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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte FUMIYUKI MATSUMURA,
AOI OZAKI and SHUHEI MORINAGA

Appeal 2019-006163
Application 14/945,776
Technology Center 3600

Before CARL W. WHITEHEAD JR., MICHAEL J. STRAUSS and
PHILLIP A. BENNETT, *Administrative Patent Judges*.

WHITEHEAD JR., *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE¹

Appellant² is appealing the final rejection of claims 1–8 under 35 U.S.C. § 134(a). Appeal Brief 5. Claims 1 and 2 are independent. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ Rather than reiterate Appellant’s arguments and the Examiner’s determinations, we refer to the Appeal Brief (filed April 5, 2019), the Reply Brief (filed August 16, 2019), the Final Action (mailed October 22, 2018) and the Answer (mailed July 11, 2019), for the respective details.

² We use the word Appellant to refer to “applicant” as defined in 37 C.F.R. § 1.42(a). Appellant identifies Nihon Kohden Corporation, as the real party in interest. Appeal Brief 2.

Introduction

According to Appellant, “The present claims are directed to a medical system for communication between a patient transmitter worn by a patient, and a plurality of portable terminals each carried by a medical staff person.”
Appeal Brief 5.

According to Appellant, a summary of the invention:

A medical system includes a transmitter that is attached to a patient to obtain vital sign of the patient, and transmits the vital sign together with position information on a position of the transmitter, and a plurality of portable terminals each of which is carried by a medical staff and displays a position and a condition of the patient based on the position information and the vital sign transmitted from the transmitter. Each of the portable terminals includes an accepting section accepting an operation of showing that the medical staff carrying the portable terminal is coming to the position of the patient, and a transmitting section that transmits, to the portable terminals other than the portable terminal accepting the operation, information corresponding to acceptance of the operation when the operation is accepted by the accepting section.

Specification 2.

Representative Claim

1. A medical system, comprising:
 - a transmitter that is attached to a patient to obtain vital sign of the patient, and transmits the vital sign together with position information of a position of the transmitter; and
 - a plurality of portable terminals each of which is carried by a medical staff and displays a position and a condition of the patient based on the position information and the vital sign transmitted from the transmitter,

wherein each of the portable terminals includes:

an accepting section accepting an operation of showing that the medical staff carrying the portable terminal is coming to the position of the patient; and

a transmitting section that transmits, to the portable terminals other than the portable terminal accepting the operation, information corresponding to acceptance of the operation when the operation is accepted by the accepting section.

References

Name³	Reference	Date
Ecker	US 2009/0278934 A1	November 12, 2009
Zdeblick	US 2014/0203950 A1	July 24, 2014

Rejections on Appeal

Claims 1–8 stand rejected under 35 U.S.C. § 101 because the claimed invention is directed to patent–ineligible subject matter. Final Action 5–7.

Claims 1–8 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Zdeblick and Ecker. Final Action 7–10.

PRINCIPLES OF LAW

A. Section 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.

³ All reference citations are to the first named inventor only.

However, the U.S. Supreme Court has long interpreted 35 U.S.C. § 101 to include implicit exceptions: “[l]aws of nature, natural phenomena, and abstract ideas” are not patentable. *E.g.*, *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014).

In determining whether a claim falls within an excluded category, we are guided by the Court’s two-part framework, described in *Mayo* and *Alice*. *Alice* at 217–18 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 75–77 (2012)). In accordance with that framework, we first determine what concept the claim is “directed to.” *See Alice*, 573 U.S. at 219 (“On their face, the claims before us are drawn to the concept of intermediated settlement, *i.e.*, the use of a third party to mitigate settlement risk.”); *see also Bilski v. Kappos*, 561 U.S. 593, 611 (2010) (“Claims 1 and 4 in petitioners’ application explain the basic concept of hedging, or protecting against risk.”).

Concepts determined to be abstract ideas, and thus patent ineligible, include certain methods of organizing human activity, such as fundamental economic practices (*Alice*, 573 U.S. at 219–20; *Bilski*, 561 U.S. at 611); mathematical formulas (*Parker v. Flook*, 437 U.S. 584, 594–95 (1978)); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)). Concepts determined to be patent eligible include physical and chemical processes, such as “molding rubber products” (*Diamond v. Diehr*, 450 U.S. 175, 191 (1981)); “tanning, dyeing, making waterproof cloth, vulcanizing India rubber, smelting ores” (*id.* at 182 n.7 (quoting *Corning v. Burden*, 56 U.S. 252, 267–68 (1853))); and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))).

In *Diehr*, the claim at issue recited a mathematical formula, but the Court held that “a claim drawn to subject matter otherwise statutory does not become nonstatutory simply because it uses a mathematical formula.” *Diehr*, 450 U.S. at 187; *see also id.* at 191 (“We view respondents’ claims as nothing more than a process for molding rubber products and not as an attempt to patent a mathematical formula.”). Having said that, the Court also indicated that a claim “seeking patent protection for that formula in the abstract . . . is not accorded the protection of our patent laws, and this principle cannot be circumvented by attempting to limit the use of the formula to a particular technological environment.” *Id.* (citation omitted) (citing *Benson* and *Flook*); *see, e.g., id.* at 187 (“It is now commonplace that an *application* of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.”).

If the claim is “directed to” an abstract idea, we turn to the second part of the *Alice* and *Mayo* framework, where “we must examine the elements of the claim to determine whether it contains an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application.” *Alice*, 573 U.S. at 221 (quotation marks omitted). “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].’” *Id.* (alterations in original) (quoting *Mayo*, 566 U.S. at 77). “[M]erely requir[ing] generic computer implementation[] fail[s] to transform that abstract idea into a patent-eligible invention.” *Id.*

B. USPTO Section 101 Guidance

In January 2019, the U.S. Patent and Trademark Office (USPTO) published revised guidance on the application of § 101. 2019 Revised Patent

Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (January 7, 2019) (“2019 Revised Guidance”). “All USPTO personnel are, as a matter of internal agency management, expected to follow the guidance.” *Id.* at 51; *see also* October 2019 Update⁴ at 1.

Under the 2019 Revised Guidance and the October 2019 Update, 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 activity such as a fundamental economic practice, or mental processes) (“Step 2A, Prong One”); and
- (2) additional elements that integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)–(c), (e)–(h) (9th ed. Rev. 08.2017, Jan. 2018)) (“Step 2A, Prong Two”).⁵

2019 Revised Guidance at 52–55.

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then look, under Step 2B, to whether the claim:

⁴ In response to received public comments, the Office issued further guidance on October 17, 2019, clarifying the 2019 Revised Guidance. USPTO, *October 2019 Update: Subject Matter Eligibility* (the “October 2019 Update”) (available at https://www.uspto.gov/sites/default/files/documents/peg_oct_2019_update.pdf).

⁵ This evaluation is performed by (a) identifying whether there are any additional elements recited in the claim beyond the judicial exception, and (b) evaluating those additional elements individually and in combination to determine whether the claim as a whole integrates the exception into a practical application. *See* 2019 Revised Guidance at 54–55.

- (3) adds a specific limitation beyond the judicial exception that is not “well-understood, routine, conventional” in the field (*see* MPEP § 2106.05(d)); or
- (4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.

2019 Revised Guidance at 52–56.

ANALYSIS

35 U.S.C. § 101 Rejection

The Examiner determines the claims are patent ineligible under 35 U.S.C. § 101. *See* Final Action 5–9; *see Alice*, 573 U.S. at 217 (describing the two-step 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/Mayo—Step 1 (Abstract Idea)

Step 2A—Prongs 1 and 2 identified in the 2019 Revised Guidance

Step 2A, Prong One

The Examiner determines, in the Answer, after the publishing of the 2019 Revised Guidance:

The courts has consolidated the abstract ideas into three categories however the instant claim still falls under one of those buckets. The claim(s) recite(s) “obtaining vital sign,” “transmitting the vital sign,” “displaying a position,” “showing the position of ...” and “transmitting ... information to acceptance of the operation ...” “The claimed limitations fall within the “certain methods of organizing human activity” (See [2019 Revised Guidance at 52]).

Answer 3.

Appellant contends:

As discussed in the Brief, the examiner's rejection under Section 101 failed to follow any of the current *2019 Revised Patent Subject Matter Eligibility Guidance*. Notably, the examiner simply distilled all of the claimed elements to their gist and alleged that each claim was an abstract "idea of itself." Final Rejection, pg. 6. Recognizing that such analysis is not proper, the Answer now alleges that every element of the claims "fall[s]" within the 'certain methods of organizing human activity'" category of abstract ideas. Answer, pg. 3. But this completely misunderstands the 'organizing human activity' category. That is, "methods of organizing human activity' are identified as, for example, 1) "fundamental economic principles or practices"; 2) "commercial or legal interactions"; and 3) "managing personal behavior or relationships or interactions between people." *Revised 2019 Subject Matter Eligibility Guidance*, Fed Reg. vol. 84, no. 4, pg. 52. Put another way, methods of organizing human activity are activities specific to human actions and relationships (e.g., business relationships, contracts/legal obligations, and social activities). See id. These are not merely human activities that result from another action, or activities that could be performed by a human; rather, they are themselves activities of organizing human behavior.

Reply Brief 2 (emphasis added).

We disagree with the Examiner's findings and find Appellant's argument persuasive of Examiner error because the claims fail to "recite matter that falls within [the] enumerated groupings of abstract ideas [and therefore] should not be treated as reciting abstract ideas." 2019 Revised Guidance at 53, 52. The Examiner fails to explain why specific claim elements recite activities that are methods of organizing human activity rather than result from a particular organization of activities. We are also do not perceive any of the recited elements as concepts performed in the human

mind or are mathematical concepts. Accordingly, we do not sustain the Examiner's 35 U.S.C. § 101 rejection of claims 1–8 and find claims 1–8 are patent eligible. *See* 2019 Revised Guidance at 54 (“If the claim does not recite a judicial exception (a law of nature, natural phenomenon, or subject matter within the enumerated groupings of abstract ideas in Section I), then the claim is eligible at Prong One of revised Step 2A. This concludes the eligibility analysis.”).

35 U.S.C. § 103 Rejection

Appellant contends:

Regarding independent claims 1 and 2, Zdeblick in view of Ecker, alone and in combination, do not teach, suggest or otherwise render obvious “a transmitter that . . . transmits [a] vital sign together with position information of a position of the transmitter” as recited by the claims. In rejecting this feature, the examiner [cites] to Zdeblick [0058] and [0114], alleging the reference teaches “retriev[ing] location information” and “detecting ambient temperature.”

Appeal Brief 8 (*citing* Final Action 4, 7).

We do not find Appellant's argument persuasive because Zdeblick discloses an application client module wherein:

[T]he mobile device 102 may have one or more application client modules. In one aspect, an application client module receives information from the detection arrangement 108 and process the information to confirm that the patient 106 has ingested the IEM [ingestible event marker] device 104. The application client module records a time and date that the IEM device 104 was detected, which corresponds approximately to the time and date when the IEM device 104 was ingested by the patient 106. In addition, client application module may store information encoded in the unique electrical current signature such as the

identity of the IEM device 104, the type of medication^[6] associated with the IEM device 104, the manufacturer of the medication and/or IEM device 104, among other information. In some aspects, the client application module may implement a data logging function tracking the ingestible events associated with the patient 106. The client application module can initiate communication with other devices and/or networks.

Zdeblick ¶57 (emphasis added).

Zdeblick further discloses, “the mobile device or elements of the mobile device such as the physical or logical elements of the device may be incorporated in any suitable device including” “appliances that are capable of receipt of data such as physiologic data and perform other data-related functions.” Zdeblick ¶42 (emphasis added).

We note, “As our precedents make clear, however, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR Int’l v. Teleflex Inc.*, 550 U.S. 398, 418 (2007). Accordingly, Zdeblick discloses a mobile device that can initiate communications with other devices, as well as, ascertain a client’s medical information. We discern no meaningful difference between Zdeblick’s medical information obtained from the client

⁶ It will be appreciated that the term “medication” or “medicinal dose” as used throughout this disclosure may include, without limitation, various forms of ingestible, inhalable, injectable, absorbable, or otherwise consumable medicaments and/or carriers therefor such as, for example, pills, capsules, gel caps, placebos, over capsulation carriers or vehicles, herbal, over-the-counter (OTC) substances, supplements, prescription-only medication, and the like, to be taken in conjunction with an IEM. Zdeblick ¶43.

and the claim's vital signs information obtained from the patient.

Zdeblick also discloses, “The application client modules also may process data from various data sources or backend services distributed throughout a network (e.g., servers) such as, for example, GPS [Global Positioning System] integrated circuits located either on or off the mobile device 500, carrier AGPS [Assisted Global Positioning System].” Zdeblick ¶58 (emphasis added). Zdeblick's mobile device 106 having access to positional information via “GPS integrated circuits located either on or off the mobile device” (paragraph 58) and transmits to processing system 138 via wireless node 120 (paragraph 77), teaches or at least suggests the transmitted information includes GPS positional information. In contrast, we find insufficient evidence that it would have been uniquely challenging or difficult to include positional information among the other information available on and transmitted by the mobile device to a care giver. Accordingly, we agree with the Examiner's findings that Zdeblick discloses transmitting the position of the mobile device or transmitter as required in both independent claims 1 and 2. *See* Final Action 8. We sustain the Examiner's obviousness rejection of independent claims 1 and 2 argued together. *See* Appeal Brief 8–9. We also sustain the Examiner's obviousness rejection of dependent claims 3–8, not argued separately with distinction. *See* Appeal Brief 9.

CONCLUSION

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1-8	101	Eligibility		1-8
1-8	103	Zdeblick, Ecker	1-8	
Overall Outcome			1-8	

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). *See* 37 C.F.R. § 1.136(a)(1)(v).

AFFIRMED