in the art of the invention (35 USC 103), and must be statutory subject matter (35 USC 101). The invention must also be adequately described and claimed (35 USC 112).

Unlike other patent systems, "novelty" in the U.S. is not absolute but instead provides a one-year grace period for various acts which bar patent protection. For example, a U.S. patent application should be rejected if the invention that was published or patented anywhere in the world more than one year before the application was filed, and a patent granted on such an application should be invalid. In 35 USC 102(e) as recently amended, a granted patent or a published application is prior art as of its effective filing date. If a patent is granted or an application is published on an application filed on January 18, 2000, that patent or application can invalidate any patent filed on or after January 19, 2001. The "novelty" requirement also provides that a patent is invalid if the patented invention was sold, on-sale or in public use in the U.S. more than a year before the patent's effective filing date. Section 102 also ensures that a patent is granted to the first inventor, provided that he/she has been diligent and has not abandoned, suppressed, or concealed the

invention. Along this line, a patent is not valid if the invention was known or used first by another in the U.S. The section 102(e) filing date can be used to show prior knowledge. If the patent owner was unable to show he/she made the invention before January 18, 2000 in the above example, his/her patent might be invalidated.

Under U.S. law, a patent is presumed valid (35 USC 282). A challenger must show invalidity by clear and convincing evidence.

If another party believes a patent is invalid, it can seek reexamination or a court judgment. Reexamination is brought in the U.S. Patent and Trademark Office (PTO) at the request of a patent owner, a third party, or, in some instances, by the PTO itself. A substantial new question of patentability is required for a reexamination to occur. To have a court consider the validity of a patent, a third party can seek a "declaratory judgment", but only if it is in apprehension of a law suit. For example, if the patent owner *threatens* an infringement action, the accused party can ask a court to declare the patent invalid. Of course, the accused party can raise "invalidity" as a defense after the patent owner actually files an infringement suit.

Comments on Hague Convention

The U.S. system differs from the European and Japanese systems in a number of ways. While the U.S. includes a grace period in its novelty requirement, other patent systems provide for absolute

novelty (no grace period). The U.S. has intricate rules to determine which of several contesting inventors is the "first inventor" entitled to a patent; European and Japanese laws vest rights in the first party to file for protection. The U.S. has expanded what is proper patent subject matter to include "business methods"; Europe has clearly excluded "business methods" per se from patent protection. The U.S. law also requires an inventor to disclose material prior art of which it is aware. Failure to disclose such art can result in the patent being invalidated. Other countries do not have such a disclosure requirement. Although similar to U.S. nonobviousness, other country's have a requirement of "inventive step"; these key requirements have distinct histories, meanings, and processes of application.

It is evident that the requirements for being granted a patent different from nation to nation in significant ways. Moreover, the various laws differ in key respects with regard to infringement. For example, the U.S. view of "equivalents" differs greatly from that in Japan and that in Europe.

The Hague Convention proposes that one country of the Convention might hear cases on the validity of a patent granted in another country and on infringement in another country of a patent granted in that other country. Extending jurisdiction in this way will result in a number of problems. Practically, courts will face the difficulty of applying the complex laws of another country and of fully recognizing the underlying policies and cultures underlying another nation's patent laws. In addition, problems may arise with respect to forum-shopping (i.e. a litigant selecting a country favorable to its position or adverse to the granting country's patent's laws),

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sovereignty, the vitality of a nation's patents and patent system objectives, and the economic dislocations and inconsistencies that may arise when the granting country must honor the decisions of another country's patent courts. In my opinion, the Hague Convention on jurisdiction should not extend to patents.

Recent Software Patent Decisions

Over the past several decades, the patentability of software-related inventions has been established in the U.S. Early on, software-related inventions were claimed as systems and methods that included hardware. It is now accepted that such inventions can also be claimed as functional elements stored on a medium (*In re Beauregard*,35 USPQ2d 1383 (Fed Cir 1995)).

Until 1998, the U.S. law seemed to suggest that business methods were not proper subject matter for patent. In *State Street Bank v Signature Financial Corp*, 47 USPQ2d 1596 (Fed Cir 1998), the Federal Circuit laid to rest the notion that a business method (embodied in software and operated on a machine) was not patentable subject matter. As a result, numerous business method patents have been granted in the U.S. and cases involving the enforcement of business method patents have been filed.

While implemented business methods and software are considered proper subject matter for patenting, it is important to note that the other patent requirements are still strictly applied.

Software-related, network-related, and business method inventions must be adequately disclosed and distinctly claimed. (See *System Management Arts v Avesta Technologies*, 137 F. Supp. 2d 382 (SDNY 2001) which considered the "definiteness" of a claimed term in a diagnostic software invention.) Also, while the software can be claimed as means plus function elements, such elements will be limited to the structure described in the specification and equivalents thereof. *Globetrotter Software Inc. v. Elan Computer Group Inc.* 1999 U.S. Dist. LEXIS 22482 (ND Cal 1999). The invention must also satisfy the novelty and nonobviousness requirements. (See *Amazon.com v Barnes and Noble*, 57 USPQ2d 1747 (Fed Cir 2001) in which a preliminary injunction for invention relating to one-click Internet ordering was vacated where review of prior art suggested that there was not the requisite "likelihood of patent owner success" in its infringement suit.)

Although not involving software-related or network related inventions, the case of *Festo v SMC*, 56 USPQ2d 1865 (Fed Cir 2000), will likely impact such inventions. The *Festo* case, in brief, holds that a claim element narrowed for purposes of patentability will not be read to include equivalents under the U.S. Doctrine of Equivalents. The case is being considered by the U.S. Supreme Court.

Prior Art Documents for Software-related Technology

The PTO conducts searches of hardcopy patents and documents, along with an electronic search.

With respect to business methods (generally inventions classified in U.S. patent class 705), the PTO has recently issued a paper discussing its search strategies. In particular, the PTO has indicated which databases are available to the PTO and which databases are searched for specific business method fields. Core databases which are generally searched and supplemental databases tailored to a specific field (e.g. banking) are listed at the following website: http://www.uspto.gov/web/menu/busmethp/figurenpl.htm.

In June 2001, the PTO asked the public to suggest additional sources that might enhance the PTO's search effectiveness in the business method area. See the following website for details: http://www.uspto.gov/web/menu/pbmethod/c705-cr.pdf for the notice.