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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte THOMAS WINTER[1]

Appeal 2017-007220
Application 13/477,016
Technology Center 3600

Before JOSEPH L. DIXON, JENNIFER S. BISK, and
STEVEN M. AMUNDSON, *Administrative Patent Judges*.

DIXON, *Administrative Patent Judge*.

DECISION ON APPEAL

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[1] According to Appellant, the real party in interest is Deutsche Börse AG. *See* App. Br. 1.

STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134(a) from a rejection of claims 1–16. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

The claims are directed to a computer-implemented

> method and system for publishing best public limits and corresponding quantity and for matching an incoming outright order against price best match limits at corresponding quantities during the continuous trading phase is provided. An incoming outright order is entered in an incoming order book side. It is determined if the incoming outright order satisfies a matching condition by evaluating the sum of the incoming outright order limit and the best match limit of the outright order book side opposing to the incoming outright order book side wherein the best match limit of the outright order book side opposing to the incoming outright order book side also considers outright order book combinations resulting to the outright order book side opposing the incoming outright order book side.

(Abstract). Claim 1, reproduced below, is illustrative of the claimed subject matter:

> 1. A computer-implemented method for maintaining deterministic combinations of single leg and double leg outright order book sides of a derivative product by one or more computing devices, the method comprising:
>
> determining, by at least one of the one or more computing devices, a best public limit of an outright order book side of a plurality of outright order book sides by considering combinations of single leg and double leg outright order book sides resulting to said outright order book side based on allowed public paths available for the derivative product, wherein each of the allowed public paths has a path length less than or equal to a maximum public path length, the path length indicating the

number of different outright order book sides considered in a combination of outright order book sides resulting to said outright order book side, and the best public limit is exclusively available for publication of a best price level of said outright order book side to the outside world; and

determining, by at least one of the one or more computing devices, a best match limit of said outright order book side by considering combinations of outright order book sides resulting to said outright order book side based on allowed match paths available for the derivative product, wherein each of the allowed match paths has a path length less than or equal to a maximum matching path length, the maximum matching path length is greater than the maximum public path length, and the best match limit is exclusively available for matching of said outright order book side.

REJECTION

The Examiner made the following rejection:

Claims 1–16 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

ANALYSIS

We have reviewed the Examiner's rejection in light of Appellant's contentions and the evidence of record. We concur with Appellant's contention that the Examiner erred in this case.[2]

Section 101 of the Patent Act provides "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may

[2] Appellant raises additional arguments. Because the identified issue is dispositive of the appeal, we do not reach the additional arguments.

obtain a patent therefor, subject to the conditions and requirements of this title." 35 U.S.C. § 101. That provision "'contains an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable.'" *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2354 (2014) (quoting *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2116 (2013)). According to the Supreme Court:

> [W]e set forth a framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts. First, we determine whether the claims at issue are directed to one of those patent-ineligible concepts. . . . If so, we then ask, "[w]hat else is there in the claims before us?" . . . To answer that question, we consider the elements of each claim both individually and "as an ordered combination" to determine whether the additional elements "transform the nature of the claim" into a patent-eligible application. . . . We have described step two of this analysis as a 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." (citations omitted).

Alice, 134 S. Ct. at 2355.

The Federal Circuit has described the *Alice* step-one inquiry as looking at the "focus" of the claims, their "character as a whole," and the *Alice* step-two inquiry as looking more precisely at what the claim elements add—whether they identify an "inventive concept" in the application of the ineligible matter to which the claim is directed. *See Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016); *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335–36 (Fed. Cir. 2016); *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015).

According to the Federal Circuit, "[t]he second step of the *Alice* test is satisfied when the claim limitations 'involve more than performance of 'well-understood, routine, [and] conventional activities previously known to the industry.'" *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1367 (Fed. Cir. 2018) (quoting *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n*, 776 F.3d 1343, 1347–48 (Fed. Cir. 2014) and *Alice*, 134 S. Ct. at 2359).

In this case, Appellant argues with respect to the *Alice* step-two analysis, the Examiner has not provided any evidence to support the Examiner's assertion that the claimed limitations perform well-understood, routine, and conventional functions or steps. (*See* App. Br. 8–9). Specifically, Appellants contend:

> limitations utilize synthetic match paths to *take into account matching opportunities which may result from combinations of single and double leg outright order books different from the outright order book of the incoming order.* These features are not "well-understood, routine and conventional in the field" of order matching in derivatives markets.

(App. Br. 9).

In response to Appellant's argument that the Examiner provides no support or evidence to show that determining a best match limit of said outright order book side based on allowed match paths available for the derivative products are well-understood, routine, and conventional, the Examiner:

> provides support in the form of decisions provided by the courts that find similar limitations to not be significantly more. The courts also find the idea of executing an algorithm or performing a calculation to be abstract (Flook 437 U.S. at 594; *Bancorp Services v. Sun Life,* 687 F.3d 1266, 1278 (Fed. Cir. 2012) ("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."). Determining a best match limit is interpreted as the generic computer performing calculations to determine a result. Performing a determination and matching in a generic manner at a high level of generality on a generic system is not significantly more. Using a computer to match order data or comparing information and using a computer to make a determination is a routine, well understood and conventional function of a processor or computer (Versata, Electric Power Grid [sic], Classen).

(Ans. 9–10).

Appellant further contends that

> The Examiner continues to allege that the claims are directed to the abstract idea of "maintaining deterministic combinations of single leg and double leg outright order book sided of a derivative product. . . ." To arrive at this determination, the Examiner restates the elements of the independent claims and then concludes, without any support or analysis, that "all of these concepts relate to processes of organizing information and a mathematical relationship or formula abstract." Page 4 of the Examiner's Answer. For some of the claim elements, the Examiner notes apparent case names in parenthesis. Appellant assumes that the Examiner is alleging that similar steps are found in the named cases. However, there is no evidence of record that this allegation is accurate. For most claimed elements, there is no parenthetical note to case law.
>
> Further, other than reiterating the claim elements, referring to unnamed case law, and concluding that the claimed elements do not "add more" (see pages 6-8 of the Examiner's Answer), the Examiner offers no analysis with respect to the specific language of the claims. Therefore, the rejection continues to fall short of articulating a prima facie case of patent ineligibility.

(Reply Br. 1–2).

We agree with Appellant that the Examiner's assertion contradicts the case law, as the *Berkheimer* court held "[w]hether something is well-understood, routine, and conventional to a skilled artisan at the time of the patent is a factual determination." *Berkheimer*, 881 F.3d at 1369. Therefore, we are constrained by the record to reverse the Examiner's rejection of claims 1–16 on procedural ground.

DECISION

We reverse the Examiner's decision rejecting claims 1–16 under 35 U.S.C. § 101.

REVERSED