

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CRS ADVANCED TECHNOLOGIES, INC.
Petitioner

v.

FRONTLINE TECHNOLOGIES, INC.
Patent Owner

Case CBM2012-00005
Patent 6,675,151 C1

Before SALLY C. MEDLEY, THOMAS L. GIANNETTI, and
JENNIFER S. BISK, *Administrative Patent Judges*.

BISK, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
35 U.S.C. § 328(a) and 37 C.F.R. § 42.73

I. INTRODUCTION

A. Background

On September 21, 2012, CRS Advanced Technologies, Inc. (“CRS” or “Petitioner”) filed a Petition under 35 U.S.C. § 321, pursuant to Section 18 of the Leahy-Smith America Invents Act¹ (“AIA”). Paper 2 (“Pet.”). The Petition challenged claims 3, 6, 7, 16, 24, and 33 of U.S. Patent No. 6,675,151 C1 (“the ’151 patent”, Ex. 1001). On January 23, 2013, the Patent Trial and Appeal Board (the “Board”) instituted a transitional covered business method patent review for all challenged claims based solely upon Petitioner’s assertion that the claims are unpatentable under 35 U.S.C. § 101. Paper 17 (“Decision to Institute”).

After institution, Frontline Technologies, Inc. (“Frontline” or “Patent Owner”) filed a Patent Owner Response on March 18, 2013 (Paper 36; “PO Resp.”) and CRS filed a Reply to the Patent Owner Response on June 20, 2013 (Paper 48; “Reply”). A hearing was held on August 13, 2013, a transcript of which appears in the record. Record of Oral Hearing, Paper 62 (“Transcript”).

This decision is a final written decision under 35 U.S.C. § 328(a) as to the patentability of the challenged claims. Based on the record presented, we hold that all the challenged claims, claims 3, 6, 7, 16, 24, and 33 of the ’151 patent, are unpatentable under 35 U.S.C. § 101.²

¹ Pub. L. No. 112–29, 125 Stat. 284 (2011).

² This decision addresses issues and arguments raised during the trial. Issues and arguments raised prior to institution of trial, but not made during trial, are not addressed in this decision.

B. The '151 Patent

The '151 patent generally relates to “human resources management.” Ex. 1001, col. 1, ll. 14-15. In particular, the patent describes “automating the performance of substitute fulfillment to assign a replacement worker to substitute for a worker during a temporary absence, performing placement of floating workers, tracking absences and entitlements of workers, notifying interested parties regarding unexpected events and daily announcements, and bidding for temporary workers.” Ex. 1001, Abstract.

The '151 patent describes known methods for supporting substitute fulfillment in the education field that typically use “one dedicated computer, combined with specialized telephony equipment, including multiple phone lines, and other equipment,” and a database accessed through a dial-up connection. *Id.* at col. 3, ll. 36-42, ll. 51-56. The invention described in the '151 patent improves the prior art systems with a system implemented using a central database located on a server and accessed over a communication connection such as the Internet. *Id.* at Abstract, col. 7, ll. 25-34. One preferred embodiment uses the described invention to fulfill substitute teller requirements in a retail bank. *Id.* at col. 14, ll. 47-50.

An *ex parte* reexamination of claims 3-13 of the '151 patent was granted on October 24, 2007, based upon several prior art references. A reexamination certificate was issued on October, 20, 2009 (prior to the decision in the Supreme Court case of *Bilski v. Kappos*, 130 S. Ct. 3218 (2010) (“*Bilski II*”)), with original claims 1 and 2, amended claims 3, 6, and 9, and new claims 14-55. Ex. 1002.

