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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JACOB PECHENIK and GREGORY CAMPBELL

Appeal 2016-007647
Application 11/186,651¹
Technology Center 3600

Before ANTON W. FETTING, SHEILA F. McSHANE, and
AMEE A. SHAH, *Administrative Patent Judges*.

McSHANE, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants seek our review under 35 U.S.C. § 134(a) from the Examiner's non-final decision to reject claims 1–25, 27, 28, 30–45, and 88–98. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ According to Appellants, the real party in interest is YellowJacket, Inc. Appeal Brief filed May 20, 2016, hereafter “App. Br.,” 1.

BACKGROUND

The invention is related to trading and analyzing derivative products and, more specifically, is related to “software that aggregates and integrates derivative products trading information from various broker networks.” Specification, hereafter “Spec.,” ¶ 1.

Claims 1, 7, 25, 28, 40, 88, 97, and 98 are the independent claims on appeal. Representative claim 1 is reproduced from pages 28 and 29 of the Claims Appendix of the Appeal Brief (Claims App.) as follows:

1. A virtual over-the-counter exchange system that allows brokers to negotiate and complete exchanges of financial products between traders within a plurality of financial product markets, comprising:

a computer server comprising a memory storing computer code and a processor executing said computer code to generate a data interface having a data converter and a data distributor, the data converter converting financial product information relating to prospective or completed financial transactions into a standard financial product data format, said data interface receiving information identifying at least one designated trader from a group of traders for receipt of a designated and customized portion of broker-created financial product information specific to each designated trader, wherein the prospective or the completed financial transactions involve two or more traders;

said memory further storing:

a virtual broker database that stores the financial product information in the standard financial product data format; and

one or more virtual trader databases, each corresponding to a respective one of the at least one designated trader and each storing, in the standard financial product data format, the designated and customized portion of the broker-created financial product information,

said data distributor, responsive to the received information identifying the at least one designated trader, automatically converting each designated and customized portion of the broker-created financial product information stored in each of the one or more virtual trader databases into one of a plurality of trader communication formats that is proprietary to a corresponding one of the at least one designated trader and automatically distributing each converted designated and customized portion of the broker-created financial product information to its corresponding designated trader without receiving a request from any of said at least one designated trader in any of said corresponding plurality of trader communication formats, wherein each converted designated and customized portion of the broker-created financial product information differs from the financial product information; and

one or more trader-client computers in communication with said computer server, said one or more trader-client computers each executing software that generates a virtual trader interface, each virtual trader interface corresponding to one of the at least one designated trader, the data distributor automatically causing the corresponding virtual trader interface to modify a graphical display screen of the virtual trader interface to display to said one of the at least one designated trader the respective converted designated and customized portion of the broker-created financial product information received from said data distributor without any request.

The Examiner rejects claims 1–25, 27, 28, 30–45, and 88–98 under 35 U.S.C. § 101 as reciting a judicial exception without significantly more. Non-Final Action mailed January 7, 2016, hereafter “Non-Final Act.,” 6–8; *see also* Examiner’s Answer mailed July 22, 2016, hereinafter “Ans.,” 2–9.

DISCUSSION

Appellants generally argue the § 101 rejection using independent claim 1 as representative, and also make arguments that refer to some limitations of claim 88. *See* App. Br. 16–26. We will address the rejection in the same manner.

The Examiner determines that the claims, and more specifically, representative claim 1, are directed to non-statutory subject matter because they are directed to the abstract idea of the provision of brokerage services in the financial products industries, which is a fundamental business practice. Non-Final Act. 6–7. Additional claim elements are determined to be directed to “pushing customized product information to traders, and automatic messaging/causing a bid and other indicia to appear on the broker’s whiteboard, etc.” which “as acknowledged in the specification, they merely automate a previous process performed over the phone, etc.” *Id.* at 7. The Examiner further determines that “[t]he claims do not effect an improvement to another technology or technical field; [] do not amount to an improvement to the functioning of a computer itself; and [] do not move beyond a general link of the use of an abstract idea to a particular, albeit well-understood, routine and conventional technological environment.” *Id.* at 7–8.

