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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte FRANK WARTENA, MUHAMMAD ASIM,
and CHARLES LEONARDUS CORNELIUS MARIA KNIBBELER

Appeal 2019-005142
Application 14/422,950
Technology Center 3700

Before JAMES P. CALVE, WILLIAM A. CAPP, and
JEREMY M. PLENZLER, *Administrative Patent Judges*.

CAPP, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant¹ seeks our review under 35 U.S.C. § 134(a) of the non-final rejection of claims 1, 4–14, 16, 17, 20, and 21. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42(a). Appellant identifies KONINKLIJKE PHILIPS N.V. as the Applicant and real party in interest. Appeal Br. 2.

THE INVENTION

Appellant's invention relates to patient monitoring systems. Spec. 1. Claim 1, reproduced below with paragraph indentation added, is illustrative of the subject matter on appeal.

1. A method of operating a patient device in a patient monitoring system to assist a patient in completing a task, the patient device being coupled to a measurement device and/or a medication dispensing device, there being a predefined set of types of task for the patient to complete, the predefined set comprising

at least one of a measurement task in which the patient is to take a measurement of a physiological characteristic using the measurement device and

a medication task in which the patient is to take a dose of medication dispensed by the medication dispensing device,

the method comprising:

receiving information on the task for the patient to complete, the information comprising an indication that the patient is to complete the measurement task or the medication task by a specified date and time frame;

determining one or more operations associated with the type of task indicated in the received information that the patient device is to perform on initiation of the measurement task or medication task or on occurrence of a predefined event,

wherein the one or more operations associated with the measurement task includes monitoring the measurement device for the taking of a measurement of the physiological characteristic and marking the measurement task as completed when the measurement is taken, and

wherein the one or more operations associated with the medication task includes monitoring the medication dispensing device for the dispensing of a dose of medication and marking the medication task as

completed when the dose of medication has been removed by the patient;

issuing a reminder to the patient at a predetermined time before the specified date and time frame for completing the measurement task or the medication task; and

determining that a predetermined time period has lapsed since the reminder was issued to the patient without completion of the measurement task or the medication task, and then issuing a further reminder to the patient to complete the measurement task or the medication task, the further reminder being issued before the specified date and time frame for completing the measurement task or the medication task, and,

on initiation of the measurement task or the medication task by the patient or on occurrence of the predefined event after the issuing of the further reminder, performing the one or more operations associated with the measurement task or the medication task, including marking the measurement task or the medication task as completed.

THE REJECTIONS

The Examiner relies upon the following as evidence in support of the rejections:

NAME	REFERENCE	DATE
Kehr	US 2003/0036683 A1	Feb. 20, 2003
Vemuri	US 2009/0157672 A1	June 18, 2009
Porras	US 2010/0137693 A1	June 3, 2010
Mathur	WO 2008/141283 A2	Nov. 20, 2008

The following rejections are before us for review:

1. Claims 1, 4–14, 16, 17, 20, and 21 are rejected under 35 U.S.C. § 101 as directed to a judicial exception to patent eligible subject matter.
2. Claims 1, 4–9, 11, 12, 14, 16, 17, 20, and 21 are rejected under 35 U.S.C. § 103 as being unpatentable over Kehr and Vemuri.

3. Claim 10 is rejected under 35 U.S.C. § 103 as being unpatentable over Kehr, Vemuri, Mathur, and Porras.

4. Claim 13 is rejected under 35 U.S.C. § 103 as being unpatentable over Kehr, Vemuri, and Porras.

OPINION

Eligible Subject Matter

Appellant argues all pending claims as a group. Appeal Br. 7–14. We select claim 1 as representative. *See* 37 C.F.R. § 41.37(c)(1)(iv).

An invention is patent-eligible if it claims a “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101.

However, the courts recognize certain judicial exceptions to Section 101, namely: (1) laws of nature, (2) natural phenomena, and (3) abstract ideas. *See Mayo Collaborative Servs. v. Prometheus Labs, Inc.*, 566 U.S. 66, 70–71 (2012).

The Supreme Court has 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.” *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 217 (2014) (citing *Mayo*, 566 U.S. at 72–73). According to the Supreme Court’s framework, we must first determine whether the claims at issue are directed to one of those concepts. *Id.* If so, we must secondly “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.*

In situations where an abstract idea is implemented on a computer, the first step in the *Alice/Mayo* analysis asks whether the focus of the claims is

on a specific 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, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335–36 (Fed. Cir. 2016).

The Supreme Court characterizes the second step of the 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.’” *Alice*, 573 U.S. at 217–18 (brackets in original) (quoting *Mayo*, 566 U.S. at 72). Where the claim is directed to an abstract idea that is implemented on a computer, merely stating the abstract idea while adding the words “apply it” is not enough to establish such an inventive concept. *See Alice*, 573 U.S. at 223.

