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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte STEPHEN DICKSON and PELHAM TEMPLE

Appeal 2015-005044[1]
Application 13/285,427[2]
Technology Center 3600

Before MURRIEL E. CRAWFORD, NINA L. MEDLOCK, and BRADLEY B. BAYAT, *Administrative Patent Judges*.

MEDLOCK, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1–36. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

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[1] Our decision references Appellants' Appeal Brief ("App. Br.," filed October 10, 2014) and Reply Brief ("Reply Br.," filed April 6, 2015), and the Examiner's Answer ("Ans.," mailed February 6, 2015) and Final Office Action ("Final Act.," mailed September 12, 2013).

[2] Appellants identify CFPH, L.P. as the real party in interest. App. Br. 3.

CLAIMED INVENTION

Appellants' claimed invention "relate[s] to interest rates and/or spreads" (Spec. 1, l. 14).

Claims 1 and 19 are the independent claims on appeal. Claim 1, reproduced below, is illustrative of the claimed subject matter:

> 1. An apparatus comprising:
>
> a computing device; and
>
> a non-transitory medium having stored thereon a plurality of instructions that when executed by the computing device cause the computing device to:
>
> receive a plurality of interest rate expectations for respective times during a time period;
>
> based on the plurality of interest rate expectations, calculate an expected first spread between a first financial instrument based on an interest rate paid on unsecured interbank deposits for the time period and a second financial instrument based on expectations of overnight interest rates for the time period;
>
> provide the first spread through a user interface;
>
> receive a first rate for the first financial instrument that is based on the interest rate paid on unsecured interbank deposits for the time period;
>
> receive a second rate for the second financial instrument that is based on expectations of overnight rates for the time period;
>
> calculate a second spread between the first rate and the second rate;
>
> calculate a spread of spreads between the first spread and the second spread;
>
> determine a correlation between a change in the first rate and the second spread;
>
> receive an indication of a change in the first rate;
>
> determine a change in the second spread based on the change in the first rate and the correlation;
>
> in response to the indication of the change, adjust the first spread to maintain a value of the spread of spreads;

in response to adjusting the first spread, adjust the plurality of interest rate expectations to correspond to the new first spread; and

provide the new first spread through the user interface.

REJECTIONS

Claims 1–36 are rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter.

Claims 1–36 are rejected under 35 U.S.C. § 103(a) as unpatentable over Tuckman (US 2008/0281762 A1, pub. Nov. 13, 2008) and Connors (US 2008/0249956 A1, pub. Oct. 9, 2008).

ANALYSIS

Non-Statutory Subject Matter

Appellants argue claims 1–36 as a group (Reply Br. 5–6). We select independent claim 1 as representative. The remaining claims stand or fall with claim 1. *See* 37 C.F.R. §41.37(c)(1)(iv).

Under 35 U.S.C. § 101, an invention is patent-eligible if it claims a "new and useful process, machine, manufacture, or composition of matter." 35 U.S.C. § 101. The Supreme Court, however, has long interpreted § 101 to include an implicit exception: "[l]aws of nature, natural phenomena, and abstract ideas" are not patentable. *See, e.g., Alice Corp. Pty Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2354 (2014).

The Supreme Court, in *Alice*, reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1300 (2012), "for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts." *Alice Corp.*, 134 S. Ct.

at 2355. The first step in that analysis is to "determine whether the claims at issue are directed to one of those patent-ineligible concepts," *id.*, e.g., to an abstract idea. If the claims are not directed to patent-ineligible concept, the inquiry ends. Otherwise, the inquiry proceeds to the second step where the elements of the claims are considered "individually and 'as an ordered combination"' to determine whether there are additional elements that "'transform the nature of the claim' into a patent-eligible application." *Alice Corp.*, 134 S. Ct. at 2355 (quoting *Mayo*, 132 S. Ct. at 1297).

The Court acknowledged in *Mayo*, that "all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas." *Mayo*, 132 S. Ct. at 1293. We, therefore, look to whether the claims focus on a specific means or method that improves the relevant technology or are instead directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery.

