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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ROBERT KALIN

Appeal 2018-006076
Application 13/015,622
Technology Center 3600

Before CAROLYN D. THOMAS, ERIC B. CHEN, and
SCOTT RAEVSKY, *Administrative Patent Judges*.

THOMAS, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 1–21. We have jurisdiction over the appeal under 35 U.S.C. § 6(b).

We REVERSE.

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 Etsy, Inc. Appeal Br. 3.

The present invention relates generally to virtual shopping carts within an electronic commerce environment. *See* Abstr.

Independent claim 1, reproduced below, is representative of the appealed claims:

1. A method of shopping within an electronic commerce environment, the method comprising acts of:
 - enabling a first user of a plurality of users of the electronic commerce environment to add one or more items to a virtual shopping cart of the first user that is maintained by a server computer system;
 - generating, by the server computer system, statistical data related to the one or more items, the statistical data including a non-zero sum total quantity of at least one of the one or more items that are contained in virtual shopping carts of the plurality of users of the electronic commerce environment other than the first user; and
 - providing the statistical data including the non-zero sum total quantity of the at least one of the one or more items that are contained in the virtual shopping carts of the plurality of users of the electronic commerce environment other than the first user to the first user in a single web page that is generated by the server computer system.

Appellant appeals the following rejections:

R1. Claims 1–21 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to patent-ineligible subject matter. Non-Final Act. 2–5.; and

R2. Claims 1–21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Minsky (US 2009/0043674 A1, Feb. 12, 2009), Siddique (US 2010/0030578 A1, Feb. 4, 2010), and Soto (US 2011/0004533 A1, Jan. 6, 2011). Final Act. 6–10.

We review 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

Rejection under § 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: “[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 the 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.”). For example, 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, 69 (1972)).

Recently, the USPTO published revised guidance on the application of 35 U.S.C. § 101. USPTO’s 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) (“Revised Guidance”). Under the Revised Guidance “Step 2A,” the office first 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* MPEP § 2106.05(a)-(c), (e)-(h)). 84 Fed. Reg. at 51–52, 55.

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, does the Office then (pursuant to the Revised Guidance “Step 2B”) 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. 84 Fed. Reg. at 56.

Step 2A, Prong 1 (Does the Claim Recite a Judicial Exception?)

With respect to independent method claim 1, and similarly, system claim 11 and non-transitory computer readable medium claim 21, the Examiner at least determines that the claims are directed to “(1) adding items to a virtual shopping cart, (2) track data associated with said virtual

shopping cart, and (3) provide statistical information about shopping carts to other users” (Non-Final Act. 3), which we conclude are fundamental economic practices, e.g., sales activities or behaviors. Such behaviors are akin to *certain methods of organizing human activity*, which is a type of abstract idea.

For example, Appellant’s Specification discloses:

Various embodiments of the present disclosure are directed to systems and methods for shopping in an electronic commerce environment, in particular, through an e-commerce website. One aspect of the disclosure provides users of the e-commerce website with the ability to create a virtual shopping cart containing one or more items, and to share access to the cart with one or more other users.

Spec. 2:2–6.

According to yet another aspect, the e-commerce website may provide statistics with respect to virtual shopping carts. In one embodiment, a user may see if a selected item on the e-commerce website has been added to another user’s virtual shopping cart. For example, “this item is in 3 other shopping carts.” This information may be combined with inventory information (e.g., how many units of the item are available for sale). The statistical information may be provided textually or graphically, such as in a chart, map, or other illustrative device. The statistical information provides users with the ability to, for example, gauge interest in a particular item, or as a marketing or motivational selling tool.

Id. at 2:23–30.

In other words, Appellant’s Specification describes shopping in an electronic commerce environment, whereby users create virtual shopping carts containing one or more items. An e-commerce website may provide statistics with respect to the virtual shopping carts, i.e., if the same item has been added to another user’s virtual shopping cart.

Here, claim 1 recites at least the following limitations: (1) “enabling a first user . . . to add one or more items to a virtual shopping cart,” (2) “generating statistical data related to the one or more items . . . that are contained in virtual shopping carts of users . . . other than the first user,” and (3) “providing the statistical data . . . to the first user in a single web page.” Claim 1. These limitations, under their broadest reasonable interpretation, recite sales activities because the limitations all recite operations that would ordinarily take place in a commercial environment.