[I]f that were the end of the § 101 inquiry, an applicant could claim any principle of the physical or social sciences by reciting a computer system configured to implement the relevant concept.

Id. at 224.

The PTO has published guidelines on the application of Section 101. 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) (the “Section 101 Guidelines”). Under such guidelines, in conducting step one of the *Alice* framework, we first look to whether the claim recites:

(1) any judicial exceptions, including certain groupings of abstract ideas (*i.e.*, mathematical concepts, certain methods of organizing human interactions such as a fundamental economic practice, or mental processes); and

(2) additional elements that integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)–(c), (e)–(h)).

In other words, under prong 1 of an abstract idea analysis, we look to whether the claim recites an abstract idea. Then, if it does, under prong 2, we look at the claim, as a whole, and determine whether the claim is “directed to” the abstract idea or, instead, is “directed to” a “practical application” of the abstract idea.

Step 1, Prong 1

The Section 101 Guidelines identifies three key concepts identified as abstract ideas: (a) mathematical concepts including “mathematical relationships, mathematical formulas or equations, mathematical calculations”; (b) certain methods of organizing human activity, such as “fundamental economic principles or practices,” “commercial or legal interactions,” and “managing personal behavior or relationships or interactions between”; and (c) mental processes including “observation, evaluation, judgment, [and] opinion.” Section 101 Guidelines, 84 Fed. Reg. at 52.

With respect to the first step, the Examiner determines that the claims are directed to an abstract idea. Non-Final Act. 3. According to the Examiner, the steps are directed to an abstract in the form of an idea “of itself.” *Id.* citing *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343, 1347 (Fed. Cir. 2014).

Appellant argues that claim 1 does not recite an abstract idea. Appeal Br. 8. In response, the Examiner analogizes Appellant’s abstract idea to tasks that a nurse or caregiver would otherwise perform. Ans. 5. The Examiner notes that such tasks can be performed mentally. *Id.* “[T]he patent device is merely a generic computer embodiment of Appellant’s abstract idea.” *Id.* at 5–6.

There is little question here that claim 1 recites an abstract idea. Appellant's Specification explains that the invention "is similar to how office productivity tools such as Microsoft Outlook™ manage tasks."

Spec. 1.

[T]here is provided a method of operating a patient device in a patient monitoring system to assist a patient in completing a task, there being a predefined set of types of task for the patient to complete, the method comprising receiving information on a task for the patient to complete, the information comprising an indication of the type of task from the predefined set the patient is to complete; determining one or more operations associated with the type of task indicated in the received information that the patient device is to perform on initiation of the task or on occurrence of a predefined event; and on initiation of the task by the patient or on occurrence of the predefined event, performing the one or more operations associated with the task.

Id. at 2. This concept is captured in the recitations of claim 1 and, although the Examiner characterizes such as an idea of itself, it can also be considered as a method of "managing personal behavior" and/or mental processes under the Section 101 Guidelines.

A method of organizing human activity is recognized by the courts as an abstract idea. *See In re TLI Communications LLC Patent Litig.*, 823 F.3d 607, 613 (Fed. Cir. 2016) (classifying and storing digital images is an abstract idea as a method of organizing human activity); *see also Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1367 (Fed. Cir. 2015) (tracking financial transactions to determine whether they exceed a pre-set spending limit is an abstract idea as a method of organizing human activity); *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1318 (Fed. Cir. 2016) (screening messages is an abstract idea as a method of organizing human activity); *BASCOM Glob. Internet Servs., Inc. v. AT&T*

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Mobility LLC, 827 F.3d 1341, 1348 (Fed. Cir. 2016) (filtering internet content is an abstract idea as a method of organizing human behavior).

“Information as such is an intangible.” *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016). Courts treat collecting information as well as analyzing information by steps people go through in their minds as essentially mental processes within the abstract-idea category. *FairWarning IP, LLC v. Iatric Systems, Inc.*, 839 F.3d 1089, 1093 (Fed. Cir. 2016). The claims here relate to monitoring and managing user behavior by collecting data, processing the data, and notifying the user. Claims App. As such, the method recites an abstract idea under the principles espoused in *FairWarning*.

Step 1, Prong 2

Under Prong 2 of Step 1 of the Section 101 Guidelines, we do not assume that such claims are directed to patent ineligible subject matter because “all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” *In re TLI Commc’ns LLC Patent Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016) quoting *Alice*. Instead, “the claims are considered in their entirety to ascertain whether their character as a whole is directed to excluded subject matter.” *McRO, Inc. v. Bandai Namco Games America Inc.*, 837 F.3d 1299, 1312 (Fed. Cir. 2016). If the claims are not directed to an abstract idea, the inquiry ends. Section 101 Guidelines. If the claims are “directed to” an abstract idea, then the inquiry proceeds to the second step of the Alice framework. *Id.*

Consequently, we consider whether the claimed patient monitoring system includes additional elements that integrate the judicial exception into

a practical application. A claim that integrates a judicial exception into a practical application will apply, rely on, or use the judicial exception in a manner that imposes a meaningful limit on the judicial exception, such that the claim is more than a drafting effort designed to monopolize the judicial exception. Section 101 Guidelines.

