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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ROD D. WALTERMANN,
HERMANN FRANZ BURGMEIER,
JONATHAN GAITHER KNOX,
PETER HAMILTON WETSEL,
SUZANNE MARION BEAUMONT, and
RUSSELL SPEIGHT VanBLON¹

Appeal 2019-004291
Application 14/098,033
Technology Center 2100

Before BRADLEY W. BAUMEISTER, MICHAEL J. STRAUSS, and
JAMES B. ARPIN, *Administrative Patent Judges*.

BAUMEISTER, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner’s final rejection of claims 1–20, which constitute all of the pending claims. Appeal Br. 15–18. These claims stand rejected under 35 U.S.C. § 103 as being unpatentable. Final Action mailed July 5, 2018 (“Final Act.”), 3–16. We have jurisdiction under 35 U.S.C. § 6(b). We REVERSE. Pursuant to our discretionary authority under 37 C.F.R. § 41.50(b), we newly reject claim 1.

¹ Appellant identifies Lenovo (Singapore) PTE. LTD. Appeal Brief filed December 6, 2018 (“Appeal Br.”), 3.

CLAIMED SUBJECT MATTER

Appellant describes the subject matter of the claimed invention as follows:

An aspect provides a method, including: accessing, using a processor, a user profile based on user context information, wherein the user context information utilizes user device events; preparing, using the processor, a list of items based on the user profile related to a particular time period organized according to importance based on the user profile; and presenting, using the processor, the list of items related to the particular time period.

Abstract.

Independent claim 1, reproduced below with paragraph designators added for clarity, illustrates the subject matter of the appealed claims:

1. A method, comprising:
 - (a) accessing, using a processor, a user profile based on user context information, wherein the user context information utilizes prior user device events associated with at least one daily activity of a user;
 - (b) preparing, using the processor, a list of future event items including at least one scheduled event based on the user profile, wherein the list of future event items is related to a particular upcoming time period;
 - (c) organizing the list of future event items according to importance by identifying a frequency of occurrence of each of the prior user device events within a predetermined past time period, wherein the organizing comprises prioritizing more frequently occurring prior user device events; and
 - (d) presenting, using the processor, the organized list of future event items related to the particular time period.

DETERMINATIONS AND CONTENTIONS²

The Examiner rejects claims 1–20 under 35 U.S.C. § 103 as being unpatentable over Kidron (US 2012/0215684 A1; published Aug. 23, 2012) and Contant (US 2011/0184247 A1; published July 28, 2011). Final Act. 3–16.

The Examiner finds that Kidron discloses all of the limitations of independent claim 1 with one exception. Final Act. 3–6. Specifically, the Examiner finds that Kidron does not teach the claim language, “wherein the user context information utilizes prior user device events associated with at least one daily activity of a user.” *Id.* at 4. The Examiner finds that Contant teaches this claim language and that “[i]t would have been obvious to modify Kidron as taught by Contant because tracking user activities on a daily, weekly or annual basis would [have] enhance[d] trend analysis.” *Id.* (citing Contant ¶ 21).

Appellant presents several arguments. Appeal Br. 15–18. Most persuasive, Appellant argues that the cited references, as combined, do not teach all of the claimed limitations. Appeal Br. 18. Specifically, Appellant notes that the Examiner does not rely on Kidron for teaching the claim language “wherein the user context information utilizes prior user device events *associated with at least one daily activity of a user.*” *Id.* (citing Final Act. 4). Appellant argues that Contant does not teach this limitation either.

² Rather than repeat the Examiner’s positions and Appellant’s arguments in their entirety, we refer to the above mentioned Appeal Brief, as well as the following documents for their respective details: the Examiner’s Answer mailed March 13, 2019 (“Ans.”); and the Reply Brief filed May 13, 2019 (“Reply Br.”).

STANDARD OF REVIEW

The Board conducts a limited *de novo* review of the appealed rejections for error based upon the issues identified by Appellant, and in light of the arguments and evidence produced thereon. *Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential).

ANALYSIS

I.

The Examiner relies on Contant's disclosure, "[t]he data store may include a database that tracks many details about the user's activity over a long period to track trends on a *daily*, weekly, annual, or other basis." Contant ¶ 21, *cited in* Final Act. 3 (emphasis added). That is, the cited passage teaches that the user's activity can be *tracked* daily. But this passage does not teach tracking the *daily activity* of a user, as claimed. That is, the relied upon passage of Contant may teach the daily monitoring of existing conditions or results, but not necessarily monitoring of daily activities.

