

DataTreasury Patent Litigation: The Impact on Payment Systems

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The last thing that a professional in the payment systems industry, already trying to cope with the impact of Check 21 and the USA PATRIOT Act, wants to worry about is patent law. Nevertheless, the recent wave of patent infringement lawsuits and the large number of patent applications related to the financial services industry may force payment systems personnel to become up-to-date on the intricacies of patent law.

It may be a general belief that the area of day-to-day financial operations is not an area where one needs to worry about infringing patents. However, if nothing else, at least the rapid, technological changes in payment systems should be one reason to raise the possibility that some of the newer technologies being employed may arguably be covered by patents. As a matter of fact, nobody in the financial services industry cared about patents a few years ago; now, however, a number of financial service providers have in-house patent counsels.

The importance of patents related to financial services has been highlighted by the number of high-profile, patent infringement cases filed over the last couple of years against members of the financial services industry. One group of cases that may have a significant impact on the payments industry is related to the two patents owned by DataTreasury, Inc.

What is DataTreasury? What has it patented? How does that affect payment systems? To answer these questions, it is important to first get a basic understanding of what a patent is, what rights a patent holder has, and how a patent can be infringed.

WHAT ARE PATENTS AND WHY DO THEY EXIST?

What is a patent anyway? A patent is a government-issued grant that confers on the inventor the right to exclude others from making, using, selling or

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offering for sale the invention for what is now a period of 20 years, measured from the filing date of the patent application. Patent protection for a U.S. patent extends only throughout the United States and its territories and possessions.

One can also analogize a patent as being a contract between the inventor and the government. In particular, the inventor is given a limited-term monopoly on the invention, and in return, the government obtains and places the invention in the public domain.

Patent Requirements

What are the requirements of obtaining a patent? The Patent Act, in title 35 of the U.S. Code, and the Federal Rules implementing the act impose a number of hurdles that must be overcome in order to obtain patent protection for an invention. This article will discuss the requirements for patentability, but these are general principles, and there are numerous refinements and intricacies to these general principles that are beyond the scope of this discussion.

With that caveat in mind, perhaps the most onerous requirement imposed by the Patent Act is that the invention must be novel, as defined in section 102 of the Patent Act, which essentially requires that the inventor developed the claimed invention before anyone else. Additionally section 103 requires that the invention not be obvious (at the time the invention was made) when viewed by others in that field that have "ordinary skill in the art."

Business Method Patents:

It is a general belief that patents are only related to the areas of sciences, engineering, etc. However, as anyone in the business world would agree, "inventions" are not limited to the fields of science and engineering only. In fact, one must find inventive ways to compete and survive in almost any area of the modern business world.

Patents and Banking?

An issued patent gives the patent holder an exclusionary right to keep others from making, using, selling or offering for sale an item or service defined in the patent. Every patent has claims that define the coverage of a patent. In general there are three conditions for patentability: novelty, nonobviousness and utility. In the past there has been some question whether software such as in the DataTreasury patents has been patentable. The Federal Circuit (the court of appeals for patent cases) underscored this fact by noting that methods of doing

business have been patentable subject matter ever since 1952, when the current Patent Act was passed. In *State Street Bank and Trust Co. v. Signature Financial Group, Inc.*, the Federal Circuit stated that an invention directed to a new method of doing business would no longer be denied patent protection as long as such an invention satisfies the standards of novelty, nonobviousness and sufficiency of claims. These types of patents are generally classified as business method patents (classified by the U.S. Patent and Trademark Office in class 705).

To be novel, the claims of the patent must not have been known or used by others prior to the date of invention or have been described in a printed publication at least a year prior to the filing date of the patent. In order for the claims of the patent to be considered nonobvious, the invention must be more than a mere, trivial step forward in the art or area that the patent covers. In order to have utility, the invention must be operable or capable of a use. In the DataTreasury case, two patents have already issued giving a presumption that the DataTreasury patents are useful, nonobvious and novel.