Here, Appellant argues that claim 1 is not directed to an abstract idea because it provides a technical solution to one or more problems of conventional patient monitoring systems. Appeal Br. 9 (citing *McRO*). In response, the Examiner reiterates that Appellant's abstract idea can be performed by human beings without the use of any particular technology. Ans. 4. In reply, Appellant repeats its argument about providing a technical solution, for example, by actively supporting the patient with the completion of a task. Reply Br. 3.

Although automating tasks that humans are capable of performing may be patent eligible if properly claimed (*See McRO*, 837 F.3d at 1313), we are not persuaded by Appellant's effort to characterize its "technical solution" as analogous to *McRO*. Here, the method of claim 1 generally comprises five functional steps, namely: (1) receiving information, (2) determining operations associated with a task, (3) issuing a reminder, (4) determining elapsed time, and (5) recording task completion. Claims App. The method collects, processes, and presents information to induce a patient to engage in specified task behavior and then collects information that the specified task has been completed. As an example, the method can be as simple as scheduling and reminding patients to weigh themselves or take a pill. Spec. 8. Such is properly characterized as managing personal behavior.

The prospect that Appellant’s method uses a computerized “tool” does not render the claims less abstract. An abstract idea does not become non-abstract by limiting the invention to a particular technological environment. *Intellectual Ventures I*, 792 F.3d at 1367; *see also Affinity Labs of Texas, LLC v. DirecTV, LLC*, 838 F.3d 1253, 1259 (Fed. Cir. 2016) (Merely limiting the field of use of the abstract idea to a particular existing technological environment does not render the claims any less abstract); *see also Alice*, 573 U.S. at 224 (the fact a computer exists in the physical realm is beside the point). Unlike *Enfish*, the focus of the instant claims is not on improving a computer, but rather on a process for which computers are invoked merely as a tool. *See Enfish*, 822 F.3d at 1335–36.

Appellant demonstrates a fundamentally incorrect understanding of what it means for an idea to be integrated into a “practical” application. The notion that implementation of Appellant’s method may result in more efficient patient care does not render the claim any less abstract. *See Bancorp Servs., L.L.C. v. Sun Life Assur. Co. of Canada (U.S.)*, 687 F.3d 1266, 1278 (Fed. Cir. 2012) (explaining that performance by computer of operations that previously were performed manually, albeit less efficiently, does not convert an abstract idea into eligible subject matter).

To illustrate what is required for an invention to be “integrated” into a “practical application,” we reversed an Examiner’s Section 101 rejection in the case of *Ex Parte Hladio*, 2019 WL 2285538 (PTAB April 29, 2019). In that case, the inventor used sensor and computer technology to improve a surgical procedure that entailed navigation and alignment of a surgical tool and a patient’s bone. *Id.* We noted that both the bone and the surgical tool were physical real world tangible items. *Id.* We further noted that invention

was directed to improving the performance and outcome of the surgical procedure as a result of improved bone-tool alignment. *Id.* We reversed the Examiner in that case because, although the claims recited an abstract idea, the idea was integrated into an application that was “practical.” *Id.* In contrast, Appellant reminding a patient to take a pill falls far short of the standard of “practical application” required by the Section 101 Guidelines.

The Examiner is correct that Appellant’s patient device is merely a generic computer embodiment of its abstract idea. Ans. 5–6. The claims, thus, fail to integrate the judicial exception into a practical application and, therefore, are “directed to” an abstract idea.

Step 2

Turning to step 2 of the *Alice/Mayo* analysis, we look more precisely at what the claim elements add in terms of whether they identify an “inventive concept” in the application of the ineligible matter to which the claim is directed to. *See SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1167 (Fed. Cir. 2018). “A claim that recites an abstract idea must include ‘additional features’ to ensure ‘that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].’” *Alice*, 573 U.S. at 221 (quoting *Mayo*, 566 U.S. at 77–78). Those “additional features” must be more than well-understood, routine, conventional activity. *Mayo*, 566 U.S. at 79.

Under step two of the *Alice/Mayo* framework, the Examiner determines,

the claims does/do not include additional elements that either alone or in combination are sufficient to amount to significantly more than the judicial exception because to the extent that a “patient device”, “patient monitoring system”, “measurement

device”, and/or a “medication dispensing device” are claimed these are all generic, well-known, and conventional computing and sensor elements and are merely claimed to embody Applicant’s abstract idea in terms of the computing elements executing Applicant’s claimed abstract idea while employing the sensing elements to gather data.

