



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.
10/884,394	07/02/2004	Sundar Narasimhan	ACO-001.01	7346
25181	7590	10/17/2018	EXAMINER	
FOLEY HOAG, LLP (General) PATENT GROUP, SEAPORT WEST 155 SEAPORT BLVD BOSTON, MA 02210-2600			LOFTIS, JOHNNA RONEE	
			ART UNIT	PAPER NUMBER
			3683	
			NOTIFICATION DATE	DELIVERY MODE
			10/17/2018	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):

Patent@foleyhoag.com
pair_foleyhoag@firsttofile.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte SUNDAR NARASIMHAN and ROBERT P. RINGROSE

Appeal 2017-003309¹
Application 10/884,394²
Technology Center 3600

Before ANTON W. FETTING, NINA L. MEDLOCK, and
SCOTT C. MOORE, *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
rejection of claims 1–58. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ Our decision references Appellants’ Appeal Brief (“App. Br.,” filed June 10, 2016) and Reply Brief (“Reply Br.,” filed December 16, 2016), and the Examiner’s Answer (“Ans.,” mailed October 27, 2016) and Non-Final Office Action (“Non-Final Act.,” mailed March 13, 2015).

² Appellants identify Ascent Technology, Incorporated as the real party in interest. App. Br. 1.

CLAIMED INVENTION

Appellants' claimed invention "relate[s] to planning and management tools, and more particularly to planning and management of worker and equipment assignments" (Spec. ¶ 2).

Claims 1, 26, 31, and 56–58 are the independent claims on appeal. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. In a suitably programmed computer system having at least one input device, at least one processor, at least one storage device and at least one output device, a method, comprising:

by means of at least one output device, providing a plurality of workers access to a listing of work shifts via a network connection;

for each said worker, allowing the worker, by means of at least one input device, to provide prioritized orders of shifts for at least some of the work shifts by the worker assigning relative rankings to the at least some of the work shifts, and wherein the said worker may provide prioritized orders of shifts without regard to whether a worker with a higher priority has yet provided prioritized orders of shifts;

for each said worker, by means of at least one processor, assigning a work shift to the worker based on a priority of the worker and the relative rankings assigned by the worker;

for each said worker, updating the listing in at least one storage device to remove the work shift assigned to the worker; and

for each said worker, outputting, by means of at least one output device, the work shift assigned.

REJECTION

Claims 1–58 are rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more.

ANALYSIS

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 35 U.S.C. § 101, the Examiner determined that the claims are directed to “collecting data regarding workers’ prioritization of shifts and assigning work shifts to workers based on the prioritization and [the] priority of the worker,” i.e., to the concept of assigning work shifts, which the Examiner concluded is a method of organizing human activities, and, therefore, an abstract idea (Non-Final Act. 3). The Examiner also determined that the claims do not include additional limitations sufficient to amount to significantly more than the abstract idea itself because, although “the claims include a computer, it is nothing more than a general purpose computer performing generic computer functions that are well-understood, routine and conventional activities previously known in the industry” (*id.* at 3–4).

Addressing step one of the *Mayo/Alice* framework, Appellants first argue that the claims are not directed to an abstract idea because, similar to the claims at issue in *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014), the claims “do not recite a mathematical algorithm; . . . a fundamental economic or longstanding commercial practice; . . . [or] a business practice known from the pre-internet world (or pre-high-performance-computing world) along with the requirement to perform it on the internet” (App. Br. 10–11). Appellants assert that their previous successful appeal, “preceded by the Examiner’s exhaustive search of the prior art,” conclusively establishes that “assignment of work shifts . . . in the way required by the claims, is not a longstanding commercial practice” (*id.* at 11). Yet, to the extent that Appellants maintain that the

claimed invention is patent-eligible because the claims were found to be novel and/or non-obvious in view of the cited prior art, Appellants misapprehend the controlling precedent.