The challenged claims encompass a method and system of substitute fulfillment “for a plurality of organizations.” Ex. 1002, claims 3 and 6. Of

the six challenged claims, claims 3 and 6 are independent, claim 7 depends from claim 6, and claims 16, 24, and 33 depend from claim 3. Both independent claims are reproduced below. Claim 3 is as follows:

3. A method for performing substitute fulfillment for a plurality of different organizations comprising:

receiving absentee information representing an absent worker that will be or is physically absent from an organization worksite via at least one communication link;

generating and posting by one or more computers a list of one or more positions of one or more absent workers that need to be filled by one or more substitute workers on a website and providing, for one or more of the positions, information indicating directly or indirectly an organization worksite location for the respective position;

receiving a response by comprising an acceptance, by the one or more computers, from a substitute worker selecting a posted position on the website via an Internet communication link; and

securing, in response to receiving the acceptance from the substitute worker, via the Internet communication link and the one or more computers, the posted position for the substitute worker who selected the posted position to fill in for the absent worker, the securing comprising halting, at the one or more computers, further processing to fulfill the posted position with any other substitute worker.

Claim 6 is as follows:

6. A substitute fulfillment system that secures one or more substitute workers for a plurality of organizations comprising:

a database comprising worker records, said worker records having information associated with workers for each of the organizations, and substitute records, said substitute records having information associated with at least one substitute worker, and;

one or more computers comprising a server connected to the database, the server configured for:

receiving absentee information representing an absent worker that will be or is physically absent from an organization worksite via at least one communication link;

generating and posting a list of one or more positions of one or more absent workers that need to be filled by one or more substitute workers on a website and providing, for one or more of the positions, information indicating directly or indirectly an organization worksite location for the respective position;

receiving a response by comprising an acceptance from a substitute worker selecting a posted position on the website via an Internet communication link; and

securing, in response to receiving the acceptance from the substitute worker, via the Internet communication link and the one or more computers, the posted position for the substitute worker who selected the posted position to fill in for the absent worker, the securing comprising halting, at the one or more computers, further processing to fulfill the posted position with any other substitute worker.

II. ANALYSIS

CRS contends that the challenged claims are unpatentable because they are abstract and not directed to statutory subject matter under 35 U.S.C. § 101. Pet. 20-31. Specifically, CRS states that the challenged claims are directed to the abstract idea of a method of hiring temporary workers. Pet. 5.

Frontline contends that that the challenged claims are not abstract, but instead are patent-eligible under § 101. Frontline maintains that each of the claims, considered as a whole, is directed to “a specific and novel way for computing and communication technology to perform substitute fulfillment,” with the claimed technology playing a central role in the process. PO Resp. 24.

CRS, as petitioner, bears the ultimate burden of proof that Frontline’s claims are unpatentable under § 101. We begin our analysis with claim

construction. *Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Canada*, 687 F.3d 1266, 1273-74 (Fed. Cir. 2012) (“[I]t will ordinarily be desirable—and often necessary—to resolve claim construction disputes prior to a § 101 analysis, for the determination of patent eligibility requires a full understanding of the basic character of the claimed subject matter.”).

A. Claim Construction

Consistent with the statute and the legislative history of the AIA, the Board will interpret claims using the broadest reasonable construction. *See* Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,766 (Aug. 14, 2012); 37 C.F.R. § 42.300(b). This is true even if a district court has construed the patent claims.³ *See* Changes to Implement *Inter Partes* Review Proceedings, Post-Grant Review Proceedings, and Transitional Program for Covered Business Method Patents, Final Rules, 77 Fed. Reg. 48,680, 48,697 (Aug. 14, 2012) (citing *In re NTP, Inc.*, 654 F.3d 1269, 1274 (Fed. Cir. 2011)); *see also* *SAP America, Inc. v. Versata Development Group, Inc.*, CBM2012-00001 Paper 70, 7-19 (discussing the history of broadest reasonable interpretation at the Office and its application to AIA proceedings). There is a “heavy presumption” that a claim term carries its ordinary and customary meaning. *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002).

In the Decision to Institute, the Board adopted CRS’s construction of several claim terms, concluding that they corresponded to the plain and ordinary meaning in the context of the specification. Decision to Institute 5-

³ In this case, there has been a construction of some of the terms of this patent in a district court case. *Frontline Placement Techs., Inc. v. CRS, Inc.*, No. 2:07-cv-2457 (E.D. Pa.) (Markman Order Feb. 8, 2011). Neither party asserts that the district court’s construction is relevant here.