Accordingly, Appellant persuades us of error in the Examiner's obviousness rejection of independent claim 1. We, therefore, reverse the Examiner's rejection of that claim and of claims 2–20, which either depend from claim 1 or otherwise include similar claim language.

II.

This determination does not end our inquiry. Appellant does not dispute that, aside from failing to teach monitoring the user's daily activities, Kidron teaches every other element of claim 1. *See generally* Appeal Br. 15–18; Reply Br. 17–20. And we agree that Kidron teaches the other

elements of claim 1. For example, Kidron teaches that accessing the prior user device events may include monitoring information about the users' music listening history, including monitoring what time of the day the user listens to the music:

At 414, user profile preference information may be retrieved. The user profile preference information may include user provided information such as favorite artist, favorite genre, album, etc. Such information may be provided by the user during registration, profile creation or profile update. The user profile preference may also be derived from the user's [Usage, Payment, Collection, and Apportionment Platform (UPCAP)] profile. *The UPCAP profile may be an "in house" profile organically built over time using information learned from the user, such as listening history. The UPCAP profile may include not only information such as the user's preferred album, tracks, artists, genre and other attributes, but also a breakdown of the user's preferences according to location, time, mood (e.g., mood indicated by the user's mood status) and/or the like. For example, the UPCAP may track and analyze the user's listening history over time to surmise that the user is likely to listen to ambient music late at night, rock music in early morning, and instrumental music at midday, etc.* Furthermore, the user profile preference information may facilitate the UPCAP's efforts to pre-fetch tracks in anticipation of the user's desire to listen to such pre-fetched tracks.

Kidron ¶ 62 (emphasis added).

It was known at the time of the invention that some people listen to music daily. It would have been obvious to one of ordinary skill in the art at the time of the invention to use Kidron's invention to monitor the music listening activities of users who listen daily to music. One would have been motivated to target such daily-listening users at least because such users provide the system a greater amount of music-listening data, which would

improve the customization of the pre-fetched tracks that are to be provided to the user in the future.

We, therefore, reject claim 1 under 35 U.S.C. § 103 as being obvious over Kidron. Because our reasoning for rejecting claim 1 differs from that of the Examiner's, we designate this rejection as a new ground pursuant to our discretionary authority under 37 C.F.R. § 41.50(b).

Although we decline to reject claims 2–20 as obvious pursuant to our discretionary authority under 37 C.F.R. § 41.50(b), we emphasize that our decision does not mean that the remaining claims are necessarily patentable. Rather, we merely leave the patentability determination of these claims to the Examiner. *See* MPEP § 1213.02.

PATENT ELIGIBILITY

Summary

Pursuant to our authority under 37 C.F.R. § 41.50(b), we also enter a new ground of rejection for claim 1 under 35 U.S.C. § 101 as directed to a judicial exception to patent-eligible subject matter, without reciting significantly more.

PRINCIPLES OF LAW

A. SECTION 101:

Inventions for a “new and useful process, machine, manufacture, or composition of matter” generally constitute patent-eligible subject matter. 35 U.S.C. § 101. 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. *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-step framework, described in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66 (2012), and *Alice*. *Alice*, 573 U.S. at 217–18 (citing *Mayo*, 566 U.S. at 75–77). 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 water-proof 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.* at 191 (citing *Benson* and *Flook*); *see also, 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 step 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 (internal 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 35 U.S.C. § 101. *See* 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) (“2019 Guidance”), *updated by* USPTO, *October 2019 Update: Subject Matter Eligibility* (available at https://www.uspto.gov/sites/default/files/documents/peg_oct_2019_update.pdf) (“October 2019

Guidance Update”); *see also* October 2019 Patent Eligibility Guidance Update, 84 Fed. Reg. 55942 (Oct. 18, 2019) (notifying the public of the availability of the October 2019 Guidance Update). “All USPTO personnel are, as a matter of internal agency management, expected to follow the guidance.” 2019 Guidance, 84 Fed. Reg. at 51; *see also* October 2019 Guidance Update at 1. The Manual of Patent Examining Procedure (“MPEP”) now incorporates this revised guidance and subsequent updates at Section 2106 (9th ed. Rev. 10.2019, rev. June 2020).³

Under MPEP § 2106, we first look to whether the claim recites the following:

- (1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activities such as a fundamental economic practice, or mental processes); and
- (2) additional elements that integrate the judicial exception into a practical application.⁴

MPEP §§ 2106.04(a), (d).

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

³ All references to the MPEP are to the Ninth Edition, Revision 10.2019 (Last Revised June 2020), unless otherwise indicated.

⁴ “Examiners evaluate integration into a practical application 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.” MPEP § 2106.04(d)II.

(3) adds a specific limitation beyond the judicial exception that is not “well-understood, routine, [and] conventional activity” in the field; 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.

MPEP § 2106.05(d).

Analysis

STEP 2A, PRONG 1:

Under step 2A, prong 1, of the 2019 Guidance, we first look to whether the claim recites any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activities such as a fundamental economic practice, or mental processes). MPEP § 2106.04(a).

Limitation (a) recites “accessing . . . a user profile based on user context information, wherein the user context information utilizes prior user device events associated with at least one daily activity of a user.” Aside from reciting that the step is performed using a processor, limitation (a) reads on a person accessing records, e.g., written records, regarding a user. Accessing information in this manner merely entails reading—a mental observation that can be performed in the human mind. The 2019 Guidance recognizes mental processes, including observations, as constituting a patent-ineligible abstract idea. MPEP § 2016.04(a). Accordingly, limitation (a) recites a patent-ineligible abstract idea recognized by the 2019 Guidance.

Limitation (b) recites “preparing . . . a list of future event items including at least one scheduled event based on the user profile, wherein the

list of future event items is related to a particular upcoming time period.”
Aside from reciting that the step is performed using a computer,
limitation (b) reads on a person creating a list of scheduled events.
Preparing a list of schedule items constitutes an evaluation, judgment, or
opinion that can be performed in the human mind or with the aid of pen and
paper.

The 2019 Guidance recognizes such mental processes as constituting
an abstract idea. MPEP § 2016.04. The “mental processes” judicial
exception also includes concepts that can be performed by a human with a
pen and paper, as well as those that can be performed entirely in the mind.
See October 2019 Guidance Update at 9 (“A claim that encompasses a
human performing the step(s) mentally with the aid of a pen and paper
recites a mental process”) (emphasis omitted). Accordingly, limitation (b)
recites a patent-ineligible abstract idea recognized by the 2019 Guidance.

Limitation (c) recites, “organizing the list of future event items
according to importance by identifying a frequency of occurrence of each of
the prior user device events within a predetermined past time period,
wherein the organizing comprises prioritizing more frequently occurring
prior user device events.” Organizing events similarly constitutes a mental
evaluation, judgment, or opinion. MPEP § 2016.04(a). Accordingly,
limitation (c) recites a patent-ineligible abstract idea recognized by the
2019 Guidance.

Limitation (d) recites, “presenting . . . the organized list of future
event items related to the particular time period.” Aside from reciting that
the presentation is performed using a processor, limitation (d) reads on
displaying a list, which entails communicating information. Communicating

information or data constitutes a certain method of organizing human activity. More specifically, communicating information constitutes a method of managing interactions between people. MPEP § 2016.04(a). The 2019 Guidance expressly recognizes this certain method of organizing human activity as constituting a patent-ineligible abstract idea.

Communicating information also constitutes a mental process of expressing or communicating an opinion to another. The 2019 Guidance recognizes mental processes, including expressing opinions, as constituting a patent-ineligible abstract idea. MPEP § 2016.04(a). Accordingly, limitation (d) recites a patent-ineligible abstract idea.

For these reasons, each of limitations (a) through (d) recites a judicial exception to patent-eligible subject matter under step 2A, prong 1, of the 2019 Guidance. *See RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017) (“Adding one abstract idea . . . to another abstract idea . . . does not render the claim non-abstract.”)

STEP 2A, PRONG 2:

Under step 2A, prong 2, of the 2019 Guidance, we next analyze whether claim 1 recites additional elements that individually or in combination integrate the judicial exception into a practical application. MPEP § 2106.04(d). The 2019 Guidance identifies considerations indicative of whether an additional element or combination of elements integrate the judicial exception into a practical application, such as an additional element reflecting an improvement in the functioning of a computer or an improvement to other technology or technical field. MPEP § 2106.05(a).

In the present case, the only additional element that claim 1 recites beyond the above-noted abstract ideas is that the steps of accessing,

preparing, and presenting are performed “using a processor.” A “processor” is a generic computer component. Its recitation in limitations (a), (b), and (d), then, amounts to mere instructions to implement the abstract idea on a computer, which is insufficient to make the claim patent eligible. *See Alice*, 573 U.S. at 226 (determining that the claim limitations “data processing system,” “communications controller,” and “data storage unit” were generic computer components that amounted to mere instructions to implement the abstract idea on a computer); October 2019 Guidance Update at 11–12 (recitation of generic computer limitations for implementing the abstract idea “would not be sufficient to demonstrate integration of a judicial exception into a practical application”).

Moreover, when limitations (a) and (d) are read in full so as to include the requirement that the steps are performed “using a processor,” these limitations do not integrate the steps of preparing and organizing a list of items, as recited in limitations (b) and (c), into a practical application because limitations (a) and (d), in full, are directed to extra-solution activity.

More specifically, limitation (a) recites insignificant pre-solution activity:

An example of pre-solution activity is a step of gathering data for use in a claimed process, *e.g.*, a step of obtaining information about credit card transactions, which is recited as part of a claimed process of analyzing and manipulating the gathered information by a series of steps in order to detect whether the transactions were fraudulent.

MPEP § 2106.05(g).

Similarly, limitation (d) recites insignificant post-solution activity. *See, e.g., Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1241–42 (Fed.

Cir. 2016) (holding that printing or downloading generated menus constituted insignificant extra-solution activity).

For these reasons, claim 1 is not directed to an improvement in the function of a computer or to any other technology or technical field. MPEP § 2106.05(a). Nor is claim 1 directed to a particular machine or transformation. Nor does claim 1 add any other meaningful limitations for the purposes of the analysis under Section 101. MPEP §§ 2106.05(b), (c), (e). Accordingly, the additional elements of claim 1 do not integrate the recited abstract ideas into a practical application within the meaning of the 2019 Guidance. *See* MPEP § 2016.05(a)–(c), (e).

STEP 2B:

Under step 2B of the 2019 Guidance, we next analyze whether claim 1 adds any specific limitations beyond the judicial exception that, either alone or as an ordered combination, amount to more than “well-understood, routine, conventional” activity in the field. MPEP § 2106.05(d); *see more generally* MPEP § 2106.05.

Appellant’s Specification indicates that the recited “processor” was well understood, routine and conventional. *See, e.g.*, Spec. ¶ 17:

While various other circuits, circuitry or components may be utilized in information handling devices, with regard to smart phone and/or tablet circuitry 100, an example illustrated in FIG. 1 includes a system on a chip design found for example in tablet or other mobile computing platforms. Software and processor(s) are combined in a single chip 110. Processors comprise internal arithmetic units, registers, cache memory, busses, I/O ports, etc., as is well known in the art. Internal busses and the like depend on different vendors, but essentially all the peripheral devices (120) may attach to a single chip 110. The circuitry 100 combines the processor, memory control, and I/O

controller hub all into a single chip 110. Also, systems 100 of this type do not typically use SATA or PCI or LPC. Common interfaces, for example, include SDIO and I2C.

Furthermore, the Specification does not indicate that consideration of these conventional elements as an ordered combination adds any significance beyond the additional elements, as considered individually. Rather, the Specification indicates that the invention, as a whole, is directed to making more efficient with the use of a conventional computer, the abstract idea of gathering profile data, organizing calendar items, and presenting the list of items. Spec. ¶ 3.

For these reasons, we determine that claim 1 does not recite additional elements that, either individually or as an ordered combination, amount to significantly more than the judicial exception within the meaning of the 2019 Guidance. MPEP § 2106.05(d).

Conclusion

Accordingly, we exercise our discretionary authority under 37 C.F.R. § 41.50(b) and newly reject claim 1 under 35 U.S.C. § 101 as being directed to a judicial exception to patent-eligible subject matter without reciting significantly more.

Although we decline to reject claims 2–20 pursuant to our discretionary authority under 37 C.F.R. § 41.50(b), we emphasize that our decision does not mean that the remaining claims are necessarily directed to patent-eligible subject matter. Rather, we merely leave the patentability determination of these claims to the Examiner. *See* MPEP § 1213.02.

DECISION SUMMARY

In summary:

Claims Rejected	35 U.S.C. §	Basis/ Reference(s)	Affirmed	Reversed	New Ground
1–20	103	Kidron, Contant		1–20	
	103	Kidron			1
	101	Eligibility			1
Overall Outcome				1–20	1

FINALITY AND RESPONSE

This decision contains a new ground of rejection pursuant to 37 C.F.R. § 41.50(b). Rule 37 C.F.R. § 41.50(b) provides “[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review.”

Rule 37 C.F.R. § 41.50(b) also provides that the Appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

(1) *Reopen prosecution.* Submit an appropriate amendment of the claims so rejected or new Evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the prosecution will be remanded to the examiner. . . .

(2) *Request rehearing.* Request that the proceeding be reheard under § 41.52 by the Board upon the same record. . . .

REVERSED;
37 C.F.R. § 41.50(b)