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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte DEBASHIS GHOSH and RANDY SHUKEN

Appeal 2017-002547
Application 14/085,776¹
Technology Center 3600

Before: JOHN A. EVANS, CATHERINE SHIANG, and
JAMES W. DEJMEK, *Administrative Patent Judges*.

DEJMEK, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from a Final Rejection of claims 1–23. We have jurisdiction over the pending claims under 35 U.S.C. § 6(b).

We affirm.

¹ Appellants identify MasterCard International Incorporated as the real party in interest. App. Br. 2.

STATEMENT OF THE CASE

Introduction

Appellants' disclosed and claimed invention relates to "apportioning a payment card authorization request among a plurality of issuer entities." Spec. 2:7–8. Thus, when conducting a purchase transaction, it may be desirable for a user (i.e., customer) to use more than one payment card. *See* Spec. 1:24–28. In a disclosed embodiment, a user may subscribe to a payment transaction service and register various payment cards associated with a master access card. Spec. 3:30–4:16. In addition to registering the payment cards with the transaction service, the user may also provide allocation designations for each payment card. Spec. 4:20–24. According to the Specification, after the payment cards have been registered and the allocation data has been designated, the user may further designate a master access card account. Spec. 5:11–18. When a purchase transaction is conducted using a master access card, the disclosed system determines how to apportion the monetary amount among the registered payment cards. Spec. 7:1–6.

Claim 1 is representative of the subject matter on appeal and is reproduced below with the disputed limitations emphasized in *italics*:

1. A method for apportioning a payment card authorization request among a plurality of issuer entities, the method comprising:

receiving, by an acquirer entity computer system comprising one or more computers, a payment card authorization request from a point of sale (POS) device, wherein the payment card authorization request specifies a card account number and a specified monetary amount;

generating, by the acquirer entity computer system using an application programming interface (API) module, a message including the card account number;

sending, by the acquirer entity computer system, the message to a processing server;

receiving, by the acquirer entity computer system, predefined allocation data and an indication from the processing server that the card account number corresponds to a master access card account;

apportioning, by the acquirer entity computer system, the specified monetary amount into a plurality of monetary amounts in accordance with the predefined allocation data associated with the master access card account; and

sending, by the acquirer entity computer system using the API module, a plurality of authorization requests containing the plurality of monetary amounts to a respective plurality of issuer entities.

The Examiner's Rejections

1. Claims 1–23 stand rejected under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter. Final Act. 4–5.
2. Claims 1–6, 8–17, and 19–23 stand rejected under 35 U.S.C. § 102(a)(1) as being anticipated by Rogers et al. (US 2005/0192895 A1; Sept. 1, 2005) (“Rogers”). Final Act. 5–8.
3. Claims 7 and 18 stand rejected under 35 U.S.C. § 103 as being unpatentable over Rogers and Glatt et al. (US 2010/0205062 A1; Aug. 12, 2010) (“Glatt”). Final Act. 8.

ANALYSIS²

Rejection under 35 U.S.C. § 101

Appellants dispute the Examiner’s conclusion that the pending claims are directed to patent-ineligible subject matter under 35 U.S.C. § 101. App. Br. 9–13; Reply Br. 2–3. In particular, Appellants assert the claims are not directed to an abstract idea because the claims are rooted in computer technology and overcomes “the problem of appropriately distributing computing tasks among computing platforms operated by different entities.” App. Br. 9–12. Further, Appellants argue the claims recite significantly more than a judicially recognized exception (i.e., abstract idea) because the recited operations improve the operation of an acquirer entity computer system. App. Br. 10–12. For the reasons discussed *infra*, Appellants have not persuaded us of error.

The Supreme Court’s two-step framework guides our analysis. *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2355 (2014). If a claim falls within one of the statutory categories of patent eligibility (i.e., a process, machine, manufacture or composition of matter) then the first inquiry is whether the claim is directed to one of the judicially recognized exceptions (i.e., a law of nature, a natural phenomenon, or an abstract idea). *Alice*, 134 S. Ct. at 2355. If so, the second step is to determine whether any element, or combination of elements, amounts to significantly more than the judicial exception. *Alice*, 134 S. Ct. at 2355.

² Throughout this Decision, we have considered the Appeal Brief, filed March 14, 2016 (“App. Br.”); the Reply Brief, filed December 2, 2016 (“Reply Br.”); the Examiner’s Answer, mailed October 3, 2016 (“Ans.”); and the Final Office Action, mailed August 14, 2015 (“Final Act.”), from which this Appeal is taken.