THE DATATREASURY PATENTS

DataTreasury owns two relevant patents, numbers 6,032,137 ('137 patent) and 5,910,988 ('988 patent), both titled "Remote Image Capture with Centralized Processing and Storage." Both patents provide a system for central management, storage and verification of remotely captured electronic and paper transactions from credit cards, smart cards, debit cards, documents and receipts involving sales, business, banking and general purpose consumer applications. The systems provided in the DataTreasury patents are designed to process paper and/or electronic receipts and automatically generate reports such as credit card statements, bank statements, tax reports, tax return preparation, market analyses, etc.

More specifically, the '988 patent claims to cover a system having a remote subsystem for capturing paper transactions from documents and receipts; a central, data-processing subsystem for processing the captured data; and a communication network for transmission of data between the remote subsystem and the centralized, data-processing subsystem. The '137 patent claims to cover a system having a remote subsystem for capturing paper transactions from checks; a central, data-processing subsystem for processing the captured data; and a communication network for transmission of data between the remote subsystem and the centralized, data-processing subsystem. Whereas the '988 patent claims to cover a broad, document-management system, the '137

patent claims are specifically directed to a check-processing system that captures and processes various transaction data from checks.

As a person working in the banking industry would know, the capturing and processing of transaction data from checks are what banks do all the time and probably have done for a long time. Therefore, one may ask how this can be an innovative method of doing business or what the inventive concept in doing so is. DataTreasury would argue that at the time of the application of the patents, earliest of which was August 1997, no one had a system that performed these tasks automatically. To what extent such a claim is accurate is an issue that will be determined at length during one of the various litigations initiated by DataTreasury.

DataTreasury does not seem to be selling any products or systems that use the technology covered in these patents, nor does it seem to have any clients for which DataTreasury has designed such products or systems. The major source of DataTreasury revenues seems to be from licensing its patented technology to banks and other financial institutions that may employ such technology.

THE DATATREASURY LAWSUITS

Currently, in the federal courts of Texas, litigation over patents owned by DataTreasury, Inc. is progressing. DataTreasury asserts that its patents cover the technology that most banks use in order to comply with Check 21, such as scanning checks and transmitting the relevant data to a control clearinghouse, a fact which is not lost on the Texas courts. Although there are ways to avoid infringement of the DataTreasury patents, the costs involved are significant. Even though a final, nonappealable judgment on the DataTreasury patents is still years away, it makes sense for banks to start thinking about the DataTreasury patents now.

How to Attack a Patent

A patent issued by the U.S. Patent and Trademark Office can be challenged in the federal courts of the United States, as well as at the U.S. Patent and Trademark Office. Although a patent is presumed to be valid upon issuance, quite often it can be invalidated via litigation in the federal courts or by asking the U.S. Patent and Trademark Office to re-exam an issued patent. A third party can ask the Patent Office to open re-examination by presenting a substantial new question of patentability, generally accompanied by a prior art that may have a bearing on the patentability of any claim of the patent in question.

Whether the validity of a patent is challenged in the federal court or at the Patent Office, there are several ways a patent may be held to be invalid.

The first way to defeat a patent is to show that it was anticipated. In order to show a patent was anticipated, a single, prior art reference must disclose each and every element of the claimed invention. Thus, if a printed publication was distributed before the application of the DataTreasury patents, where such publication discloses all the elements of any of the claims of the patents, it will also invalidate the DataTreasury patents.

The second way to defeat a patent is to show that every element of the claim was known or used by others prior to the invention. Thus, any system shown to include all of the elements of any claims and to be in use prior to the application of the DataTreasury patents can be used to invalidate the claims.

The third way to attack a patent is to argue that the patent is obvious. The common way to demonstrate that an application is obvious is to show that two separate pieces of prior art disclose all the elements of the claim and that it would only take a motivation by someone skilled in the art to combine those references into one. For example, claim 1 of the '988 patent has three elements: a data-access subsystem; a central, data-processing subsystem; and a communication network connecting the data-access subsystem and the central, data-processing subsystem. If a prior banking system had systems similar to the data-access subsystem and the central, data-processing subsystem as disclosed in claim 1, and a prior, printed publication had a communication system that discloses a communication network, and if there were a motivation for someone working in the field to combine the three systems, claim 1 and therefore the '988 patent would be held invalid as being obvious over these prior art references.