A finding of novelty or non-obviousness does not automatically lead to the conclusion that the claimed subject matter is patent-eligible. Although the second step in the *Mayo/Alice* 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 Corp.*, 134 S. Ct. at 2355. “Groundbreaking, innovative, or even brilliant discovery does not by itself satisfy the § 101 inquiry.” *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 591 (2013). A novel and non-obvious claim directed to a purely abstract idea is, nonetheless, patent-ineligible. *See Mayo*, 566 U.S. at 90; *see also Diamond v. Diehr*, 450 U.S. 175, 188–89 (1981) (“The ‘novelty’ of any element or steps in a process, or even of the process itself, is of no relevance in determining whether the subject matter of a claim falls within the § 101 categories of possibly patentable subject matter.”).

Even accepting Appellants’ assertion, it also is insufficient, without more, that the claimed method “would be impossible [to perform] without a computer” (App. Br. 11). Although “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), it does not logically follow that methods requiring a computer — i.e., methods that arguably cannot be performed entirely in the

human mind or by a human using pen and paper — are, therefore, not directed to abstract ideas.

To the extent that Appellants maintain that any invention that cannot be performed mentally or by hand, because the claim recites a computer, is, therefore, not abstract, we note that a substantially similar argument was expressly rejected by the Court in *Alice*. See *Alice Corp.*, 134 S. Ct. at 2358 (“the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention”). Merely “relying on a computer to perform routine tasks more quickly or more accurately is insufficient to render a claim patent eligible.” *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d at 1363 (Fed. Cir. 2015) (citing *Alice Corp.*, 134 S. Ct. at 2359 (“use of a computer to create electronic records, track multiple transactions, and issue simultaneous instructions” is not an inventive concept)).

Appellants assert in the Reply Brief that the Examiner oversimplified the claims in asserting that they are directed to the concept of assigning work shifts and, therefore, to a method of organizing human activities, and that the Examiner ignored “the series of specific and unique technical limitations recited in the claims” (Reply Br. 1–2). But, the Examiner’s formulation of the abstract idea need not copy the language recited in the claim. Instead, the Federal Circuit has explained that “the ‘directed to’ inquiry applies a stage-one filter to claims, considered in light of the [S]pecification, based on whether ‘their character as a whole is directed to excluded subject matter.’” See *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016) (citing *Internet Patents Corp.*, 790 F.3d at 1346). It asks whether the focus of the claims is on a specific improvement in relevant technology or on a

process that itself qualifies as an “abstract idea” for which computers are invoked merely as a tool. *See id.* at 1335–36.

Here, it is clear from a fair reading of the Specification that the claimed invention is directed to planning and managing worker shift assignments based on worker preferences and seniority/priority (*see, e.g.*, Spec. ¶¶ 5–16)). As such, we see no legal difficulty with the Examiner’s determination that the claims are directed to “assigning work shifts,” i.e., to a method of organizing human activities (Non-Final Act. 3).

Finally, we are not persuaded by Appellants’ argument that the Examiner’s comparison of the present claims to those at issue in *SmartGene* is inapposite (Reply Br. 2–3). Although there may be factual differences, we agree with the Examiner that claim 1, like the claims found patent-ineligible in *SmartGene*, involves no more than collecting information and comparing information in view of a set of rules in order to generate a work shift schedule (Non-Final Act. 3).

We are not persuaded, on the present record, that the Examiner erred in determining that the claims are directed to an abstract idea. Appellants do not contend that the claims are patent-eligible under step two the *Mayo/Alice* framework, i.e., that the claims include additional elements that are sufficient to amount to “significantly more” than the abstract idea itself. Therefore, we sustain the Examiner’s rejection of claims 1–58 under 35 U.S.C. § 101.³

³ We need not, and do not, reach the Examiner’s further rejection of claims 31–55 and 58 under 35 U.S.C. § 101 as directed to non-statutory transitory signals (Non-Final Act. 4).

Appeal 2017-003309
Application 10/884,394

DECISION

The Examiner's rejection of claims 1–58 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