Here, in rejecting the claims under 35 U.S.C. § 101, the Examiner finds that claims 1–36 are directed to determining correlations between interest rates, i.e., to a fundamental economic practice, and, therefore, to an abstract idea; that the additional elements or combination of elements in the claims other than the abstract idea per se amount to no more than: "(i) mere instructions to implement the idea on a computer or electronic device, and/or (ii) recitation of generic computer structure that serves to perform generic computer functions that are well-understood, routine, and conventional activities previously known to the pertinent industry"; and that viewed as a whole, these additional claim elements do not provide meaningful limitations to transform the abstract idea into a patent eligible application of the abstract idea such that the claims amount to significantly more than the abstract idea itself (Ans. 16–17).

Appellants argue that the Examiner has failed to make a prima facie case of unpatentability because the Examiner has failed to establish that "'determining correlations between interest rates' is actually abstract" and also failed to provide evidence that this is a fundamental economic practice (Reply Br. 5). But there is no requirement that the Examiner provide any such evidence in order to make a prima facie case. Instead, the Federal Circuit has held that the USPTO carries its procedural burden of establishing a prima facie case when its rejection satisfies the requirements of 35 U.S.C. § 132 by notifying the applicant of the reasons for rejection, "together with such information and references as may be useful in judging of the propriety of continuing the prosecution of [the] application." *See In re Jung*, 637 F.3d 1356, 1362 (Fed. Cir. 2011).

In rejecting claims 1–36 under § 101, the Examiner notified Appellants of the reasons for the rejection "together with such information and references as may be useful in judging of the propriety of continuing the prosecution of [the] application." 35 U.S.C. § 132. And, in doing so, we find that the Examiner set forth a prima facie case of unpatentability.

Appellants next argue that claim 1 is not directed to "determining correlations between interest rates," but rather has "numerous limitations and not one of them together or in combination with others amounts to 'determining correlations between interest rates'" (Reply Br. 5). But Appellants do not explain why these numerous limitations are not part and parcel of a method for "determining correlations between interest rates." Indeed, it is telling in this regard that the Abstract explicitly states that various embodiments of the claimed invention "may relate to determining interest rates for one or more periods, determining interest rates for one or more financial instruments, [and] determining correlations."

Appellants next argue that the claim limitations together and/or separately add significantly more to the abstract idea because the limitations recite "an apparatus with novel and non-obvious functionality" (*id.* at 6). Yet to the extent Appellants maintain that the limitations of claim 1 necessarily amount to "significantly more" than an abstract idea because the claimed apparatus is allegedly patentable over the prior art, Appellants misapprehend the controlling precedent. Although the second step in the *Alice/Mayo* framework is termed a search for an "inventive concept," the analysis is not an evaluation of novelty or non-obviousness, but rather, a search for "'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.'" *Alice*, 134 S. Ct. at 2355. A novel and nonobvious claim directed to a purely abstract idea is, nonetheless, patent-ineligible. *See Mayo*, 132 S. Ct. at 1304

Appellants further argue that claim 1 "solve[s] a problem rooted in computer technology by improving the functionality and use of interest rate and spread models and data in an electronic trading environment" and that the present case is similar *to DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014) (Reply Br. 6). But we find no parallel between claim 1 and the claims at issue in *DDR Holdings*.

In *DDR Holdings*, the Federal Circuit determined that, although the patent claims at issue involved conventional computers and the Internet, the claims addressed the problem of retaining website visitors who, if adhering to the routine, conventional functioning of Internet hyperlink protocol, would be transported instantly away from a host's website after "clicking" on an advertisement and activating a hyperlink. *DDR Holdings*, 773 F.3d at 1257. The Federal Circuit, thus, held that the claims were directed to statutory subject matter because they claim a solution "necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks." *Id.*

No such technological advance is evident in the present invention. Unlike the situation in *DDR Holdings*, Appellants do not identify any problem particular to computer networks and/or the Internet that claim 1 allegedly overcomes. Instead, claim 1 merely employs generic computer components to perform generic computer functions, i.e., receiving and processing information.[3]

Appellants maintain the claims override the routine and conventional sequence of events that would have otherwise not found a correlation between interest rates and spreads or maintained a spread of spreads as claimed (Reply Br. 6.). However, we are not persuaded that this represents an improvement to any technology as opposed to an improvement to a general business practice.