Another way to defeat a patent is to show that the written description in the patent is not sufficient to support the claims that are currently being asserted. The standard usually requires that one skilled in the art could make the invention without undue experimentation by merely reading the disclosure in the patent application. Another way to defeat a patent is to argue that the inventor did not disclose the best mode of his or her invention at the time of filing. A patent application may disclose numerous embodiments of the patented invention; however, if the inventor has a single, best way of creating the invention, this must be disclosed in the patent application, and not doing so results in the patent being invalidated. Finally, if it can be shown that the inventor or the assignee of the patent had the claimed invention on sale more than a year before applying for the patent application, the claims would be held invalid.

Avoid Infringing a Patent

Another way to avoid falling under a patent is to demonstrate non-infringement of the claims of the patent. As stated previously, claims define the coverage of a patent and the claims are defined by long sentences containing elements that must be in an item or process. Courts hold "Markman Hearings" to determine in plain English the meaning of these claims. Once the meaning of the claims has been established, the claims must be compared to the accused structures or methods. Infringement can be demonstrated in two ways: either literally or under the Doctrine of Equivalents. For literal infringement, every element of the claim must be present in the accused device. For infringement under the Doctrine of Equivalents, there must be an insubstantial difference between the accused device or method and the claim. Another way to think about the Doctrine of Equivalents is consider whether the item or system performs substantially the same function in substantially the same way to obtain the same result. If one element is missing from an accused device, infringement cannot be found. It should be noted that in light of the recent decisions affecting scope of patents under the Doctrine of Equivalents, it is more difficult to prove infringement under the Doctrine of Equivalents. However, whether a system would be held to be infringing under the Doctrine of Equivalents can be determined only after a thorough review of the patent application file and various assertions made by the inventors and their attorneys to the Patent and Trademark Office during the prosecution of the patent application.

Effect of Infringing a Patent

If a patent is found to be valid, enforceable and infringed, the patent owner is entitled to an injunction against the accused infringer. In addition, the patent holder is entitled to, at the minimum, a reasonable royalty and may be entitled to lost profits from the date of the issuance of the patent. In cases of infringement, courts generally use so-called Georgia-Pacific factors in determining reasonable royalty. The Georgia-Pacific factors provide 15 different factors, such as rates paid by licensees for similar technology, commercial success of the patented technology, commercial relationship between the infringer and the patentee, etc.

Because the first DataTreasury patent was issued in June 1999, anyone who may have used the infringing system may be liable for past damages for up to approximately six years. On top of that, the infringer will have to agree to take a license with DataTreasury to continue using any systems covered by the patents for the remaining life of the DataTreasury patents.

In addition, these damages may be tripled if the court decides that the infringer was willful. To be willful, the plaintiff must establish that the defendant knew of the patent and continued their infringement without consulting a qualified patent attorney and getting an opinion that their course of conduct was permitted.

CURRENT LITIGATION STATUS

Currently, DataTreasury is in litigation in Texas with JPMorgan, First Data Corporation and Bank One, among others. The case against JPMorgan was filed in Texarkana, and the case against Bank One was filed in Dallas. In the Texarkana case, a Markman ruling has been issued. In the Dallas case, a Markman hearing has been held, but a final ruling has yet to be issued. In general, the claims of the DataTreasury patents appear to be broad and the judge in Texarkana agreed on the claim construction of many terms put forth by DataTreasury. For example, the term "paper transaction" data was interpreted to be information concerning a transaction reflected on a paper document, which may be broad enough to include checks even though checks are not specifically mentioned.

Although having broad claim terms is useful for proving infringement, having broad claim terms can be detrimental to proving the validity of the patent. For example, the broader the claim terms are, the more likely that someone will infringe; however, it also is more likely that someone will have disclosed, previous to the filing of the patent, all the elements that are claimed in the patent. At this point, it is too soon to tell whether the plaintiffs will be able to prove infringement and that the patents are valid.