6. The Board, however, did not agree with CRS's proposed construction of two terms: "organization worksite" and "posting." *Id.* The Board construed "organization worksite" as "any location associated with any work environment" and construed "posting" as "the act of visually displaying information, including in the form of a list." *Id.* at 6. For all other claim terms not specifically addressed in the Petition, the Board applied the plain and ordinary meaning that the term would have had to a person of ordinary skill in the art. *Id.*

Frontline argues that several of the constructions adopted in the Decision to Institute should be rejected as going beyond the ordinary meaning and incorporating extraneous language, and proposes alternative constructions for those terms. PO Resp. 12-13. CRS contends that Frontline's proposed constructions are incorrect. Reply 2-4. Both parties agreed at oral argument that claim construction does not affect the § 101 analysis in this case. See Transcript 14-15; 30. The following table summarizes the claim interpretations contested by Frontline:

Claim Term	Adopted by the Decision to Institute	Frontline's Proposed Construction
website	one or more related HTML-code webpages on the World Wide Web	a file or related group of files available on the World Wide Web
one or more computers	one or more general-purpose computational devices	one or more machines capable of executing instructions on data
organization worksite	any location associated with any work environment	a scene of work associated with an organization
receiving	being given information	to take possession or delivery of
generating	the act of creating a visual representation of	to bring into existence

	information, including in the form of a list or report	
posting	the act of visually displaying information	to publish, announce, or advertise
information	any type of data that may be stored or recorded	data
providing	the act of conveying or making information available	supplying for use

For each of the claim terms discussed above, we conclude that either definition would result in the same § 101 analysis. In other words, each of the challenged claims is unpatentable under § 101 whether or not we adopt CRS’s proposed claim constructions. Therefore, we conclude that each of the claim terms is given its ordinary and customary meaning and the issue of claim construction will not be addressed further.

B. The Challenged Claims are Unpatentable under 35 U.S.C. § 101

CRS challenges claims 3, 6, 7, 16, 24, and 33 as unpatentable under 35 U.S.C. § 101. Pet. 20. Frontline maintains that its claims are directed to patent-eligible processes and machines in which computing technology plays a significant part in performing the claimed operations. PO Resp. 19-42.

1. Patent Eligibility Under § 101

Section 101 provides that patentable subject matter extends to four broad categories, including four statutory classes: processes, machines, manufactures, or compositions of matter. 35 U.S.C. § 101. The Supreme Court recognizes three exceptions to these statutory classes: laws of nature, physical phenomena, and abstract ideas. *Bilski II*, 130 S. Ct. at 3220.

Although a fundamental principle cannot be patented, the Supreme Court has held that “an application of a law of nature or mathematical

formula to a known structure or process may well be deserving of patent protection,” so long as that application would not preempt substantially all uses of the fundamental principle. *Bilski II*, 130 S. Ct. at 3230 (quoting *Diamond v. Diehr*, 450 U.S. 175, 187 (1981) (internal quotations omitted)). In making this determination, the claim must be considered as a whole, as it is “inappropriate to dissect the claims into old and new elements and then to ignore the presence of the old elements in the analysis.” *Diehr*, 450 U.S. at 176. Nonetheless, a scientific principle cannot be made patentable by limiting its use “to a particular technological environment” or by adding “insignificant post-solution activity.” *Id.* at 191.

The test for whether a claim embraces something more than an abstract idea has been clarified in recent cases. The “machine-or-transformation test” has been used as one inquiry regarding the abstractness of process claims. *See In re Bilski*, 545 F.3d 943, 955-56 (Fed. Cir. 2008) (en banc) (“*Bilski I*”). Under this test, a claimed process is patent-eligible under § 101 if: (1) it is tied to a particular machine or apparatus; or (2) it transforms a particular article into a different state or thing. *Id.* (citing *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972)). Thus, the machine-or-transformation test reveals limitations on the claimed process that indicate that the patent covers an *application* of an abstract idea, instead of claiming the abstract idea itself. *See Ultramercial, Inc. v. Hulu, LLC*, 722 F.3d 1335, 1343 (Fed. Cir. 2013) (“[A] claim is not patent eligible only if, instead of claiming an *application* of an abstract idea, the claim is instead to the abstract idea itself.”).