Appellants argue that the rejection of claim 1 is flawed because the claims are not directed to an abstract idea. App. Br. 16. Appellants, referencing *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016) (“*Enfish*”), argue that the Specification discusses problems with prior art computers, such as “their inability to send timely data and convert data into acceptable computer formats.” *Id.* (citing Spec. ¶¶ 4–5). Appellants

contend that the claims provide “new specialized, automated, individualized communications protocols.” *Id.* at 19 (citing Spec. ¶ 11). Appellants further allege that the claims are patent-eligible because they improve computer efficiency over existing systems. Reply Brief filed August 8, 2016, hereafter “Reply Br.,” 2 (citing Spec. ¶ 4). Appellants aver that the claims overcome computer formatting deficiencies by “translat[ing] product data and information input *from various sources* having *varying computer protocols* into one common format and protocol.” *Id.* (citing Spec. ¶ 13). Appellants also argue that claim 1 includes “the computer improvement of *automatically converting* data into at least one communication format and then automatically distributing the data without needing to receive a request.” *Id.* at 3. Appellants assert similarities to *BASCOM Global Internet Servs. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016) (“*BASCOM*”), arguing that “even if the question of whether the claims are directed to an abstract idea is a ‘close call’ like *BASCOM*,’ the claims are directed to a technical solution . . . , which overcomes a technical problem.” *Id.* at 4. Appellants allege that the claims are patent eligible because “they describe instructing and controlling another component to perform certain functions when triggered,” arguing that they are similar to the claims in *Diamond v. Diehr*, 450 U.S. 175 (1981) (“*Diehr*”). App. Br. 20.

Appellants additionally assert that the claimed automatic distribution of customized financial product data without any trader request is similar to a patent-eligible stock alert claim², which is to a computer’s automatic

² Appellants refer to “Example 21” of the July 2015 Update of the 2014 Interim Guidance on Patent Subject Matter Eligibility issued by the USPTO on December 16, 2014 found at <https://www.uspto.gov/sites/default/files/>

control of a specific component on another computer, and which represents significantly more than an abstract idea. App. Br. 21. Appellants also argue that the claimed custom format for display is also similar to the patent-eligible example and this also supports patent eligibility. *Id.* at 22.

Appellants refer to claim 88 which includes a broker interface (of a broker computer) and a trader interface (of a trader computer), which display data entry fields, market screens, a market display area, contact screens, instant messaging screens, and market filter screens, and analogizes the claim to a patent-eligible graphical interface patent.³

Appellants further aver that the allowance of these claims will not preempt others from selling products over an exchange in view of the specific claim elements that are directed to specialized components and functions. App. Br. 23–24. Appellants allege that the claimed steps are unique and unconventional. *Id.* at 16. Appellants allege that the claims are not directed to conventional computing devices because they include “specialized components perform[ing] non-conventional functions” that “**improve the functioning of the computer / system itself**” that is identified as:

documents/ieg-july-2015-app1.pdf (hereinafter “July 2015 Update”). “Example 21” are modeled after the technology in *Google Inc. v. Simpleair, Inc.*, Covered Business Method Case No. CBM 2014-00170 (January 22, 2015), but the claims are hypothetical. July 2015 Update 1.

³ Appellants refer to “Example 23” of the July 2015 Update of the 2014 Interim Guidance on Patent Subject Matter Eligibility issued by the USPTO on December 16, 2014. Only hypothetical claims are used in “Example 23” and the eligible claims included limitations directed to automatic scaling and relocating textual information in overlapping windows in a computer interface that improved the ability of the computer to display information. See July 2015 Update 8–9, 11–12.

converting financial product information into a standard financial product data format, designating and customizing a portion of the broker-created financial product information specific to each trader, and distributing the designated and customized portion of the broker-created financial product information to a designated trader in a proprietary trader communication format for display in a virtual trader interface etc.[,]

as summarized above. *Id.* at 25–26.

