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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JOSEPH BREWER¹

Appeal 2017-007980
Application 13/271,278
Technology Center 3600

Before BRADLEY W. BAUMEISTER, JOSEPH P. LENTIVECH, and
AARON W. MOORE, *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, 3–6, 8, 10–13, 15, and 17–23. App. Br. 8–19.
We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ Appellant identifies iHeartMedia Management Services, Inc. as the real party in interest. Appeal Brief filed December 22, 2016 (“App. Br.”), 3.

THE INVENTION

Appellant describes the present invention as follows:

A media posting system and method for managing a media advertising order with respect to a media outlet are disclosed. The media advertising order can be ordered via a media ordering application. Exact time data with respect to the media outlet can be extracted from a traffic sub-system. Exact time data can be stored in a database and linked with the ordered spot. Audience delivery data obtained from a rating unit can be merged into the database and linked with the ordered spot and the exact time data. A report with respect to the ordered spot can be generated and displayed on a user interface by comparing the estimated audience delivery data associated with the media advertising order to an actual audience delivery data. At least one of the reports may be based on at least one of: a market criterion; a media station criterion; and a national buy criterion.

Abstract.

Independent claim 1 illustrates the claimed invention. The claim is reproduced below with modified formatting and added emphasis of claim language that recites an abstract idea:

1. *A method for managing an advertising spot or campaign, comprising:*

[i] *receiving a media advertising order with respect to a media outlet, the media advertising order received from a media ordering application module, wherein the media advertising order includes a schedule including at least one ordered advertising spot scheduled to be aired at a specified time as well as estimated audience delivery data associated therewith;*

[ii] *in response to an advertisement being run in the at least one ordered advertising spot after receiving the media advertising order, obtaining exact time data associated with the at least one ordered advertising spot and the media outlet, by extracting the exact time data from a traffic server platform with data warehousing utilized for data extraction, wherein the exact*

time data equates to a time at which the advertisement ran in the at least one ordered advertising spot;

[iii] *storing the exact time data in a query language relational database and linking with the ordered advertising spot by matching the exact time with a corresponding ordered advertising spot, the matching including retrieving one or more query language stored procedures to identify the ordered advertising spot for the media outlet;*

[iv] *obtaining from a rating unit actual audience delivery data generated in association with the advertisement being run in the at least one ordered advertising spot, the actual audience delivery data calculated based on information provided in one or more survey books;*

[v] *linking the actual audience delivery data with the media advertising order and the exact time data, by merging the actual audience delivery data into the query language relational database and thereafter matching with the previously matched ordered advertising spot and exact time data; and*

[vi] *generating and transmitting to a user interface at least one report with respect to the media advertising based on a comparison between the estimated audience delivery data and the actual audience delivery data.*

THE REJECTION AND CONTENTIONS

Claims 1, 3–6, 8, 10–13, 15, and 17–23 stand rejected under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter. Final Act. 2–8.² The Examiner determines that the claims recite an abstract idea of comparing and organizing information and that the claim elements, when

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 Final Action mailed October 4, 2016 (“Final Act.”); the Examiner’s Answer mailed March 6, 2017 (“Ans.”); and the Reply Brief filed May 5, 2017 (“Reply Br.”).

viewed individually and as an ordered combination, do not include additional elements sufficient to amount to significantly more than the abstract idea. Final Act. 2–4.

Appellant argues, *inter alia*, that (1) the rejection does not comply with Office guidance (App. Br. 12–13); (2) the claims are not directed to an abstract idea (*id.* at 13–15); (3) automating a manual process where the computer does it differently than humans or previous computers may be patent eligible (*id.* at 15–16); (4) new and useful applications of an abstract idea are eligible as statutory subject matter (*id.* at 16–18); and (5) an ordered combination of limitations can provide the “inventive concept” (*id.* at 18).

We address Appellant’s arguments individually below.³

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. However, the Supreme Court has long interpreted 35 U.S.C. § 101 to include implicit exceptions: “[I]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) (citation omitted).

In determining whether a claim falls within an excluded category, we are guided by the Supreme Court’s two-step framework, described in *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66 (2012), and

³ Appellant argues only claim 1 and asserts that the other claims are patentable for similar reasons. App. Br. 18–19. We, therefore, limit our analysis to claim 1. *See* 37 C.F.R. § 41.37(c)(1)(iv).

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 (1854))); 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 Supreme 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 176; *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 Supreme 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.* (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 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 (citation 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

The United States Patent and Trademark Office (“USPTO” or “the Office”) recently published revised guidance on the application of § 101. USPTO’s Memorandum, 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) (“2019 Guidance”). Under that guidance, 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 (*see* MPEP § 2106.05(a)–(c), (e)–(h)).

See 2019 Guidance, 84 Fed. Reg. 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 to whether the claim:

(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.

See 2019 Guidance, 84 Fed. Reg. at 56.

ANALYSIS

Recitation of an Abstract Idea

Appellant argues that the Examiner’s Final Action does not comply with the USPTO’s May 2016 Guidance. App. Br. 12–13. Appellant also argues that the Examiner has not established that the claims recite an abstract idea by virtue of being directed to “an idea of itself.” *Id.* at 13–16.

We need not address either of these arguments because, as noted above, the Office’s May 2016 Guidance has been superseded by the 2019 Guidance, and this newer Guidance does not authorize Examiners to determine that claims recite abstract ideas by virtue of the claim being characterized as an idea unto itself. *See* 84 Fed. Reg. at 52–53. We instead

inquire, then, whether the claims recite one or more of the abstract ideas that still are authorized by the 2019 Guidance.

We determine that claim 1 does recite abstract ideas that are authorized by the 2019 Guidance. For example, claim 1 recites an abstract idea that reasonably can be characterized, *inter alia*, as various mental processes—concepts that can be performed in the human mind. *See id.* at 52; *see also Mayo*, 556 U.S. at 71 (“mental processes[] and abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technologic work”).

More specifically, limitation [i] recites a human observation: “receiving a media advertising order with respect to a media outlet . . . , wherein the media advertising order includes a schedule including at least one ordered advertising spot scheduled to be aired at a specified time as well as estimated audience delivery data associated therewith.” Limitation [iii] of claim 1 recites a step of mental observation or recordkeeping that could have been performed in the pre-Internet era with pen and paper: “storing the exact time data in a . . . database and linking with the ordered advertising spot by matching the exact time with a corresponding ordered advertising spot.” Limitation [v] recites a step of mental evaluation or recordkeeping that also could have been performed in the pre-Internet era with pen and paper: “linking the actual audience delivery data with the media advertising order and the exact time data, by merging the actual audience delivery data into the . . . database and thereafter matching with the previously matched ordered advertising spot and exact time data.”

Claim 1 also includes steps that reasonably can be characterized as reciting methods of organizing human activities, such as organizing business

relations associated with commercial interactions or legal obligations associated with advertising and marketing activities. *See* 84 Fed. Reg. at 52; *see also Two-Way Media Ltd. v. Comcast Cable Comm., LLC*, 874 F.3d 1329, 1340 (Fed. Cir. 2017) (concluding that “monitoring the delivery of real-time information to a user or users,” and “measuring the delivery of real-time information for commercial purposes” reasonably may be characterized as abstract ideas).

For example, claim 1’s preamble and limitation [i] recite a method for organizing advertising activities: “A method for managing an advertising spot or campaign, comprising [i] receiving a media advertising order with respect to a media outlet, . . . wherein the media advertising order includes a schedule including at least one ordered advertising spot scheduled to be aired at a specified time as well as estimated audience delivery data associated therewith.” Limitation [vi] recites a business practice that could have been performed in the pre-Internet era with pen and paper (generating an advertising report), as well as by means of human courier (transmitting the advertising report): “generating and transmitting . . . at least one report with respect to the media advertising based on a comparison between the estimated audience delivery data and the actual audience delivery data.”

The fact that claim 1 may be characterized as reciting plural abstract ideas does not make the claim any less abstract. That is, a claim need not be addressed to a single abstract idea to be patent ineligible. As our reviewing court has held, combining several abstract ideas does not render the combination any less abstract. *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.”); *see also*

FairWarning IP, LLC v. Iatric Sys., Inc., 839 F.3d 1089, 1093–94 (Fed. Cir. 2016) (patent-ineligible claims were directed to a combination of abstract ideas). Also, the level of abstraction at which the Examiner describes the invention does not change the accuracy of the Examiner’s determination. *Apple v. Ameranth Inc.*, 842 F.3d 1229, 1240 (Fed. Cir. 2016) (“An abstract idea can generally be described at different levels of abstraction.”)

As such, we agree with the Examiner’s ultimate conclusion that claim 1 recites abstract ideas. We next inquire, then, pursuant to step 2A, Prong 2, of the 2019 Guidance, whether claim 1 integrates the abstract ideas into a practical application.

Integration of the Abstract Ideas into a Practical Application

Appellant argues that *McRO, Inc. v. Bandai Namco Games America Inc.*, 837 F.3d 1299 (Fed. Cir. 2016), stands for the proposition that “[a]utomating a manual process where the computer does it differently than humans or previous computers may be patent eligible.” App. Br. 15. Appellant further argues that the claims “include a properly claimed improvement to a previously flawed computer-based solution/process by replacing it with a new and different process.” *Id.* Appellant further argues that “[t]he claims . . . are necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks. *Id.* (citing *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257 (Fed. Cir. 2014).

Appellant does not present any persuasive factual basis, though, to support this conclusory argument that the invention, as claimed, improves

technology or solves a problem that is rooted in technology—at least not in relation to the limitations individually. *See* App. Br. 15–18. Appellant primarily merely argues that because “the USPTO is unable to find prior art that discloses the claimed steps, it is only logical that the steps cannot be conventional or well-known.” *Id.* at 17.

This argument is unpersuasive. “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.” *Diamond v. Diehr*, 450 U.S. 175, 188–89 (1981). A novel and nonobvious claim directed to a purely abstract idea is, nonetheless, patent ineligible. *See Mayo*, 566 U.S. at 90.

Appellant also recites a list of structural elements that are set forth in the claims:

the claims include many positively claimed structural elements and process steps not simply limited to “information”. For example, but not limited thereto: an ordering application (part of rep application ordering module 152 connected to interface 153 for user input), traffic sub-system (element 220), a schedule (determines action taken at specific time at a radio station (media outlet)), estimated audience delivery (calculated pre-order), extracting ([Set Query Language (SQL) server integration services (SSIS)] job **320** may provide a platform for data integration and workflow applications which feature a fast and flexible data warehousing tool utilized for data extraction); a traffic server platform with data warehousing utilized for data extraction; a rating unit (system **200** may further utilize the rating application **370** in order to generate matching SQL scripts **380** with respect to an ETR server **360**), a query language relational database; matching (one or more SQL stored procedures that can match the traffic and security identification information on a security identification contract number and finds appropriate

media advertising order **285** in the media outlet **210**); and retrieving one or more query language stored procedures (SQL database 315 may provide a SSIS (SQL server integration services) job 320 to the traffic sever 330 in order to import the media advertising order 285 from the advertiser 295. The SQL, server 310 may include an SSIS package that can be scheduled via a SQL agent in order to load the ordered data 285 into a traffic database 325 associated with the traffic server 330).

App. Br. 17–18.

Appellant’s recitation of the structural elements that are set forth within the claims does not address the relevant question, though, which is whether the claims are directed to improvements in the functioning of a computer or to any other technology or technical field. *See* MPEP § 2106.05(a). Nor is this listing of elements accompanied by persuasive evidence or argument for why the claims recite a particular machine or transformation or include other meaningful limitations. *See* MPEP § 2106.05(b), (c), (e).

Appellant further argues for patent eligibility on the basis that “[t]he inventive concept inquiry requires more than recognizing that each claim element, by itself, was known in the art.” App. Br. 18 (citing *BASCOM Glob. Internet Sers., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016)). In this regard, Appellant argues the following:

the rejection essentially suggests that because SQL relational databases have been around 1996, that these claim elements represent nothing more than a well-known field of use. However, SQL relational databases serve a specific functionality different from generic computer processing techniques and implement specific functionality within the claims as related to other claim elements and limitations. Describing these specific claim elements as prior art and then discarding their importance to the ordered combination of limitations appears to be performed in error.

App. Br. 18.

Again, though, this argument merely contains the conclusory assertion that “SQL relational databases serve a specific functionality different from generic computer processing techniques” without providing sufficient explanation or persuasive evidence of what that specific functionality allegedly is or how the invention improves this functionality that allegedly differs from generic functionality.

To summarize, Appellant recites various undisputed principles of patent-eligibility jurisprudence in the Appeal Brief, but does not explain why the claimed limitations are similar to the facts of the cited cases. That is, Appellant’s conclusory and unsupported arguments do not persuade us that claim 1 integrates the recited abstract ideas into a practical application, as outlined by the step 2A, prong 2, of the 2019 Guidance.

Well-Understood, Routine, and Conventional Activities

The Examiner has set forth a rational basis for concluding “that the claimed invention can be carried out by just about any kind of computing device known to humanity.” Final Act. 6 (citing Spec. ¶ 27). The cited portion of Appellant’s Specification reads, as follows:

Generally, program modules include, but are not limited to, routines, subroutines, software applications, programs, objects, components, data structures, etc., that perform particular tasks or implement particular abstract data types and instructions. Moreover, those skilled in the art will appreciate that the disclosed method and system may be practiced with other computer system configurations such as, for example, hand-held devices, multi-processor systems, data networks, microprocessor-based or programmable consumer electronics,

networked PCs, minicomputers, mainframe computers, servers, and the like.

Spec. ¶ 27.

Our review of Appellant's Specification provides further evidence that the additionally recited claim elements were well understood, routine, and conventional at the time of filing:

FIGS. 1–2 are thus intended as an example and not as an architectural limitation with respect to particular embodiments. Such embodiments, however, are not limited to any particular application or any particular computing or data-processing environment. Instead, those skilled in the art will appreciate that the disclosed system and method may be advantageously applied to a variety of system and application software. Moreover, some embodiments may include a variety of different computing platforms including Macintosh, UNIX, LINUX, and the like.

Spec. ¶ 30 (emphasis added).

The security identification server 350 may transmit data to an [exact time report or run (ETR)] staging database 335 associated with the ETR staging server 340. The rating application 370 may further update the survey book associated with the rating unit 230 and thereby provide the audience delivery data 260 with respect to the media advertising order 285. The rating application 370 can be a C+ application that runs on the rating unit 230, but may also be in any computing language known to those skilled in the art.

Spec. ¶ 42 (emphasis added).

DECISION

Appellant has not persuaded us of error in the Examiner's rejection of the appealed claims for being directed to patent-ineligible subject matter.

We, therefore, affirm the Examiner's decision to reject claims 1, 3–6, 8, 10–13, 15, and 17–23 under 35 U.S.C. § 101.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv)

AFFIRMED