Although each independent claim broadly falls within the statutory categories of patentability, the Examiner concludes the claims are directed to a judicially recognized exception—i.e., an abstract idea. Final Act. 4. In particular, the Examiner concludes the claims are directed to the abstract idea of “apportioning a transaction amongst a plurality of payment (e.g., credit card) accounts,” which is a fundamental economic practice. Final Act. 4. Additionally, the Examiner concludes “the claims do not amount to an improvement to the functioning of a computer itself,” but rather use a computer performing well-understood, routine, and conventional functions to execute the abstract idea. Final Act. 4. Thus, the Examiner concludes the claims do not recite significantly more than the abstract idea itself. Final Act. 4.

Instead of using a definition of an abstract idea, “the decisional mechanism courts now apply is to examine earlier cases in which a similar or parallel descriptive nature can be seen—what prior cases were about, and which way they were decided.” *Amdocs (Isr.) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1294 (Fed. Cir. 2016) (citing *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353–54 (Fed. Cir. 2016)); accord United States Patent and Trademark Office, *July 2015 Update: Subject Matter Eligibility 3* (July 30, 2015), <https://www.uspto.gov/sites/default/files/documents/ieg-july-2015-update.pdf> (instructing Examiners that “a claimed concept is not identified as an abstract idea unless it is similar to at least one concept that the courts have identified as an abstract idea.”). As part of this inquiry, we must “look at the ‘focus of the claimed advance over the prior art’ to determine if the claim’s ‘character as a whole’ is directed to excluded

subject matter.” *Affinity Labs of Tex., LLC v. DirecTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016).

Our reviewing court has concluded that abstract ideas include the concepts of collecting data, recognizing certain data within the collected data set, and storing the data in memory. *Content Extraction & Transmission LLC v. Wells Fargo Bank, N.A.*, 776 F.3d 1343, 1347 (Fed. Cir. 2014); *see also Smart Sys. Innovations, LLC v. Chicago Transit Authority*, 873 F.3d 1364, 1372 (Fed. Cir. 2017) (concluding “claims directed to the collection, storage, and recognition of data are directed to an abstract idea”).

Additionally, the collection of information and analysis of information (e.g., recognizing certain data within the dataset) are also abstract ideas. *Elec. Power*, 830 F.3d at 1353. Similarly, “manipulating data” is an abstract idea. *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1340 (Fed. Cir. 2017).

Further, merely combining several abstract ideas does not render the combination any less abstract. *RecogniCorp, LLC v. Nintendo Co., Ltd.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017) (“Adding one abstract idea (math) 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) (determining the pending claims were directed to a combination of abstract ideas).

Here, Appellants’ claims are directed to apportioning a monetary amount associated with a payment card authorization request among a plurality of accounts (i.e., registered payment cards) in accordance with predefined allocation data. In particular, a payment card authorization request is received by an acquirer entity system, which then generates and

sends a message to a processing server. The processing server responds to the acquirer entity system with, *inter alia*, predefined allocation data (i.e., how the monetary amount is to be allocated across a plurality of identified payment cards). The acquirer entity system apportions the monetary amount, in accordance with the received allocation data, and sends a plurality of authorization requests to the issuer entities of the plurality of payment cards. We agree with the Examiner that the claims are drawn to a fundamental economic practice. *See* Final Act. 4; Ans. 9; *see also Alice*, 134 S. Ct. at 2356 (concluding an intermediated settlement is a fundamental economic practice—an abstract idea); *Bilski v. Kappos*, 561 U.S. 593, 609 (2010) (concluding hedging, a fundamental economic concept, to be an abstract idea).

In particular, the steps of receiving information (i.e., a payment card authorization request), generating and sending a message to a processing system, receiving a message by the acquirer entity computer system, and sending a plurality of authorization requests are similar to ideas previously concluded by our reviewing court to be abstract. *See buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) (“That a computer receives and sends the information over a network—with no further specification—is not even arguably inventive.”); *see also Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333 (Fed. Cir. 2012) (concluding the claimed steps of “receiving data from one source (step A), selectively forwarding the data (step B, performed according to step D), and forwarding reply data to the first source (step C)” to be abstract). Additionally, the step of apportioning the specified monetary amount in accordance with the predefined allocation data is similar to using mathematical algorithms to

manipulate existing information to generate additional information, which the courts have concluded to be a patent-ineligible concept. *See Digitech Image Techs., LLC v. Elec. for Imaging, Inc.*, 758 F.3d 1344, 1351 (Fed. Cir. 2014).

Because we determine the claims are directed to an abstract idea, we analyze the claims under step two of *Alice* to determine if there are additional limitations that individually, or as an ordered combination, ensure the claims amount to “significantly more” than the abstract idea. *Alice*, 134 S. Ct. at 2355 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1294, 1297–98 (2012)).

