No Respite on the Horizon for CBM Patents

March 30, 2017 Andrew Cohn

PRACTICES Patent Office Trials, Patents, Intellectual Property

The Patent Trials and Appeals Board ("PTAB") and the Federal Circuit have continued their hostility to payment and financial technology patents, recently invalidating three patents and reversing a large damage award in *Smartflash LLC v. Apple Inc*, see *Smartflash LLC v. Apple Inc.*, Case No. 2016-1059 (Fed. Cir. March 1, 2017 (*Smartflash*).

In *Smartflash*, the Federal Circuit invalidated three patents held by Smartflash LLC ("Smartflash") that were asserted against Apple Inc. ("Apple") two years ago, resulting in a decision of $533 million in damages in favor of Smartflash. However, the overturning of the two-year old verdict from the Eastern District of Texas seemed likely after the PTAB found, in multiple CBM patent reviews, that the claims of Smartflash's asserted patents were not patent-eligible under the test provided by the U.S. Supreme Court in *Alice*. The Federal Circuit then followed with a holding that Smartflash's patents were directed to patent ineligible concepts, agreeing with the District Court that the claims were directed to the abstract idea of "conditioning and controlling access to data based on payments," but disagreeing that the claims included meaningful limitations to "transform the abstract idea into a patent-eligible invention", *Smartflash* at 14.

Smartflash originally brought suit against Apple (as well as Samsung Electronics Co. ("Samsung"), alleging that Apple's iTunes store infringed three patents: U.S. Patent No. 7,334,720 ("'720 patent"), U.S. Patent No. 8,118,221 ("'221 patent"), and U.S. Patent No. 8,336,772 ("'772 patent") (collectively, the "Smartflash patents"). That suit was stayed awaiting the decisions by the PTAB in the pending CBM patent reviews. Generally, the Smartflash patents were directed to "a portable data carrier for storing and paying for data to computer systems for providing access to data to be stored", *Smartflash* at 3-4. Addressing issues surrounding the piracy of digital content, the Smartflash patents describe a process to receive a payment to access requested data, validate the payment data, and then write and control access to the requested data using rules that are based on the provided payment. Independent claim 3 of the '720 patent is representative:

> 3. A data access terminal for retrieving data from a data supplier and providing the retrieved data to a data carrier, the terminal comprising:
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> ...
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> code to read payment data from the data carrier and to forward the payment data to a payment validation system;
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> code to receive payment validation data from the payment validation system;
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> code responsive to the payment validation data to retrieve data from the data supplier and to write the retrieved data into the data carrier; and
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> code responsive to the payment validation data to receive at least one access rule from the data supplier and to write the at least one access rule into the data carrier, the at least one access rule specifying at least one condition for accessing the retrieved data written into the

> data carrier, the at least one condition being dependent upon the amount of payment associated with the payment data forwarded to the payment validation system.

After the District Court adopted the magistrate judge's recommendations that the claims were not invalid under 35 U.S.C. §101, Smartflash was awarded $533 million in damages based on the determination that Apple infringed their patents, *Smartflash* at 6-7. Following the jury award, Apple (as well as Samsung) requested and received grant for review of the patents under the AIA's CBM patent review. In the first half of 2016, the PTAB invalidated the three patents at issue, while invalidating another four of Smartflash's patents in early November 2016. The Federal ultimately adopted a rationale similar to the PTAB in their decision.

CBM and Federal Circuit Review of the SmartFlash Patents

The legal test as to whether claims in a patent are eligible under 35 U.S.C. §101 is now relatively well established, although how those legal tests should be applied is an open question. After the *Mayo Collaborative Services v. Prometheus Laboratories, Inc.* and *Alice* decisions, a two-step test has been adopted to determine subject matter eligibility. Invoking the first step of that test in *Smartflash*, the Federal Circuit looked at whether the claims were directed to an "abstract idea," which included determining whether the claims are directed to "an improvement of computer functionality." In finding that the claims of the Smartflash patents focused not on "the specific asserted improvement in computer capabilities," but instead "on a process that qualifies as an 'abstract idea' for which the computers are invoked merely as a tool," the Federal Circuit stated that the "asserted claims here invoke computers merely as tools to execute fundamental economic practices", *Smartflash* at 9-10. The Federal Circuit reasoned that because the data was retrieved, gated, and output based on payment validation and access rules that were dependent on a payment, the claims were directed to an abstract idea of "conditioning and controlling access to data based on payment", *Id*.

The Federal Circuit differed with the District Court in the second step of the two-step test, which seeks to identify whether there is an "inventive concept" that is sufficient to "'transform the nature of the claim' into a patent-eligible application" by determining whether there is any element or combination of elements that amount to significantly more than the abstract idea, *Smartflash* at 10. In *Smartflash*, the Federal Circuit found that the inventive concepts within the claims were merely "routine computer activities", (Id at 11.) While the District Court believed that the claims "recite[d] specific ways of using distinct memories, data types, and use rules that amount to significantly more than the underlying abstract idea," the Federal Circuit stated that steps such as "transmitting, retrieving, and writing data," executed by generic computer hardware, are insufficient to provide patent eligibility, *Id*. at 12.