Similarly, at least the following decisions from our reviewing court have found many types of fundamental commercial practices patent ineligible: *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359 (Fed. Cir. 2015), *cert. denied*, 136 S. Ct. 701 (mem) (2015) (offer-based price optimization); *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350 (Fed. Cir. 2014) (transaction guaranty); *Personalized Media Commc’ns, L.L.C. v. Amazon.com Inc.*, 671 F. App’x 777 (mem) (Fed. Cir. 2016) (receiving instructions for ordering); *Macropoint, LLC v. Fourkites, Inc.*, 671 F. App’x 780 (mem) (Fed. Cir. 2016) (tracking freight); *Wireless Media Innovations, LLC v. Maher Terminals, LLC*, 636 F. App’x 1014 (mem) (Fed. Cir. 2016) (monitoring shipping containers); *America’s Collectibles Network, Inc. v. Jewelry Channel, Inc. USA*, 672 F. App’x 997 (mem) (Fed. Cir. 2017) (conducting reverse auction by adjusting price and inventory); and *EasyWeb Innovations, LLC v. Twitter, Inc.*, 689 F. App’x 969 (Fed. Cir. 2017) (receiving, authenticating, and publishing data).

Appellant challenges the Examiner’s determinations on the ground that the Examiner has not identified any court decisions that are similar to the concepts in the claimed invention. *See* Appeal Br. 7–8. We direct

Appellant's attention to the decisions cited *supra* in addition to the decisions cited by the Examiner, which show similar concepts. *See* Ans. 6.

Appellant also contends that “[t]he alleged abstract idea identified by the Examiner is broader than the actual language of the claims and mischaracterizes and overgeneralizes what is recited.” Appeal Br. 10.

Although we agree that the Examiner may have condensed the claims to “(1) adding items to a virtual shopping cart, (2) track data associated with said virtual shopping cart, and (3) provide statistical information about shopping carts to other users” (Non-Final Act. 3), we note that this is simply a higher level of abstraction. *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240-41 (Fed. Cir. 2016) (“An abstract idea can generally be described at different levels of abstraction. As the Board has done, the claimed abstract idea could be described as generating menus on a computer, or generating a second menu from a first menu and sending the second menu to another location. It could be described in other ways, including, as indicated in the specification, taking orders from restaurant customers on a computer.”)

Under the first step (i.e., prong 1) of the *Alice* framework, “[w]e must first determine whether the claims at issue recite a patent-ineligible concept,” such as an abstract idea. *Alice*, 134 S. Ct. at 2355. Whichever way the concept is described, we do not see that Appellant has adequately shown that claim 1 does not recite an abstract idea. Just because the claim includes more words than the phrase the Examiner uses, as an articulation of the abstract idea to which he/she found the claim to recite, is an insufficient reason to persuasively argue that claim 1 does not recite an abstract idea.

Further, the identified abstract idea need not encompass every claim limitation. Otherwise, there would be no need for step two of the *Alice* inquiry. *Alice*, 573 U.S. at 216.

Regarding Appellant’s preemption contention (*see* Appeal Br. 11), we note that although pre-emption “‘might tend to impede innovation more than it would tend to promote it,’ thereby thwarting the primary object of the patent laws” (*Alice*, 573 U.S. at 216 (citing *Mayo*, 566 U.S. at 71)), “the absence of complete preemption does not demonstrate patent eligibility” (*Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015)). Moreover, because we find the claimed subject matter covers patent-ineligible subject matter, the pre-emption concern is necessarily addressed. “Where a patent’s claims are deemed only to disclose patent ineligible subject matter under the *Mayo* framework, . . . preemption concerns are fully addressed and made moot.” *Ariosa Diagnostics*, 788 F.3d at 1379.

Therefore, for at least the aforementioned reasons, we agree with the Examiner that claim 1 recites an abstract idea, which we conclude is at least a fundamental economic practice.

Step 2A—Prong 2 (integration into Practical Application)²

Under the Revised Guidance, we now must determine if additional elements in the claims integrate the judicial exception into **a practical application** (*see* MPEP § 2106.05(a)–(c), (e)–(h)).