To provide context, 35 U.S.C. § 101 provides that a new and useful “process, machine, manufacture, or composition of matter” is eligible for patent protection. The Supreme Court has made clear that the test for patent eligibility under Section 101 is not amenable to bright-line categorical rules. *See Bilski v. Kappos*, 561 U.S. 593, 609 (2010). There are, however, three limited, judicially created exceptions to the broad categories of patent-eligible subject matter in § 101: “[L]aws of nature, natural phenomena, and abstract ideas.” *See Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 70 (2012).

In *Alice Corporation Pty. Ltd. v. CLS Bank International*, 134 S. Ct. 2347 (2014), the Supreme Court reiterated the framework set forth previously in *Mayo*, “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” *Alice*, 134 S. Ct. at 2355 (citation omitted). Under *Alice*, the first step of such analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts.” *Id.* (citation omitted). If it is determined that the claims are directed to a patent-ineligible concept, the second step in the analysis is to consider the elements of the claims “individually and ‘as an ordered combination’” to “determine whether the additional elements ‘transform the nature of the claim’ into a

patent-eligible application.” *Id.* (quoting *Mayo*, 566 U.S. at 79, 78). In other words, the second step is to “search for an ‘inventive concept’—*i.e.*, an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.’” *Id.* (alteration in original) (quoting *Mayo*, 566 U.S. at 72–73).

After considering Appellants’ arguments and the evidence presented in this Appeal for the § 101 rejections, we are not persuaded that Appellants identify reversible error. We add the following for emphasis.

Appellants do not present a dispute as to whether the elements of claim 1 are related to providing brokerage services in the financial products industries. The issue disputed is whether the claim represents an abstract idea. We agree with the Examiner that the claims are to a fundamental business practice, which is an abstract idea. The invention and the claims relate to the type of processes that the Federal Court has repeatedly held is an abstract idea that is not patent-eligible. Claims are not patent eligible when they merely call for information collection, storage, analysis, and display functions on computer components and display devices. *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353–54 (Fed. Cir. 2016). Similar to the claims at issue in *Electric Power*, the claimed invention here stores, distributes, and presents information of a specified content, but does not use any particular inventive technology for performing those functions. That the information pertains to data associated with derivative financial products does not make the storage, distribution, and presentation non-abstract. *See SAP Am., Inc. v. Investpic, LLC*, 898 F.3d 1161, 1163, 1167–68 (Fed. Cir. 2018) (“*SAP*”) (“No matter how much of an advance in the

finance field the claims recite, the advance lies entirely in the realm of abstract ideas, with no plausibly alleged innovation in the non-abstract application realm”). Further, Appellants’ arguments about the alleged similarities to *Enfish* and *BASCOM* fail to persuade us of Examiner error because the claims in those cases were deemed to be patent eligible because they were directed to improvements in the way computers and networks carry out their basic functions. *See Enfish*, 822 F.3d at 1335–36; *BASCOM*, 827 F.3d at 1348–49; *see also Electric Power*, 830 F.3d at 1354.

Issues discussed in *Enfish* and *BASCOM* are similar to those which differentiate Examples 21 and 23 of the July 2015 Update from the claims here. In Example 21, implementation of a computer’s automatic control of a specific component (activating an application) on another computer is claimed, and Example 23’s claims include a specific application of the mathematical algorithm that improves the functioning of the basic display function of the computer itself. *See* July 2015 Update 4, 9, 12. More specifically, Appellants allege that similar to Example 21, the claims here provide automatic control of a virtual system and automatically send information, with automatic control of the virtual trader interface and automatic distribution of the customized financial product data, and this distribution is performed with no request from the trader. In Example 21, however, the claim included a specific technological feature—one computer activating an application on another computer. Here, the Specification does not disclose that any specific technological improvements are sought or used. Rather, as the Examiner found, the goal of the claimed computer-based system is to improve some of the disadvantages of telephonic and instant messaging communications of financial product data, and under the