The Federal Circuit was not swayed by Smartflash's arguments, finding the claims at issue analogous to "the type of Internet activity that we found ineligible in [*Ultramercial, Inc. v. Hulu, LLC*]." In particular, while Smartflash attempted to analogize the subject matter of its claims to that found patent eligible in *DDR Holdings*, it appears the key difference between in the two outcomes was the Federal Circuit's inability to find a "pre-Internet analog" as it found in *DDR Holdings, LLC v. Hotels.com*. Similarly as with the abstract idea found in *Ultramercial* the Federal Circuit then analogized the abstract idea in the Smartflash patents to a real-world example, which doomed the claims.

The finding by the PTAB of invalidity of the Smartflash patents in the CBM patent reviews had a large influence in the outcome of this case. CBM patent reviews are meant to be implemented for those patents that include data processing or other limitations involved in "the practice,

administration, or management of a financial product or service." Unlike Inter Partes Review, CBM patent reviews may review the claims of the patents for subject matter eligibility under 35 U.S.C. §101. It is particularly noteworthy that there have only been four instituted CBM patent reviews (of 232 trials instituted) where no reviewed claims were invalidated, see slide 11. Furthermore, although the challenges to the instituted claims in a CBM patent review may vary, these four instituted CBM patent reviews having no instituted claims held unpatentable represents just one percent of the total CBM petitions received by the USPTO, two percent of the CBM patent review trials instituted, and three percent of all final written PTAB decisions

It seems as though the Federal Circuit has taken a similarly dim view of many patents that involve financial technology, or use financial processes to accomplish the means of the underlying invention. Although the payment technology described in Smartflash's patents provided ancillary, but required, support to the gating of data and information on a device, the Federal Circuit found that the recitations in the claims "execute[d] fundamental economic practices." As discussed above, the data in the Smartflash patents is made available dependent on rules that are particular to a payment. Smartflash focused their arguments on the innovation claimed in the patents and directed to the protection of data written to a device as well as the gating of access to all or portions of the data, rather than on whether the patents provided a new payment mechanism. However, the Federal Circuit found that the claims were directed to a "fundamental economic practice" by analogizing the claims to *Ultramercial* and noting that they are unwilling to find patent eligibility for claims directed to Internet activity that can easily be analogized to a real-world analog. Additionally, the District Court's statement that "[a]lthough in some claims the language is functional and somewhat generic, the claims contain significant limitations on the scope of the inventions" likely hurt Smartflash more than helped. The Federal Circuit was quick to find an abstract idea and analogize it to a fundamental economic practice based on these statements, which likely led to ultimate finding of invalidity. Thus, where claims in a patent can arguably be construed to broadly cover a "fundamental economic practice," patentees will likely face an uphill battle when arguing validity.

Considering the PTABs high rates of invalidation of claims in CBM patent reviews, it appears that the use of economic terms in patent claims may weigh against subject matter eligibility. In order to avoid potential CBM patent review or Federal Circuit invalidation, it is advisable to specifically recite the more technical aspects and processes occurring between two or more machines, and avoid high level, conceptual descriptions and claims. Although patent attorneys by nature tend to go for the broadest claims, this may not be the path to success moving forward. Instead, consideration should be given to removing economic terms in claims, or even eliminating/reducing their use throughout the specification. Instead, there may be value in specifically reciting more technical terminology for needed economic limitations (which can be defined in the specification), as well as identifying more than the generic computer components and architecture in the claims, which was relied on by Smartflash at the District Court and was insufficient to survive review at the Federal Circuit.

The *Smartflash* decision is not surprising on its own; recent history is rife with invalidations of patents directed to fundamental economic processes, and the 3690 art group (business methods – finance) has had a very low allowance rate since *Alice*, although more allowances of financial or payment related claims have been seen recently as the USPTO has continued to clarify guidance under *Alice*. However, the Smartflash case provides another example of a relatively large loss to a patentee due to the invalidation of their patent(s) for being directed to a "fundamental economic practice," even where there has been differing opinions over whether the claims include an "inventive concept" that amounted to sufficiently more than the abstract idea. This may signify that

post-grant, the first step of the Alice test will be the largest burden to those patentees inventing in spaces that may be considered financial.

Additionally, in Smartflash, Apple argued that Smartflash was a non-practicing entity ("NPE"), and was merely trying to profit off of Apple's innovation of the iTunes store. However, this argument raises questions over whether the new interpretation of Section 101 through the *Alice/Mayo* framework has gone too far in an attempt to eliminate "weak" patents. Moving forward, the incentives provided for inventors must be balanced against the need to eliminate improperly granted patents, or else innovative and useful technology may be stifled. This becomes especially true when protecting new financial technology as mobile and electronic payments become the prevailing processes by which we interact financially.