² We acknowledge that some of the considerations at Step 2A, Prong 2, properly may be evaluated under Step 2 of *Alice* (Step 2B of the Office revised guidance). For purposes of maintaining consistent treatment within the Office, we evaluate them under Step 1 of *Alice* (Step 2A of the Office revised guidance). *See* Revised Guidance, 84 Fed. Reg. at 55 n.25, 27–32.

We discern no additional element (or combination of elements) recited in Appellant’s representative claim 1 that integrates the judicial exception into a practical application. *See* Revised Guidance, 84 Fed. Reg. at 54–55 (“Prong 2”). For example, Appellant’s claimed additional elements (e.g., “a server computer system,” “a single web page,” and “a statistical data component”) do not: (1) improve the functioning of a computer or other technology; (2) are not applied with any particular machine (except for a generic computer); (3) do not effect a transformation of a particular article to a different state; and (4) are not applied in any meaningful way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception. *See* MPEP §§ 2106.05(a)–(c), (e)–(h).

Appellant contends the claims “provide for an improvement in the field of electronic commerce.” Appeal Br. 13, citing Spec. 20:26 to 21:2.

Specifically, Appellant’s Specification states:

The information provided in item statistics panel 514 may be useful to the user in a number of ways. For example, by knowing how many units of an item are available, and how many other users have the same item in their shopping carts, a buyer may be able to gauge the overall degree of interest in the item and make a purchasing decision using that knowledge. In another example, the seller of the item may be able to use the information for marketing purposes, for example, to encourage a user to purchase the item due to high demand by other users, low or limited availability, price, or other considerations.

Spec. 20:26 to 21:2. In other words, Appellant’s invention provides information relating to other users’ shopping carts, information that may be useful in encouraging a sale.

Although we agree that the aforementioned information may be useful to a user in deciding whether to purchase an item, we do not see this as an improvement to computer functionality itself. Instead, such statistical information appears to simply hasten a user's mental decision making process, i.e., possibly forcing a user to make a purchasing decision more quickly if many others are also interested in the same item.

Thus, contrary to Appellant's argument, the claims here are unlike those in *Trading Technologies* (see Appeal Br. 13) because Appellant has not provided persuasive evidence or technical reasoning that the method of claim 1 produces an advance in efficiency or technological improvement to the computer data processing system itself. See *Trading Technologies International Inc. v. CQG, Inc.*, 675 F. App'x 1001 (Fed. Cir. 2017) (nonprecedential).

Instead, the claimed features merely hastens economic tasks, i.e., by pressuring the user to make purchasing decisions more quickly based on other users interest in the same item, as opposed to the computer functionality itself providing an advance in efficiency. That is, here the arguably innovative technique of the appealed claims is inextricably a part of the abstract idea. Moreover, nothing in the claims, understood in light of the Specification, requires anything other than an off-the-shelf, conventional computer used for collecting and processing/analyzing various information/data. Therefore, unlike *Trading Technologies*, the claims are directed not to improvement in computer capabilities, but to the results of applying an abstract idea.

For at least the reason noted *supra*, we determine that claim 1

(1) recites a judicial exception and (2) does not integrate that exception into a practical application. Thus, representative claim 1 is directed to the aforementioned abstract idea.

Alice/Mayo—Step 2 (Inventive Concept)
Step 2B identified in the Revised Guidance

Turning to the second step of the *Alice* inquiry, we now look to whether claim 1 contains any “inventive concept” or adds anything “significantly more” to transform the abstract concept into a patent-eligible application. *Alice*, 573 U.S. at 216. As recognized by the Revised Guidance, an “inventive concept” under *Alice* step 2 can be evaluated based on whether an additional element or combination of elements:

- (1) adds a specific limitation or combination of limitations that are not well-understood, routine, conventional activity in the field, which is indicative that an inventive concept may be present; or
- (2) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception, which is indicative that an inventive concept may not be present.

See Revised Guidance, 84 Fed. Reg. at 56; *see* MPEP § 2106.05(d).

Here, the Examiner determines that “[i]t is customary and usual to provide a total of items and a total purchase price of the items shown in the shopping cart in order to create and order, and complete a payment of said items.” Ans. 5.