Electronic check-processing is quite an old idea, therefore there may be a great deal of prior art that may be used to invalidate the DataTreasury patents. As the lawsuits in various courts are further litigated, it would be interesting to see what, if any, such prior art is produced to invalidate the DataTreasury patents. On the other hand, juries may not be sympathetic to big corporations and banks, and their big pockets are easy targets for large verdicts.

Options Moving Forward

When confronted with a patent, there are many options to consider, and all these apply to the DataTreasury situation.

The first potential option to avoid infringing a patent is to design around the patented technology. For a system to infringe a patent, it must have each and every element listed in the claims or its equivalents. If an alternate system

can be designed that would allow one to get the same results as provided by a patent but would have at least one of the claim elements missing, such a design may be a viable alternative. The first problem with the option to design around solution is that it only protects against future infringement. If a bank had used an infringing system in the last six years, that is, since the issuance of the DataTreasury patents, it will still be liable for past infringement damages. The second problem is that the claims for the DataTreasury patents seem to be generally broad, and avoidance by a bank of performing one of the elements while still providing banking services, such as Check 21, may be a difficult task. For example, images of checks could be moved by truck instead of electronically, which would be a lot more expensive but would avoid the patent. It must be noted that although each and every claim has to be considered to ensure there is no infringement, generally, if a system does not infringe all the independent claims of the DataTreasury patents, it can be safely assumed that the system does not infringe any other claims of the patents as well.

Another potential option is to take a license of the patents from the patent holder. The license may be cheaper than designing around the patents or litigating the patents. Royalty rates for software patent licenses run anywhere from 2 percent to as high as 20 percent of the revenues attributable to the patented technology. However, there are a number of different methods of determining reasonable royalty and the revenue basis supporting such royalties.

Another way to approach the situation is to lay low and hope that DataTreasury is bogged down with other litigation, until the scope and validity of the patent becomes clearer. In addition, anyone following the lay low strategy should certainly consider getting an opinion from a qualified patent attorney so that willful damages and treble damages would not be as likely.

Litigating against DataTreasury is another option. Patent litigation is not cheap with cases easily costing millions of dollars for defense. Further, significant uncertainty results from litigation. However, litigation can also be a useful tool to negotiate lower licensing rates.

Banks can also gather a group of similarly minded defendants to defend against the claims of the patent holder. Great care has to be taken not to violate antitrust laws in joint defense groups. Specifically, each member of a joint defense group must be able to pursue its own course of action, such as taking a license. However, a large defense group is often more difficult for a plaintiff to bully and may be able to mount a better defense due to improved coordination and sharing of litigation costs.

An example of such an industry consortium is the Internet Media Protection Association (IMPA), which was formed by a number of companies

using the Internet to provide streaming, digital-media content. IMPA was formed in response to the assertion by the Acacia Technologies Group, of patent rights covering the streaming, digital-media transmission technology. However, it should be noted that the formation of IMPA has not stopped Acacia from going forward with infringement lawsuits against several online streaming, media service providers. As of November 2004, Acacia has entered into licensing agreements for its digital-media transmission technology with more than 100 different such service providers.

It should also be noted that other patent holders are also just starting to assert their patent rights related to data-processing systems used by banks. For example, LML Payment Corp., a wholly-owned subsidiary of LML Payment Systems, filed a suit in July 2004 against Telecheck Services Inc., Electronic Clearing House, Inc., and other electronic, check-processing companies for infringing U.S. Patent Nos. 5,484,988; 6,164,528 and 6,283,366.

CONCLUSION

In conclusion, the DataTreasury situation is a serious situation that requires all banks to be aware. Although it does not seem fair that banks may be required to pay a royalty to a patent holder in order to comply with a federal law, unless a defendant can invalidate or prove noninfringement of the DataTreasury patents, this is precisely the situation facing the check-clearing industry. Moreover, DataTreasury may be just one example of a patent holder trying to cash in on its patent portfolio related to a banking system. Given the large number of patent applications and patents addressing electronic data-processing and other aspects of banking operations, banks should closely scrutinize their operations with respect to potential patent infringements.