Although the machine-or transformation test remains a “useful and important clue,” the Supreme Court held that it is not the sole test for

determining the patent-eligibility of process claims. *Bilski II*, 130 S. Ct. at 3227; *see also Prometheus Labs., Inc. v. Mayo Collaborative Servs.*, 628 F.3d 1347, 1349 (Fed. Cir. 2010). In the wake of *Bilski II*, the Federal Circuit has provided many guideposts, several of which are summarized below, for determining whether a particular claim encompasses a patent-eligible application of an abstract idea, or a patent-ineligible abstract idea itself.

Several cases have held claims were to patent-eligible subject matter where computing technology was integral to the claimed process. For example, in *SiRF*, the primary claim at issue involved a method by which a GPS receiver could “calculate its position without having to wait to receive time information from a satellite, thereby allowing the receiver to calculate its position more quickly even in weak-signal environments.” *SiRF Tech., Inc. v. Int’l Trade Comm’n*, 601 F.3d 1319, 1323 (Fed. Cir. 2010). The Federal Circuit held that “[a] GPS receiver is a machine and is integral to each of the claims at issue.” *Id.* at 1332. The integral nature of the GPS receiver was clear because the receiver “play[ed] a significant part in permitting the claimed method to be performed, rather than function[ing] solely as an obvious mechanism for permitting a solution to be achieved more quickly, i.e., through the utilization of a computer for performing calculations.” *Id.* at 1333. Moreover, the inability of the claimed method to be “performed *without*” a GPS receiver is indicative of the receiver’s indispensability to the patented process. *Id.* (emphasis added).

More recently, the Federal Circuit held claims concerning a method for distributing media products over the Internet to be patent-eligible. *Ultramercial*, 722 F.3d at 1352-53. The court noted that the claims required

steps to be performed through an “extensive computer interface” involving “eleven separate and specific steps with many limitations and sub-steps in each category.” *Id.* The court reasoned that “it is clear that several steps plainly require that the method be performed through computers, on the internet, and in a cyber-market environment.” *Id.* at 1350.

Other cases have found claims to be directed to patent-ineligible subject matter where computing technology did not limit the scope of the claims meaningfully. For example, in *Dealertrack*, the Federal Circuit found patent-ineligible claims to “[a] computer aided method of managing a credit application.” *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1331-34 (Fed. Cir. 2012). The court observed that the “claims are silent as to how a computer aids the method, the extent to which a computer aids the method, or the significance of a computer to the performance of the method.” *Id.* at 1333. The mere addition of “a ‘computer aided’ limitation to a claim covering an abstract concept, without more, is insufficient to render the claim patent eligible.” *Id.* (citing *SiRF*, 601 F.3d at 1333).

Similarly, in *Bancorp*, the patent at issue described “systems and methods for administering and tracking the value of life insurance policies in separate accounts.” *Bancorp*, 687 F.3d at 1269. The court observed that the “computer required by some of Bancorp’s claims is employed only for its most basic function, the performance of repetitive calculations, and as such does not impose meaningful limits on the scope of those claims.” *Id.* at 1278 (citation omitted). Moreover, the court noted that the computer alluded to in the claims was not part of a “technological advance” of any sort and that “[u]sing a computer to accelerate an ineligible mental process does not make that process patent-eligible.” *Id.* at 1279.