claims, the information is stored, formatted, and “automatically distribut[ed]” to traders by the virtual trader interface, which Appellants allege is automatic control of that interface. *See* Spec. ¶4. We do not discern that automatically sending financial product data to a trader computer and displaying the data represents a significant difference from a broker initiating a phone call to a trader and verbally transmitting the data, short of the implementation on a computer.⁴ The focus of the claims is not to improved computer operations or functions, but rather the claims are directed to a fundamental business practice, namely, provision of brokerage services information—an abstract idea. *See also In re Chorna*, 656 F. App’x 1016, 1022 (Fed. Cir. 2016) (unpublished) (holding ineligible claims directed to financial instruments valued using an allocation formula, traded, and cleared as directed to an abstract idea). Moreover, although a claim would avoid being abstract by the addition of specific meaningful limitations directed to physical transformations as in *Diehr*, this is not the case here—claim 1 is directed only to storing, distributing, and presenting information relating to brokerage services. Further, although it may be true that there are other methods of selling products over an exchange, that issue is not dispositive as to whether the claim is patent eligible. *See Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015)

⁴ We also fail to find that alleged enhanced efficiencies due to computer implementation would render the claims patent eligible. *See CLS Bank Int’l v. Alice Corp. Pty. Ltd.*, 717 F.3d 1269, 1286 (Fed. Cir. 2013) (en banc) *aff’d*, 134 S. Ct. 2347 (2014) (“[S]imply appending generic computer functionality to lend speed or efficiency to the performance of an otherwise abstract concept does not meaningfully limit claim scope for purposes of patent eligibility.” (citations omitted)).

(“While preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility.”).

Although Appellants repeatedly argue that the claims employ specialized components that perform non-conventional functions, we do not discern that the evidence of record reflects that the argued improvements represent patentable technological improvements to computer systems or technology. The Specification discloses the use of a conventional computers with central processing units, memories, and network interfaces, and databases (Spec. ¶¶ 78–80), and we find no suggestion that a specialized computer system is used. The Federal Circuit’s analysis in *SAP* is instructive on the issue of the use of conventional components:

Some of the claims require various databases and processors, which are in the physical realm of things. But it is clear, from the claims themselves and the specification, that these limitations require no improved computer resources [patent owner] claims to have invented, just already available computers, with their already available basic functions, to use as tools in executing the claimed process.

SAP, 898 F.3d at 1169–70.

The Specification discloses that some traders use proprietary or preferred formats for product data and graphical interfaces (*see* Spec. ¶¶ 81–84) and there is reformatting from standard financial product data format, but no specific technical improvements are disclosed for modifying formats or display, short of the use of an application program interfaces (*see id.* ¶ 82), and there is no indication that the disclosed reformatting methods or graphical displays used are inventive. Reformatting data has not been found to be patent eligible. *See Novo Transforma Technologies, LLC v. Sprint Spectrum L.P.*, 2015 WL 5156526, at *3 (D. Del. Sept. 2, 2015), *aff’d*, 669

Fed. App'x 555 (Fed. Cir. 2016) (where claims directed to a computer system that received a payload (data) in one format, and translated and delivered the data into a different format, were found to be an abstract idea); *see also RecogniCorp, LLC v. Nintendo Co., Ltd.*, 855 F.3d 1322, 1326 (Fed. Cir. 2017) (finding data encoding and decoding to be an abstract idea).

There is a difference between improving computer functionality and using existing computers to perform tasks, and here, there is no underlying change as to how the technology operates under claim 1. Rather, the claim only implements the abstract idea, and it is “clear that the basic character of a process claim drawn to an abstract idea is not changed by claiming only its performance by computers, or by claiming the process embodied in program instructions on a computer readable medium.” *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1375 (Fed. Cir. 2011).

Therefore, we sustain the rejection of claims 1–25, 27, 28, 30–45, and 88–98 under § 101.

SUMMARY

The rejection of claims 1–25, 27, 28, 30–45, and 88–98 under 35 U.S.C. § 101 is sustained.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED