



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/335,521	12/15/2008	Robert Lee Angell	END920080326US1	1225
79230	7590	10/11/2018	EXAMINER	
Law Office of Jim Boice 3839 Bee Cave Road Suite 201 West Lake Hills, TX 78746			MCCORMICK, GABRIELLE A	
			ART UNIT	PAPER NUMBER
			3629	
			NOTIFICATION DATE	DELIVERY MODE
			10/11/2018	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Jennifer@BoiceIP.com
Emily@BoiceIP.com
Jim@BoiceIP.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ROBERT LEE ANGELL, ROBERT R. FRIEDLANDER,
and JAMES R. KRAEMER

Appeal 2017-003527¹
Application 12/335,521²
Technology Center 3600

Before JOSEPH A. FISCHETTI, 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 1–20. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ Our decision references Appellants’ Appeal Brief (“App. Br.,” filed September 21, 2016) and Reply Brief (“Reply Br.,” filed December 19, 2016), and the Examiner’s Answer (“Ans.,” mailed October 18, 2016), and Final Office Action (“Final Act.,” mailed April 19, 2016).

² Appellants identify International Business Machines Corporation as the real party in interest. App. Br. 2.

CLAIMED INVENTION

Appellants' claimed invention "relates generally to an improved data processing system and in particular to a method and apparatus for generating cohorts from video data" (Spec. ¶ 1).

Claims 1, 8, 15, and 19 are the independent claims on appeal.

Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A processor-implemented method for generating a furtive glance cohort, the processor-implemented method comprising:

responsive to receiving video data of a monitored population, processing, by a processor, the video data to form digital video data, wherein the digital video data comprises metadata describing glancing patterns associated with one or more subjects from the monitored population, wherein the monitored population is a group of persons present at a monitored location, and wherein the video data is collected by a set of sensors;

analyzing, by the processor, the digital video data to identify a set of furtive glance patterns from the glancing patterns, wherein one or more furtive glance attributes for the furtive glance cohort are selected from the set of furtive glance patterns;

generating, by the processor, the furtive glance cohort comprising members selected from the monitored population, wherein each member of the furtive glance cohort has at least one furtive glance attribute in common; and

implementing, by the processor, an inference engine to generate an inference that the members of the furtive glance cohort are collaborating on a plan to perform an act of collusion.

REJECTIONS

Claims 1–20 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

Claims 1–20 are rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more.

ANALYSIS

Written Description

Whether a specification complies with the written description requirement of 35 U.S.C. § 112, first paragraph, is a question of fact and is assessed on a case-by-case basis. *See, e.g., Purdue Pharma L.P. v. Faulding, Inc.*, 230 F.3d 1320, 1323 (Fed. Cir. 2000) (citing *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1561 (Fed. Cir. 1991)). The disclosure, as originally filed, need not literally describe the claimed subject matter (i.e., using the same terms or *in haec verba*) in order to satisfy the written description requirement. But the Specification must convey with reasonable clarity to those skilled in the art that, as of the filing date, Appellants were in possession of the claimed invention. *See id.*

In rejecting claims 1–20 under § 112, first paragraph, the Examiner takes the position that the claims fail to comply with the written description requirement because although the claims “recite the concept of identifying a set of furtive glance patterns,” the Specification simply discloses the concept of using data models to identify a set of furtive glance patterns without disclosing the standards or calculations used via the data models to determine the furtive glance patterns (Final Act. 3). The Examiner maintains that it, therefore, is unclear “what type of analysis is performed to determine whether there are unexpected or unusual patterns” (*id.*).

As a further basis for the rejection, the Examiner notes that the claims also recite the concept of determining a cohort based on a set of furtive glance patterns (*id.*). And the Examiner concludes that the claims lack the

requisite written description support in the Specification because the Specification “simply describes the factors used to determine patterns,” and fails to disclose “how the factors and the patterns are used to determine a cohort” (*id.* at 3–4).

The Examiner seemingly confuses the enablement provision of 35 U.S.C. § 112, first paragraph, with the written description requirement, which, as the Examiner acknowledges, is a separate and distinct requirement (*id.* at 3).

To satisfy the written description requirement, Appellants need only demonstrate original descriptive support in the Specification for the subject matter recited in the claims. The Examiner has not established that the Specification, as filed, lacks the requisite descriptive support. To the contrary, as described above, the Examiner ostensibly concedes that the Specification includes original descriptive support.

The Examiner has not established a *prima facie* case of unpatentability. Therefore, we do not sustain the Examiner’s rejection of claims 1–20 under 35 U.S.C. § 112, first paragraph.

Patent-Ineligible Subject Matter

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. *Alice Corp. 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*

Laboratories, Inc., 566 U.S. 66 (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.* If the claims are not directed to a patent-ineligible concept, e.g., an abstract idea, 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.” *Id.* (quoting *Mayo*, 566 U.S. at 79, 78).

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*, 566 U.S. at 71. Therefore, the Federal Circuit has instructed that claims are to be considered in their entirety to determine “whether their character as a whole is directed to excluded subject matter.” *McRO, Inc. v. Bandai Namco Games Am., Inc.*, 837 F.3d 1299, 1312 (Fed. Cir. 2016) (quoting *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015)).

Here, in rejecting the pending claims under § 101, the Examiner determined that the claims are directed to analyzing digital video data to identify a set of furtive glance attribute patterns, generating a furtive glance cohort, where each member of the cohort has at least one furtive glance attribute in common, and generating an inference that the members of the furtive glance cohort are collaborating on a plan to perform an act of collusion, i.e., to the abstract ideas of using categories to organize, store, and

transmit information, and comparing data to determine a risk level (Final Act. 4). The Examiner also determined that the claims do not include additional elements sufficient to amount to significantly more than the judicial exception (*id.* at 5).

Independent Claims 1 and 19 and Dependent Claims 2–14 and 20

Appellants argue claims 1–14, 19, and 20 as a group (App. Br. 9–13). We select claim 1 as representative. The remaining claims stand or fall with claim 1. 37 C.F.R. §41.37(c)(1)(iv).

Appellants first argue that the § 101 rejection cannot be sustained because the claimed “sensors” that collect video data are machines and integral to the pending claims (App. Br. 9 (“[W]ithout the sensors, there is no video data; without the video data, there is no cohort; without the cohort, there is no inference of an act of collusion.”); *see also* Reply Br. 3).

That argument is not persuasive of Examiner error at least because “not every claim that recites concrete, tangible components escapes the reach of the abstract-idea inquiry.” *In re TLI Commc’ns LLC Patent Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016). Although claim 1 recites physical components, e.g., sensors, the focus of claim 1 is not on the improvement of any technology or technical field, but rather on implementation of the abstract idea, i.e., analyzing video data of a monitored population to identify members of the population who may be collaborating on a plan to perform an act of collusion. The recited sensors merely provide the generic environment in which to implement this abstract idea, i.e., the means for collecting the video data.

Appellants’ reliance also is misplaced to the extent that Appellants cite *SiRF Technology Inc. v. International Trade Commission*, 601 F.3d

1319 (Fed. Cir. 2010) as establishing that any invention that cannot be fully performed without the use of a machine is necessarily patent-eligible (App. Br. 9; *see also* Reply Br. 3).

In *SiRF*, Appellants challenged the Commission’s determination that the asserted claims of the ‘801 and ‘187 patents,³ which are directed to calculating an absolute position of a GPS receiver, recite patent-eligible subject matter under § 101. *SiRF*, 601 F.3d at 1331–32. In affirming the Commission’s decision, the Federal Circuit observed that claim 1 of the ‘801 patent requires “‘pseudoranges’ that estimate the distance from ‘the GPS receiver to a plurality of GPS satellites’” and that “[p]seudoranges, which are the distances or estimated distances between satellites and a GPS receiver, can exist only with respect to a *particular* GPS receiver that receives the satellite signals.” *Id.* at 1332. And the court noted that claim 1 of the ‘187 patent is similarly tied to a GPS receiver because it requires “the estimation of ‘states’ that are ‘associated with a satellite signal receiver,’ and the formation of a ‘dynamic model . . . to compute [the] position of the satellite signal receiver.’” *Id.* The court, thus, determined that the claims of both patents are directed to patent-eligible subject matter because “the methods at issue could not be performed without the use of a GPS receiver; indeed without a GPS receiver it would be impossible to generate pseudoranges or to determine the position of the *GPS receiver* whose position is the precise goal of the claims.” *Id.* In other words, the claims of both patents were determined patent-eligible not simply because the claims require a GPS receiver, but because they are directed to improved techniques

³ U.S. Patent Nos. 6,417,801 (“the ‘801 patent”) and U.S. Patent No. 6,937,187 (“the ‘187 patent”).

for computing the position of the GPS receiver. We are not persuaded that any comparable situation is presented here.

We also cannot agree with Appellants that the Federal Circuit’s ruling in *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016) impacts the patent-eligibility of the present claims (App. Br. 10–11; *see also* Reply Br. 3–4). The Federal Circuit, in *Enfish*, explained that the first step in the *Mayo/Alice* inquiry asks “whether the focus of the claims is on [a] specific asserted improvement in computer capabilities . . . or instead, on a process that qualifies as an ‘abstract idea’ for which computers are invoked merely as a tool.” *Enfish*, 822 F.3d at 1336. Thus, in rejecting a § 101 challenge at the step one stage in the *Mayo/Alice* analysis in *Enfish*, the Federal Circuit determined that the claims focused on a specific type of data structure, i.e., a self-referential table for a computer database, designed to improve the way a computer carries out its basic functions of storing and retrieving data, and not on asserted advances in the uses to which existing computer capabilities could be put. *Id.* at 1335–36.

We find no parallel here between claim 1 and the claims in *Enfish* nor any comparable aspect in claim 1 that represents an improvement to computer functionality. Rather than constituting an improvement in computer functionality, claim 1 involves nothing more than collecting data (i.e., video data of a monitored population); analyzing the data (i.e., to identify a set of furtive glance attributes and generate a furtive glance cohort of selected members of the monitored population who have at least one furtive glance attribute in common); and presenting the results of the collection and analysis (i.e., generating an inference that the members of the

furtive glance cohort are collaborating on a plan to perform an act of collusion).

Appellants assert that the court in *Enfish* “clarifies that an invention may be statutory, even if it organizes and stores data, so long as it improves how that data is organized and stored” (App. Br. 10; *see also id.* at 14). Yet, we find nothing in the Specification, nor do Appellants direct us to any portion of the Specification, that attributes, to the claimed invention, any improvement in the way data is organized and stored.

Rather than paralleling the claims in *Enfish*, claim 1, in our view, is similar to the claims that the Federal Circuit determined were patent-ineligible in *Electric Power Group, LLC v. Alstom, S.A.*, 830 F.3d 1350 (Fed. Cir. 2016).

In *Electric Power*, the method claims at issue were directed to performing real-time performance monitoring of an electric power grid by collecting data from multiple data sources, analyzing the data, and displaying the results. *Elec. Power Grp.*, 830 F.3d at 1351–52. The Federal Circuit held that the claims were directed to an abstract idea because “[t]he advance they purport to make is a process of gathering and analyzing information of a specified content, then displaying the results, and not any particular assertedly inventive technology for performing those functions.” *Id.* at 1354.

Similarly here, we find that claim 1 involves nothing more than collecting video data of a monitored population; analyzing the data; and generating an inference of planned collusion based on the analyzed data — activities squarely within the realm of abstract ideas. *See id.* at 1353–54 (characterizing collecting information, analyzing information by steps

people go through in their minds, or by mathematical algorithms, and presenting the results of the collection and analysis, without more, as matters within the realm of abstract ideas). There is no indication in the record that the particular operations called for in claim 1 require any specialized computer hardware or other inventive computer components, invoke any assertedly inventive programming, or that the claimed invention is implemented using other than generic computer components to perform the claimed method steps. Indeed, the Specification suggests just the opposite, i.e., that the claimed invention is implemented using only generic computer components (*see, e.g.*, Spec. ¶¶ 14–19), which is not enough for patent-eligibility. *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014) (“[A]fter *Alice*, there can remain no doubt: recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible.”).

Appellants assert that the claimed invention provides an improvement in computer-related technology of “generating and utilizing a cohort by 1) modifying video data with novel metadata that describes ‘glancing patterns,’ and then using such data to 2) create a cohort of related members of a monitored population, when is then used 3) to ‘generate an inference . . . of . . . an act of collusion’” (App. Br. 11). But, we are not persuaded that claim 1 represents any technological improvement. Instead, it appears clear, when considered in light of the Specification, that the focus of the claimed invention, as recited in claim 1, is on achieving a business objective (i.e., monitoring a customer population to detect potential wrongdoing by identifying members of the monitored population who may collaborating on a plan to perform an act of collusion), and not on any claimed means for

achieving that goal that improves technology. *See, e.g.*, Spec. ¶¶ 4, 5, 23, 24.

Finally, we cannot agree with Appellants that the Examiner failed to follow USPTO guidelines or otherwise attempted to impermissibly expand the scope of *Alice* (App. Br. 11–12; *see also id.* at 15–16). Appellants ostensibly maintain that claim 1 is not directed to an abstract idea because the claimed subject matter is dissimilar from the concepts the USPTO identified as abstract on its July 2015 Update: Interim Eligibility Guidance Quick Reference Sheet⁴ (App. Br. 11–12). Yet, even if true, that is no basis for concluding that the Examiner erred in determining that claim 1 is directed to an abstract idea. The USPTO guidance, including the Quick Reference Sheet, is intended as a tool to assist examiners in determining subject matter eligibility under § 101. But there is nothing in the guidance that precludes an examiner from determining that a claim is directed to an abstract idea unless it is similar to a concept identified on the Quick Reference Sheet. We also are aware of no controlling precedent, nor for that matter do Appellants identify any precedent, that precludes an examiner from determining that a claim is directed to an abstract idea unless it is similar to a concept that a court has previously identified explicitly as an abstract idea.⁵

⁴ Available at <https://www.uspto.gov/sites/default/files/documents/ieg-july-2015-qrs.pdf>.

⁵ We also note, for the record, that an Examiner’s failure to follow the Director’s guidance is appealable only to the extent that the Examiner has failed to follow the statutes or case law. To the extent the Director’s guidance goes beyond the case law and is more restrictive on the Examiner than the case law, the failure of the Examiner to follow those added restrictions is a matter for petition to the Director.

Responding to the Examiner’s Answer in the Reply Brief, Appellants attempt to draw an analogy between the present claims and the claims at issue in *McRO* (Reply Br. 4). Appellants argue that, as in *McRO*, “[t]he present invention provides ‘a particular way’ to achieve a desired outcome defined by the claimed invention’ and is clearly more than ‘collecting and analyzing information’” (*id.*). But, the Federal Circuit premised its determination that the claims in *McRO* were patent-eligible on the fact that the claims, when considered as a whole, were directed to a technological improvement over the existing, manual 3-D animation techniques and used limited rules in a process specifically designed to achieve an improved technological result in conventional industry practice, and not merely on the specificity of the claimed animation scheme. We are not persuaded, as described above, that claim 1 provides a comparable improved “technological” result.

We are not persuaded, on the present record, that the Examiner erred in rejecting claim 1 under 35 U.S.C. § 101. Therefore, we sustain the Examiner’s rejection of claim 1 and claims 2–14, 19, and 20, which fall with claim 1.

Independent claim 15 and Dependent claims 16–18

Appellants’ arguments with respect to claims 15–18 are substantially identical to Appellants’ arguments with respect to claim 1 (App. Br. 13–16), and are similarly unpersuasive of Examiner error. As in *Alice* “[t]he method claims [e.g., claim 1] recite the abstract idea implemented on a generic computer” and apparatus claim 15 recites “a handful of generic computer components [i.e., a bus system, a memory, and a processing unit connected

Appeal 2017-003527
Application 12/335,521

to the bus system] configured to implement the same idea.” *Alice*, 134 S. Ct. at 2360.

We are not persuaded, on the present record, that the Examiner erred in rejecting claims 15–18 under 35 U.S.C. § 101. Therefore, we sustain the Examiner’s rejection.

DECISION

The Examiner’s rejection of claims 1–20 under 35 U.S.C. § 112, first paragraph, is reversed.

The Examiner’s rejection of claims 1–20 under 35 U.S.C. § 101 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