Finally, in *Accenture*, the Federal Circuit found patent ineligible system claims for generating insurance file notes comprising steps, such as “transmitting information” and “storing the updated information,” and components, such as “transaction database for storing information” and “event processor.” *Accenture Global Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1339-40 (Fed. Cir. 2013). The court relied on the *CLS Bank* decision for the holding that “system claims that closely track method claims and are grounded by the same meaningful limitations will generally rise and fall together.” *Id.* at 1341 (citing plurality opinion in *CLS Bank, Int’l. v. Alice Corp.* 717 F.3d 1269, 1274 n.1 (Fed. Cir. 2013) (en banc)). The court concluded that “because the system claims offer no meaningful limitations beyond the method claims that have been held patent-ineligible and because, when considered on their own, under *Mayo* and our plurality opinion in *CLS Bank*, they fail to pass muster.” *Id.*

2. Claims 3, 16, 24, and 33

Claims 3, 16, 24, and 33 recite processes. CRS contends that these challenged process claims contain patent-ineligible abstract ideas and fail the machine-or-transformation test. Pet. 20-30. Specifically, CRS contends that the claims fail the “machine” prong because they recite only generic devices—a computer, a communication link, and a website—not integral to the claimed invention. *Id.* at 25-26. Moreover, CRS contends that the claims do not transform physical objects to another state or thing. *Id.* at 24. According to CRS, the process claims encompass the preexisting process of substitute fulfillment simply made more efficient with the use of generic computer hardware and software, and, therefore, constitute unpatentable abstract ideas under § 101. *Id.*

In response, Frontline contends that the claims recite a specific and novel way for computing and communication technology to perform substitute fulfillment in which the technology is integral. PO Resp. 23-30. According to Frontline, the claims do not merely recite that the “one or more computers,” “website,” and “communications links” must be used, nor do they merely use the computer to carry out the steps more quickly, but instead the claimed operations only work when carried out using the recited technology. Pet. 26. Frontline adds that efficiency is only one of the many benefits achieved by the claimed invention. *Id.* at 27-28.

We conclude that claims 3, 16, 24, and 33 are directed to abstract, and, therefore, unpatentable, methods for substitute fulfillment. The claims are directed to concepts for taking the preexisting process of substitute fulfillment and implementing it in a networked computing environment.

We do not agree with Frontline’s argument that the computer technology is integral to the claimed subject matter. As we explained in the Decision to Institute, the “one or more computers,” “Internet communication link,” and “website” recited in claim 3 are not analogous to the GPS receiver in *SiRF*. Decision to Institute 10-11. Frontline has not directed us to anything in the record at trial to cause us to change our position. Frontline asserts that because the claimed limitations “generating and posting by *one or more computers* a list of one or more positions of one or more absent workers that need to be filed by one or more substitute workers on a *website*” and “receiving via *at least one communication link* absentee information” are required for the claimed process to work as intended, they, like the GPS receiver in *SiRF*, are integral to the claimed subject matter. PO Resp. 25-26. We, however, disagree. We find these additions of generic

computer technology to be more akin to the addition of “computer-aided” to the claims of *Dealertrack*, and the additions of “transaction database” and “transmitting information” to the claims of *Accenture*. *Accenture*, 728 F.3d at 1339; *Dealertrack*, 674 F. 3d at 1333.

Like the terms “computer-aided” in *Dealertrack*, and “transaction database” in *Accenture*, the terms “one or more computers,” “website,” and “communication link” at issue in this case do not impose meaningful limits on the challenged claims’ scope. This particular technology is employed only for the purposes of creating more efficient communication and data storage—basic functions of those components. Ex. 1001, col. 4, ll. 46-58 (stating that the advantages of the present invention are “to provide a reliable, efficient system . . . that has low overhead and requires little . . . oversight. . . includ[ing] an interface to the Internet . . . [and] a central database”); *see also* col. 3, ll. 36-64 (describing the prior art automated systems). In other words, the claims here, even with the recitation of computing technology, are not part of a “technological advance” of any sort. *See Bancorp*, 687 F.3d at 1279.

Frontline argues that the claims at issue in *Bancorp* are different than the claims at issue here because none of the recited operations of the ’151 patent claims are mathematical calculations, but instead recite a particular series of interactive operations. PO Resp. 29-30. According to Frontline, as opposed to simply accelerating the mental process of performing mathematical calculations, here the computing structure plays a significant part in performing the interactive steps and thereby imposes meaningful limits on the claim scope. PO Resp. 30 (citing Ex. 2003 ¶¶ 13-18).

We agree that the claims of the '151 patent are not exactly the same as those at issue in *Bancorp*. However, we determine that the '151 patent claims are closer to those at issue in *Bancorp*, *Dealertrack*, and *Accenture* than to those at issue in *SiRF* and *Ultramercial*. Specifically, similar to the claims in *Bancorp*, *Dealertrack*, and *Accenture*, the challenged claims of the '151 patent all recite technology components that are simply examples of well-known, generic computing technology being asked to do their generic function without any specified constraints, and without being a part of any technological advance used to implement an abstract idea unrelated to that technology. For example, the technology recited in the '151 patent claims—“website,” “one or more computers,” and “Internet communication link” — is similar to the technology recited in the patent-ineligible claims of *Dealertrack*— “computer aided,” “remote application entry and display device,” and “remote funding source terminal devices.” *Dealertrack*, 674 F.3d at 1331.

On the other hand, the claims at issue in *SiRF* and *Ultramercial* both involve specific technology that is integral to the actual method being implemented. For example, in *SiRF*, the technology in the claim is a GPS receiver used to implement “[a] method for calculating an absolute position of a GPS receiver.” *SiRF*, 601 F.3d at 1331. And in *Ultramercial*, the claim implements “a method for monetizing and distributing copyrighted products over the Internet” using an “Internet website” with an “extensive computer interface.” *Ultramercial*, 722 F.3d at 1352.

We are persuaded that, like the claims in *Bancorp*, *Dealertrack*, and *Accenture*, the challenged claims of the '151 patent involve implementing an abstract idea—a method of substitute fulfillment—using well-known

technology. Thus, we conclude that claims 3, 16, 24, and 33 do not embrace an application of an abstract idea, but an abstract idea itself.

3. *Claims 6 and 7*

Independent claim 6 and claim 7, depending from claim 6, recite a “substitute fulfillment system,” tracking the language of claim 3 with the addition of a “database” and a “system” for performing the method claimed in claim 3. These additions do not necessarily change the patent-eligibility analysis. *See Accenture*, 728 F.3d at 1341; *Bancorp*, 687 F.3d at 1276-77 (“[W]e look not just to the type of claim but also ‘to the underlying invention for patent-eligibility purposes.’” (quoting *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1374 (Fed. Cir. 2011))). “As the Supreme Court has explained, the form of the claims should not trump basic issues of patentability.” *Bancorp*, 687 F.3d at 1277 (citing *Parker v. Flook*, 437 U.S. 584, 593 (1978)). In this case, we are persuaded that claim 6 is simply an alternative format for claiming the same underlying patent-ineligible subject matter of claim 3.

Frontline argues that claims 6 and 7 include a meaningful limitation over and above those included in the method claims, in the form of “a particular database with a particular structure.” PO Resp. 22-23.

Specifically, Frontline refers to the following limitation:

a database comprising worker records, said worker records having information associated with workers for each of the organizations, and substitute records, said substitute records having information associated with at least one substitute worker.

PO Resp. 34-35.

We do not agree that this language in claims 6 and 7 meaningfully limits the claims so as to distinguish them from the patent-ineligible method claims. The database is not enough to limit the claims meaningfully. Instead, the database is another piece of computing technology similar to those already required by claim 3 and addressed by the Federal Circuit in *Bancorp*, *Dealertrack*, and *Accenture*.

III. CONCLUSION

This is a final written decision of the Board under 35 U.S.C. § 328(a). We hold Frontline's claims 3, 6, 7, 16, 24, and 33 to be unpatentable under 35 U.S.C. § 101. Specifically, the claims recite unpatentable abstract ideas, and the claims do not provide enough significant meaningful limitations to transform these abstract ideas into patent-eligible applications of these abstractions.

IV. ORDER

Accordingly, it is hereby:

ORDERED that claims 3, 6, 7, 16, 24, and 33 are CANCELLED as unpatentable.

Case CBM2012-00005

Patent 6,675,151 C1

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