Non-Final Act. 4.

Appellant argues that the Examiner failed to consider the claim “as a whole.” Appeal Br. 10. However, in the five pages devoted to this step of the analysis, Appellant does not identify a single element in the claim that amounts to more than what is well-understood, routine, or conventional. Appeal Br. 10–14. To be clear, it is not that we disagree with Appellant as to whether certain elements are well-understood, routine, or conventional. Here, Appellant does not identify any elements in the claim, individually or as an ordered combination, as providing an inventive concept. *Id.*; *see also* Reply Br. 2–9.

Appellant’s Specification describes the physiological monitoring devices used in the invention as “common,” such as weight scales. Spec. 7. There is no indication in the Specification that Appellant has achieved an advancement or improvement in patient monitoring technology. *See generally* Spec. The computer processing features of Appellant’s invention are described in the following terms:

In addition to the device interface(s) 10 and communication module 12, the telehealth hub 8 comprises a processor or control unit 16 that controls the operation of the telehealth hub 8, a memory module 18 (such as a hard disc, an optical storage medium or a non-volatile memory chip) that stores information and program code for use by the processor 16 in implementing the invention, and a user interface 20 which allows the patient to interact with the telehealth hub 8. The user interface 20 can comprise a display or screen (which may be a

touch screen), one or more buttons or keys, a pointer-control device, such as a mouse or touchpad, and/or one or more audio speakers.

The healthcare service 6 comprises a server 22 that is connected to the Internet or WAN 14 and that receives and stores patient data sent from the telehealth hub 8. The server 22 is connected to one or more computer terminals or devices 24 that are used by healthcare professionals to access the patient data.

Spec. 8. There is no indication in the Specification that Appellant has achieved an advancement or improvement in computer processing technology. *See generally* Spec. There is similarly no indication in the Specification that Appellant has achieved an advancement or improvement in display technology. *Id.*

All of the data processing, sensing, and input-output devices, as well as their interconnections, are described at a high level of generality that presumes familiarity on the part of the reader. *Id.* A patent applicant is required to submit a specification that contains a written description of the invention in “full, clear, concise, and exact terms.” 35 U.S.C. § 112(a). For purposes of the *Alice/Mayo* analysis, a specification demonstrates the well-understood, routine, conventional nature of step 2 “additional elements” when it describes them in a manner that indicates they are sufficiently well-known that they need not be described with particularity to satisfy 35 U.S.C. § 112(a). That is the case here.

Essentially, all Appellant has done here is use generic medical devices, such as a weight scale, to capture data, use computer processing technology to correlate information with date and time scheduling, generate information displays to a user, and record task completion data input by the patient-user. This is quintessentially “collecting information, analyzing it,

and displaying certain results of the collection and analysis.” *Elec. Power Grp.*, 830 F.3d at 1353. Appellant’s method recites an “abstract idea” for which computers are invoked merely as a tool. *Enfish*, 822 F.3d at 1335–36. In short, claim 1 is directed to an abstract idea that is implemented on a computer in a manner that merely states the abstract idea while adding the words “apply it.” *See Alice*, 573 U.S. at 223. This is not sufficient for patent eligibility. *Id.*

Appellant argues that claim 1 does not monopolize any abstract concept. Appeal Br. 9, This argument is not persuasive as it is well settled that “[w]here a patent’s claims are deemed only to disclose patent ineligible subject matter under the *Mayo* framework, as they are in this case, preemption concerns are fully addressed and made moot.” *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015).

We have considered Appellant’s remaining arguments and find them to be without merit. Accordingly, for the above reasons, the recited elements of claim 1, considered individually and as an ordered combination, do not constitute an “inventive concept” that transforms independent claim 1 into patent-eligible subject matter. On this record, we affirm the Examiner’s Section 101 rejection of claims 1, 4–14, 16, 17, 20, and 21.

Prior Art Obviousness Grounds of Rejection

Inasmuch as we sustain the Section 101 rejection of all pending claims, we do not reach the Section 103 art rejections of such claims. *See* 37 C.F.R. § 41.50(a)(1) (explaining that the affirmance of the rejection of a claim on any of the grounds specified constitutes a general affirmance of the decision of the Examiner on that claim, except as to any ground specifically reversed).

CONCLUSION

Claims Rejected	§	Reference(s)/Bases	Affirmed	Reversed
1, 4-14, 16, 17, 20, 21	101	Judicial Exception to Eligible Subject Matter	1, 4-14, 16, 17, 20, 21	
1, 4-9, 11, 12, 14, 16, 17, 20, 21	103	Kehr, Vemuri		
10	103	Kehr, Vemuri, Mathur, Porras		
13	103	Kehr, Vemuri, Porras		
Overall Outcome			1, 4-14, 16, 17, 20, 21	

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