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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte HOWARD CHARLES DUNCAN MATTSON,
DOUGLAS JOSEPH KING, and DANIEL C. STAPLES

Appeal 2016-003203
Application 13/907,034
Technology Center 2600

Before ELENI MANTIS MERCADER, CARL W. WHITEHEAD JR., and
ADAM J. PYONIN, *Administrative Patent Judges*.

MANTIS MERCADER, *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, 2, 4–9, 11–16, and 18–20.¹ We have
jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ Claims 1–20 are pending. The rejection of claims 1–20 under 35 U.S.C.
§ 103(a) has been withdrawn. Ans. 2.

THE INVENTION

Appellants' claimed invention is directed to pattern recognition, including "receiving a set of two-dimensional (2D) points" and "identifying neighbor points for each of a plurality of points in the set and finding at least one indicated pattern between points in the set" (Abstract).

Independent claim 1, reproduced below, is representative of the subject matter on appeal:

1. A method for pattern recognition, the method performed by a data processing system and comprising:

receiving a set of two-dimensional (2D) points by the data processing system;

identifying neighbor points for each of a plurality of points in the set, by the data processing system;

finding at least one indicated pattern between points in the set, by the data processing system, wherein the indicated pattern is one of

a linear pattern identified by a plurality of points in the set at regular distances from and in line with a given point within a 2D plane,

a rectangular pattern identified by a plurality of points in the set at regular distances from a given point in orthogonal directions,

a skew pattern identified by a plurality of points in the set at regular distances from and in line with a given point in two directions within the 2D plane, or

a circular pattern identified by a plurality of points in the set at regular distances from each other and

that each lie along an arc of a circle with a common center;
and
storing pattern data corresponding to the found
indicated pattern.

THE REJECTION

Claims 1, 2, 4–9, 11–16, and 18–20 stand rejected under 35 U.S.C.
§ 101 as directed to non-statutory subject matter. Final Act. 5.

ISSUE

The pivotal issue is whether the Examiner erred in finding that claims
1, 2, 4–9, 11–16, and 18–20 are directed to non-statutory subject matter.

ANALYSIS

Appellants contend the claims are not abstract and therefore are not
directed to non-statutory subject matter because claim 1 recites operations
that “represent more than just an abstract idea” and “implement a process
that is not shown to be performed by any prior system to automatically
recognize patterns in sets of 2D points” (Reply Br. 15). Appellants further
contend that “all claims specifically require that all processes are performed
by a data processing system, and so there can be no interpretation of the
claims that encompasses human behavior or decision making” (Reply Br.
16). Appellants further contend “the Office Action fails to address the actual
requirements of the claims” (Reply Br. 16), and Appellants rely on two
Board decisions to argue that “recent PTAB decisions confirm that over-
generalized characterizations of the claims in § 101 rejections are improper”
(Reply Br. 18 (citing *Ex parte Cyriac J. Wegman III*, Appeal 2013-008168

(PTAB Sept. 18, 2015) and *Ex parte Bruce Gordon Fuller et al.*, Appeal 2013-000762 (PTAB May 28, 2015)). Appellants further contend the claims do not preempt any abstract idea because “they include specific requirements for how specific indicated patterns are identified by the data processing system” (Reply Br. 20).

The Examiner cites *Contract Extraction & Transmission v. Wells Fargo Bank, N.A.*, 776 F.3d 1343 (Fed. Cir. 2014), for the proposition that “the collecting of data, recognizing certain data within the collected data set, and storing that data in a memory is ineligible patent subject matter” (Ans. 4).

The Examiner finds claim 1 recites:

the concept of data collection (receiving a set of two-dimensional points), recognition (identifying neighboring points and determining a pattern is one of a linear, rectangular, skew, or circular pattern), and storage (pattern data corresponding to the found indicated pattern)

(Ans. 4), and finds the claims “merely recite the recognition of certain data within a collected data set and are considered ineligible” (Ans. 4). The Examiner finds the “receiving,” “identifying,” and “finding” steps of claim 1 performable by a human in which “[t]here is no significant step taken to identify the neighboring points or finding one of the patterns from the points in the set that a human cannot perform in their mental capacity” (Ans. 5).

We do not find Appellants’ arguments persuasive. The Supreme Court, in *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347 (2014), held that 35 U.S.C. § 101 contains important implicit exceptions to subject matter eligibility (i.e., patent-ineligible concepts), in that “[l]aws of nature, natural phenomena, and abstract ideas are not patentable.” *Id.* at 2354

(quoting *Assoc. for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2116 (2013)) (internal quotation marks omitted). The two-part analysis used to determine whether claims are patent-eligible is to first “determine whether the claims at issue are directed to one of those patent-ineligible concepts.” *Id.* at 2355. If they are directed to a patent-ineligible concept, the second step in the analysis is to “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.” *Id.* (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1297–98 (2012)). 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.* (quoting *Mayo*, 132 S. Ct. at 1294).

Thus, we first determine whether the claim is directed to a patent-ineligible concept. Claim 1 is directed to a “method for pattern recognition, the method performed by a data processing system.” We agree with the Examiner that the steps of the method are performable by a human, because the steps recite geometric pattern identification performable via simple mathematical operations. Such a method is abstract. “[A] method that can be performed by human thought alone is merely an abstract idea and is not patent-eligible under § 101.” *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1373 (Fed. Cir. 2011). Accordingly, we find the claimed invention directed to an abstract idea: the idea of finding patterns corresponding to geometrical shapes.

Under the second step, because we find that claim 1 is directed to an abstract idea, the claim must include an “inventive concept” in order to be patent-eligible, *i.e.*, there must be an element or combination of elements sufficient to ensure that the claim in practice amounts to significantly more than the abstract idea itself. Claim 1 recites various alternative pattern recognition identification steps, and, at best, adds only a “data processing system” that comprises generic computer components. *See* Figure 1, illustrating “a block diagram of a data processing system” (Spec. ¶ 7). Under *Alice*, “using some unspecified, generic computer . . . is not ‘*enough*’ to transform the abstract idea into a patent-eligible invention.” *Alice*, 134 S. Ct. at 2360 (internal citations omitted).

Thus, the recited claim limitations both individually and as an ordered combination fail to transform the nature of the claim into patent-eligible subject matter. Accordingly, we agree with the Examiner that independent claims 1, 8, and 15, and claims 2, 4–7, 9, 11–14, 16, and 18–20 depending therefrom, are directed to non-statutory subject matter.²

² We note that the Examiner did not reject claims 3, 10, and 17 under 35 U.S.C. § 101, and thus, these claims are not before us for review. However, should there be further prosecution the Examiner should consider whether these claims are directed to non-statutory subject matter. Claim 3, for example, is dependent on claim 1 and adds the limitation “wherein the data processing system consolidates multiple linear patterns into a rectangular pattern.” It would appear that using the analysis above, the consolidation of multiple linear patterns into a rectangular pattern would constitute an abstract idea that is not made patent-eligible when performed on a generic data processing system.

CONCLUSION

The Examiner did not err in finding that claims 1, 2, 4–9, 11–16, and 18–20 are directed to an abstract idea.

DECISION

The Examiner’s decision rejecting claims 1, 2, 4–9, 11–16, and 18–20 is affirmed.

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