Finally, we are not persuaded of Examiner error by Appellants' argument that "the claims do not attempt to preempt every application of the

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[3] The Specification discloses that "the various processes described herein may be implemented by, e.g., appropriately programmed general purpose computers, special purpose computers and computing devices" (Spec. 46, ll. 20–22). *See also id.* at 28, ll. 11–30 (describing, with reference to Figure 6, that an exemplary system may include "a computing device 601 (e.g., a broker's computer, a general purpose computing device, etc.)").

alleged abstract idea, but rather recite specific manners of treated spreads and rates" (Reply Br. 6). There is no dispute that the Supreme Court has described "the concern that drives this exclusionary principle [i.e., the exclusion of abstract ideas from patent eligible subject matter] as one of pre-emption." *Alice*, 134 S. Ct. at 2354. But characterizing pre-emption as a driving concern for patent eligibility is not the same as characterizing pre-emption as the sole test for patent eligibility. "The Supreme Court has made clear that the principle of preemption is the basis for the judicial exceptions to patentability" and "[f]or this reason, questions on preemption are inherent in and resolved by the § 101 analysis." *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) (citing *Alice*, 134 S. Ct. at 2354). Yet although "preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility." *Id.*

In view of the foregoing, we sustain the Examiner's rejection under 35 U.S.C. § 101 of claim 1, and claims 2–36, which fall with claim 1.

Obviousness

Independent Claim 1 and Dependent Claims 2–18

Appellants first argue that the Examiner erred in rejecting claim 1 under 35 U.S.C. § 103(a) because Tuckman, on which the Examiner relies, does not disclose or suggest "calculat[ing] a second spread between the first rate [for the first financial instrument that is based on the interest rate paid on unsecured interbank deposits for the time period] and the second rate [for the second financial instrument that is based on expectations of overnight rates for the time period]," as recited in claim 1 (App. Br. 10–13).

Claim 1 recites "based on the plurality of interest rate expectations, calculate an expected first spread between a first financial instrument based on an interest rate paid on unsecured interbank deposits for the time period and a second financial instrument based on expectations of overnight interest rates for the time period." In addressing this limitation, the Examiner finds that the federal funds in Tuckman corresponds to the claimed first financial instrument and that the claimed second financial instrument corresponds to either (1) LIBOR or (2) the Eurodollar (Ans. 19). Consistent with that interpretation, in the argued limitation, the claimed "first rate," i.e., for the first financial instrument, is the federal funds rate and the claimed "second rate," i.e., for the second financial instrument, is either the LIBOR rate or the Eurodollar rate (App. Br. 11).

Responding to Appellants' argument, the Examiner ostensibly takes the position that the claimed second spread corresponds to the market prices of federal funds versus the 3-month LIBOR basis swaps shown in element 230 of Tuckman's Figure 2 and also to the differences between market rates and pricing model rates for federal funds futures (element 210 in Figure 2 of Tuckman) and Eurodollar futures (element 220 in Tuckman Figure 2) (*see* Ans. 21–26 (citing Tuckman ¶¶ 17–20, 27, 31–35; Figures 1–3)). However, we agree with Appellants that although some spread may be shown in element 230 of Figure 2, there is no disclosure or suggestion regarding how this spread is calculated (App. Br. 13). Further, neither the market rate and model rate spread shown in element 210 of Figure 2 nor the spread shown in element 220 can constitute a "second spread," as recited in claim 1, because neither represents a spread between a first rate, e.g., a federal funds rate, and a second rate, e.g., a Eurodollar rate or a LIBOR rate

(Reply Br. 3). Instead, element 210 shows the spread between a federal funds market rate and a federal funds model rate; element 220 shows the spread between a Eurodollars futures market rate and a Eurodollar model rate.

In view of the foregoing, we do not sustain the Examiner's rejection of independent claim 1 under 35 U.S.C. § 103(a). For the same reasons, we also do not sustain the Examiner's rejection of dependent claims 2–18. *Cf. In re Fritch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992) ("dependent claims are nonobvious if the independent claims from which they depend are nonobvious").

Independent Claim 19 and Dependent Claims 20–36

Independent claim 19 include language substantially similar to the language of claim 1, and stands rejected based on the same rationale applied with respect to claim 1 (Final Act. 5). Therefore, we do not sustain the Examiner's rejection under 35 U.S.C. § 103(a) of independent claim 19, and claims 20–36, which depend therefrom, for the same reasons set forth above with respect to independent claim 1.

DECISION

The Examiner's rejection of claims 1–36 under 35 U.S.C. § 101 is affirmed.

The Examiner's rejection of claims 1–36 under 35 U.S.C. § 103(a) is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED