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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JOHN H. YOAKUM

Appeal 2020-001226
Application 14/068,513
Technology Center 3600

Before MURRIEL E. CRAWFORD, PHILIP J. HOFFMANN, and
BRADLEY B. BAYAT, *Administrative Patent Judges*.

BAYAT, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 1–21, which constitute all pending claims in the application. 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. Appellant identifies the real party in interest as Avaya Inc. Appeal Br. 2.

CLAIMED SUBJECT MATTER

Appellant's claimed invention "relates to employee access to employer communications systems." Spec. ¶ 1. More specifically, the claims address "control of employee access to employer communications systems during periods of employee furlough." *Id.* ¶ 23. Claims 1, 16, and 21 are independent and recite substantially similar subject matter. Claim 16, reproduced below, is representative of the claimed subject matter.

16. A method for providing unified control of employee access to a plurality of employer communications systems during periods of employee furlough, comprising:
 - receiving from a user a set of employee furlough information for each of a plurality of employees, the employee furlough information for each of the employees of the plurality of employees comprising an employee indicia identifying the employee, a furlough period identifying a time period of furlough for the employee, and a list of restricted employer communication systems from which the employee is restricted during the furlough period;
 - determining the restricted employer communications systems for each employee of the plurality of employees from among the plurality of employer communications systems based on the received employee furlough information for each employee; and
 - instructing the restricted employer communications systems to restrict communications access of each employee to the restricted employer communications systems during the furlough period for each employee, wherein the restricted employer communications systems include at least one telephonic system and at least one email system and wherein instructing the restricted employer communications systems further comprises providing forwarding instructions for incoming calls on the at least one telephonic system and incoming email messages on the at least one email system.

REJECTION

Claims 1–21 are rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter. Final Act. 2.

OPINION

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: “[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 Supreme Court’s two-step framework, described in *Mayo* and *Alice*. *Id.* 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 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 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 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* 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.*

(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.*

The USPTO published revised guidance on the application of § 101. *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50 (Jan. 7, 2019) (“Guidance”). Under the Guidance, the Examiner looks 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); and
- (2) additional elements that integrate the judicial exception into a practical application (*see* Manual of Patent Examining Procedure (“MPEP”) § 2106.05(a)–(c), (e)–(h)).

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, does the Examiner 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 Guidance, 84 Fed. Reg. at 56.

Alice Step One

Prong One of Step 2A of the Guidance

Appellant argues all claims together as a group. *See* Appeal Br. 5–8. We select claim 16 as representative of the group, with claims 1–15 and 17–21 standing or falling therewith. *See* 37 C.F.R. § 41.37(c)(1)(iv).

In evaluating the three steps of process claim 16, the Examiner finds the step of receiving employee furlough information from a user is a data gathering step that represents insignificant extra-solution activity. Final Act. 3–4. As for the “determining” and “instructing” steps of claim 16, the Examiner determines that these steps recite abstract mental processes because they can be performed in the human mind. *Id.* at 3 (citing Guidance, 84 Fed. Reg. at 52 (“mental processes include concepts performed in the human mind (including an observation, evaluation, judgment, opinion.)”).

The step of “receiving from a user a set of employee furlough information . . . [including] a list of restricted employer communication systems from which the employee is restricted during the furlough period” is described as collecting information from a user. Spec. ¶ 7. We determine that the step of collecting information regardless of its content is an abstract idea. In *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350 (Fed. Cir. 2016), the court reiterated: “[W]e have treated collecting information, including when limited to particular content (which does not change its character as information), as within the realm of abstract ideas.”²

The “determining” step involves checking a list to see which resources (employer communications systems) are restricted based on the received employee furlough information. Spec. ¶ 32. Evaluating a list to determine which resources are to be restricted is an activity that can be

² See also, e.g., *Internet Patents*, 790 F.3d at 1349; *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed. Cir. 2015); *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343, 1347 (Fed. Cir. 2014); *Digitech Image Techs., LLC v. Elecs. For Imaging, Inc.*, 758 F.3d 1344, 1351 (Fed. Cir. 2014).

performed in the human mind by reading the list and assessing which resources are restricted to the furloughed employee. *See CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1373 (Fed. Cir. 2011) (“[A] method that can be performed by human thought alone is merely an abstract idea.”); *accord Versata Dev. Grp. v. SAP Am., Inc.*, 793 F.3d 1306, 1335 (Fed. Cir. 2015).

The final step of claim 16 recites “instructing the restricted employer communications systems to restrict communications access of each employee . . . during the furlough period for each employee.”³ Appellant does not define the term “instructing,” and the mechanism of performing that function is not described in the Specification. *See* Spec. ¶¶ 8, 24, 34, 35 (cited Appeal Br. 5). The ordinary and customary meaning of “instruct” is “to give knowledge to . . . to provide with authoritative information or advice . . . to give an order or command to.”⁴ We construe “instructing” to mean to convey a message containing information and/or a command to control access to system resources, by restricting access.

In a similar case, the Federal Circuit held that “controlling access to, or limiting permission to, resources” is an abstract idea. *Ericsson Inc. v. TCL Comm’n Tech. Holdings Ltd.*, 955 F.3d 1317, 1326 (Fed. Cir. 2020).

Controlling access to resources is exactly the sort of process that “can be performed in the human mind, or by a human using a pen and paper,” which we have repeatedly found unpatentable. *See CyberSource Corp. v. Retail Decisions, Inc.*,

³ “[A]n employer communications system is any communications system provided or controlled by an employer that facilitates communications between the employer and employees.” Spec. ¶ 24.

⁴ Merriam-Webster Online Dictionary (last retrieved on Sept. 15, 2020 at <https://www.merriam-webster.com/dictionary/instruct>).

654 F.3d 1366, 1372 (Fed. Cir. 2011). The idea long predates the '510 patent and is pervasive in human activity, whether in libraries (loaning materials only to card-holding members), office buildings (allowing certain employees entrance to only certain floors), or banks (offering or denying loans to applicants based on suitability and intended use). In each of these circumstances, as in the claims at issue, a request is made for access to a resource, that request is received and evaluated, and then the request is either granted or not.

Id. at 1327. The court reiterated: “[W]e have repeatedly found the concept of controlling access to resources via software to be an abstract idea.” *Id.* (citing *Smart Sys. Innovations, LLC v. Chicago Transit Authority*, 873 F.3d 1364, 1371 (Fed. Cir. 2017); *Prism Techs. LLC v. T-Mobile USA, Inc.*, 696 F. App'x 1014, 1017 (Fed. Cir. 2017); *Smartflash LLC v. Apple Inc.*, 680 F. App'x 977 (Fed. Cir. 2017)). As such, we are not persuaded by Appellant’s arguments that the claimed method cannot be performed in the human mind. *See* Appeal Br. 6; *see also* Reply Br. 2–3.

In light of these precedents, we conclude that claim 16 equally recites an abstract idea.

Prong Two of Revised Step 2A of the Guidance

Turning to the next step in the Guidance, we determine if the claimed method is integrated into a “practical application.” Guidance, 84 Fed. Reg. at 54. We use the term “additional elements” for “claim features, limitations, and/or steps that are recited in the claim beyond the identified judicial exception.” *See id.* at 55 n.24.

We initially note that the first two “receiving” and “determining” steps of claim 16 do not require any computer implementation, and, as such, can be performed manually. The only additional element is recited as part of

the “instructing” step, which is the “employer communications systems.” The Specification describes these systems broadly as “any communications system provided or controlled by an employer that facilitates communications between the employer and employees.” Spec. ¶ 24. Claim 16 further defines these systems as a “telephonic system” and “email system.” Appeal Br. 14, Claims App.

Appellant’s Specification discloses that the claimed method “may be provided in or integrated into any processor-based device.” Spec. ¶ 71; *see also id.* ¶ 65 (“the term ‘server’ shall also be taken to include any collection of machines that individually or jointly execute a set (or multiple sets) of instructions to perform any one or more of the methodologies discussed herein”). Because a particular computer is neither recited nor required for the method of claim 16, the claim also does not define or rely on a “particular machine.” 84 Fed. Reg. at 55; *see also* MPEP § 2106.05(b). Further, the method does not transform matter because it merely communicates restriction instructions to an employer communications system. Guidance, 84 Fed, Reg. at 55; *see also* MPEP § 2106.05(c). The method has no other meaningful limitations (MPEP § 2106.05(e)), and thus merely recites instructions to execute the recited judicial exception on a generic communications system.

We are unpersuaded that “the claimed invention is a technical solution to a technical problem,” similar to claims in *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F. 3d 1245 (Fed. Cir. 2014). Appeal Br. 6; *see also* Reply Br. 3–4. Appellant’s reliance on *DDR* is unavailing because claim 16 neither recites nor addresses a problem unique to the Internet. *See Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363,

1371 (Fed. Cir. 2015) (“The patent at issue in *DDR* provided an Internet-based solution to solve a problem unique to the Internet that (1) did not foreclose other ways of solving the problem, and (2) recited a specific series of steps that resulted in a departure from the routine and conventional sequence of events after the click of a hyperlink advertisement. The patent claims here do not address problems unique to the Internet, so *DDR* has no applicability.”)

Appellant contends: “Prior to the invention, employers were dependent on self-compliance by the employee and/or physically taking possession of communication devices. Alternatively, employers could manually lock each userid/password and then later unlock the same.” Appeal Br. 7. We find Appellant’s contention here underscores the court’s reasoning in *Ericsson supra*; that the claimed method was performed manually in the past before implementation on generic computers or systems.

Though not advanced until the Reply Brief, and thus waived, Appellant argues “that claimed invention constitutes an improvement, and a more efficient way to restrict communication access by furloughed employees.” Reply Br. 4. However, this alleged improvement lies in the abstract idea itself, regardless of the type of employees, furloughed or not, access to resources is being restricted. *See Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151 (Fed. Cir. 2016) (“[A] new abstract idea is still an abstract idea.”).

The remaining arguments advanced on pages 5 and 6 of the Reply Brief (“claims improve the functioning of employer communication systems,” the “claims improve employer communication systems (e.g.,

telephone and email) by automatically restricting and restoring access by furloughed employees,” and the “claims recite a specific manner of restricting access to employer communication systems”) are forfeited, because “[a]ny bases for asserting error, whether factual or legal, that are not raised in the principal brief are waived.”⁵ *Ex parte Borden*, 93 USPQ2d 1473, 1474 (BPAI 2010) (informative). Regardless, we have considered these arguments, but we are not persuaded for the following reasons.

“[T]o be directed to a patent-eligible improvement to computer functionality, the claims must be directed to an improvement to the functionality of the computer or network platform itself.” *Customedia Techs., LLC v. Dish Network Corp.*, 951 F.3d 1359, 1365 (Fed. Cir. 2020) (citing *Enfish*, 822 F.3d at 1336–39). The final step of claim 16 recites an employer communications system arranged in no particular way to perform basic function of receiving instructions, without improving the system. The Specification’s description of the this system makes clear that generic computer components and systems are utilized as tools to implement the abstract idea of restricting access of each employee during the furlough period to resources, rather than improving the functioning of the employer communications system or other technology. Claim 16 does no more than use instructions to implement the abstract idea on a generic communications system.

⁵ Appellant may not present arguments in a piecemeal fashion, holding back arguments until an Examiner answers the original brief, without giving the Examiner an opportunity to respond. 37 C.F.R. § 41.37(c)(1)(iv).

As a whole, claim 16 merely instructs generic systems to restrict access, and does not “ha[ve] the specificity required to transform a claim from one only claiming a result to one claiming a way of achieving it.” *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1167 (Fed. Cir. 2018). Claim 16 is silent as to how restricting access to these generic systems is controlled, beyond merely reciting generic functional recitations that employee furlough information is received and evaluated, and an instruction is sent to restrict access to system resources based on a restricted employer communication systems list. Simply claiming “those functions in general terms, without limiting them to technical means for performing the functions” (*Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1351 (Fed. Cir. 2016)), does not reflect a technological improvement and fails to integrate the judicial exception into a practical application.

As such, we determine that claim 16 does not integrate the recited judicial exceptions into a “practical application.”

Alice Step Two

Step 2B of the Guidance

In Step 2B, we consider whether an “additional element,” or combination of “additional elements,” adds a specific limitation or combination of limitations that are not well-understood, routine, conventional activity in the field, which would be considered “something more” than the judicial exception. Guidance, 84 Fed. Reg. at 56.

As discussed, the only “additional elements” that lie outside the scope of the abstract in claim 16 are the “employer communications systems [that] include at least one telephonic system and at least one email system.”

Appeal Br. 14, Claims App. However, these conventional systems are

merely targets to which the restricting access instructions are directed. The Specification describes these systems and processors as well-understood, routine, or conventional. Spec. ¶ 75 (“A processor may be a microprocessor, but in the alternative, the processor may be *any conventional processor, controller, microcontroller, or state machine.*”) (Emphasis added).

We agree with the Examiner that claim 1 lacks additional elements that provide an inventive concept. As an ordered combination, the additional elements provide no more than when they are considered individually. *Alice*, 573 U.S. at 225. They recite generic computer components and systems that perform well-understood and conventional functions. They are used as tools to implement the judicial exception. *See Inventor Holdings LLC v. Bed Bath & Beyond, Inc.*, 876 F.3d 1372, 1378 (Fed. Cir. 2017) (considering the method steps of the representative claims as an “ordered combination” reveals that they “amount to ‘nothing significantly more’ than an instruction to apply [an] abstract idea” using generic computer technology).

We are not persuaded that claim 16 is directed to patent eligible subject matter because “the instant claims do not pre-empt all ways for restricting communications access.” Appeal Br. 7–8. “While preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility.” *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015). “Where a patent’s claims are deemed only to disclose patent ineligible subject matter” under the *Alice* framework, “preemption concerns are fully addressed and made moot.” *Id.*

For these reasons, we agree with the Examiner that claim 16 is directed to a judicial except that is not integrated into a practical application, and fails to contain an inventive concept. Accordingly, we sustain the rejection of independent claim 16 under Section 101, and claims 1–15 and 17–21, which fall with claim 16.

CONCLUSION

The Examiner’s decision to reject claims 1–21 is affirmed.

DECISION SUMMARY

Claims Rejected	35 U.S.C. §	Basis/Reference(s)	Affirmed	Reversed
1–21	101	Eligibility	1–21	

TIME PERIOD FOR RESPONSE

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