However, Appellant contends, and we agree, that “the Examiner has not even provided any of the evidence that is required to establish a ‘reasoned explanation that supports’ a conclusion that the limitations in the

claims of the present application constitute no more than a recitation of well-understood, routine, and conventional activities.” Reply Br. 4.

Specifically, the Examiner has not set forth with sufficient specificity or provided any finding (*see* Ans. 3–9; *see also* Non-Final Act. 3–5) that the generated statistical data relating to other users is well-understood, routine, or conventional. *See Berkheimer v. HP Inc.*, No. 2017-1437, slip op. at 14 (Fed. Cir. Feb. 8, 2018) (“Whether something is well-understood, routine, and conventional to a skilled artisan at the time of the patent is a factual determination.”).

Thus, under *Alice Step Two*, the Examiner has not properly considered the elements of the claims, both individually and “as an ordered combination,” to determine whether the additional elements transform the Examiner’s asserted abstract idea into a patent-eligible application.

For the above reasons under step two of *Alice*, we are constrained, on this record, to reverse the Examiner’s rejection of claims 1–21 under 35 U.S.C. § 101.

Rejection under § 103(a)

Appellant contends that “[n]one of the cited references, alone or in combination, disclose or suggest providing a user in an electronic commerce with ‘statistical data’” Appeal Br. 14. Specifically, Appellant contends that “[t]here is no disclosure or suggestion that [the] shared shopping carts [in Minsky] include ‘statistical data’ as recited in claim 1” (*id.*) or that “the merchant server generates ‘statistical data’” *Id.* at 15. Appellant further contend that “there is no disclosure or suggestion that the ‘shared shopping carts’ of Siddique include any ‘statistical data’ as recited in

claim 1.” *Id.* Appellant also contend that “[t]here is no disclosure or suggestion in Soto of ‘generating . . .’ or ‘providing . . . the non-zero sum total . . .’” and “the ‘shared universal shopping cart’ of Soto is not shared among different users.” *Id.* at 16. In other words, Appellant at least contends that neither Minsky, Siddique, nor Soto teach or suggest “statistical data” as set forth in claim 1. We agree with Appellant.

Although the Examiner finds that “[b]oth Siddique and Soto teach data available from shopping carts across users. . . . Siddique teaches . . . view[ing] your own cart and your buddy’s cart . . . [u]sers can share their account resources such as shopping cart content with other members of the shopping trip” (Ans. 11, (citations omitted)) and “[i]nventories information of items . . . suggesting a statistic” (*id.* at 12), the Examiner fails to illustrate in the combined teachings statistical data, i.e., a non-zero sum total, of the one or more items that are contained in virtual shopping carts of users other than the first user, as required by claim 1.

Instead, Siddique merely teaches that “a live feed can provide to users from real stores regarding the quantity of a particular item . . . the actual number of items in inventory.” ¶ 119. However, we note that Siddique’s number of quantity *in inventory at the stores* is distinguishable from the claimed non-zero sum total quantity of the at least one item *contained in virtual shopping carts of other users*.

Additionally, Siddique teaches “users can view the contents of each other’s shopping carts.” ¶ 198. However, we find that a view of other’s shopping cart also fails to illustrate a “non-zero sum total quantity” of all others, as required by claim 1, but rather an individual quantity of each user.

Similarly, Soto also teaches “a shared shopping cart” (¶ 45) and “inventory information” (*id.* at 46), which we find is likewise deficient in teaching the aforementioned claimed limitations for similar reasons.

Thus, we disagree with the Examiner’s finding that Minsky, Siddique and Soto, either alone or in combination, teach statistical data, i.e., a non-zero total quantity . . . contained in virtual shopping carts of . . . other than the first user, as recited in each of the independent claims. Because we agree with at least one of the arguments advanced by Appellant, we need not reach the merits of Appellant’s other arguments. Accordingly, we will not sustain the Examiner’s obviousness rejection of claims 1–21.

Accordingly, we reverse the Examiner’s rejection of claims 1–21 under 103(a).

CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–21	101	Eligibility		1–21
1–21	103	Minsky, Siddique, Soto		1–21
Overall Outcome				1–21

REVERSED