Appellants contend the claims recite significantly more than the abstract idea because “the recited operations improve the operation of the acquirer entity computer system itself” by using an API to offload to a processing server the determination of whether a card account number corresponds to master access card account. App. Br. 10. Appellants assert the claimed approach “*can* decrease the processing load at the acquirer entity computer system” and “*can* reduce the likelihood of developer errors.” App. Br. 10 (emphases added). Additionally, Appellants assert the claimed features “significantly restrict the claims to a very specific technical field.” App. Br. 10.

We disagree that the claims recite significantly more than the abstract idea. Contrary to Appellants’ assertions, the claims do not recite an improvement to the operation of the acquirer entity computer system. “[T]he focus of the claims is not on such an improvement in computers as tools, but on certain independently abstract ideas that use computers as tools.” *Elec. Power*, 830 F.3d at 1354; *see also Alice*, 134 S. Ct. at 2359

(relying on a computer to perform routine tasks more quickly or more accurately is insufficient to render a claim patent eligible). Further, Appellants do not provide sufficient persuasive evidence in support of the alleged improvement. *See In re Geisler*, 116 F.3d 1465, 1470 (Fed. Cir. 1997) (holding that mere attorney arguments and conclusory statements, which are unsupported by factual evidence, are entitled to little probative value); *see also In re Pearson*, 494 F.2d 1399, 1405 (CCPA 1974) (attorney argument is not evidence). Further, “[a]n abstract idea does not become nonabstract by limiting the invention to a particular field of use or technological environment.” *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1366 (Fed. Cir. 2015).

For the reasons discussed *supra*, we are unpersuaded of Examiner error. Accordingly, we sustain the Examiner’s rejection of independent claim 1 under 35 U.S.C. § 101. For similar reasons, we also sustain the Examiner’s rejection of independent claims 12 and 23, which recite similar limitations and for which Appellants advance similar arguments. *See App. Br. 9–13*. Additionally, we also sustain the Examiner’s rejection of claims 2–11 and 13–22, which depend directly or indirectly therefrom and were not argued separately. *See App. Br. 9–13; see also 37 C.F.R. § 41.37(c)(1)(iv)(2015)*.

Rejection under 35 U.S.C. § 102

Appellants dispute the Examiner’s finding that Rogers discloses the claimed acquirer entity computer system and the processing server. *App. Br. 13–17; Reply Br. 3–6*. In particular, Appellants contend Rogers discloses a single host system performs both the determining of the

allocation data and the apportionment of the monetary amount. App. Br. 13, 15 (citing Rogers ¶¶ 9–10, 34); Reply Br. 4–5. Appellants assert that although the merchant systems in Rogers *could* apportion a payment, there is no disclosure supporting the Examiner’s speculation that the merchant systems in Rogers is performing the apportionment. Reply Br. 4–5 (citing Rogers ¶ 28).

The Examiner finds Rogers teaches a merchant system and a host system for processing a transaction. Final Act. 5–6 (citing Rogers ¶¶ 9–10, 17, 29, 31, 34, 39–40, Figs. 1–3); Ans. 11. The Examiner explains “the acquirer entity *may involve* the merchant system as described throughout Rogers.” Ans. 11 (emphasis added). Further, the Examiner finds “Rogers teaches that ‘Interactions with the host system and second parties may take place with merchant systems 104 that are configured to perform *merchant-end processing functions*[‘] (which would include apportionment when preferred).” Ans. 11 (citing Rogers ¶ 28).

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros., Inc. v. Union Oil Co. of Cal.*, 814 F.2d 628, 631 (Fed. Cir. 1987). Additionally, to anticipate, a prior art reference must disclose more than “multiple, distinct teachings that the artisan might somehow combine to achieve the claimed invention.” *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1371 (Fed. Cir. 2008); *see also In re Arkley*, 455 F.2d 586, 587 (CCPA 1972) (“[T]he [prior art] reference must clearly and unequivocally disclose the claimed [invention] or direct those skilled in the art to the [invention] without *any* need for picking, choosing, and

combining various disclosures not directly related to each other by the teachings of the cited reference.”).

Rogers describes a payment system comprising a plurality of merchant systems and a host system. Rogers ¶¶ 28–29, Fig. 1. Rogers further describes the host system “may include a variety of different logical modules that are used to implement methods of the invention.” Rogers ¶ 36, Fig. 2. Among these modules is a preference module that may further comprise a consumer payment profile. Rogers ¶¶ 37–39, Fig. 2 (216, 224). Rogers discloses the consumer payment profile may indicate how payments are to be made for different transactions (e.g., splitting a payment among different transaction types). Rogers ¶ 39.

We disagree with the Examiner that Rogers discloses—either explicitly or inherently—that the apportionment of the monetary amount is performed by the merchant system of Rogers. The Examiner’s finding that the apportionment *could be* considered part of the merchant-end processing functions is speculative. For us to sustain the Examiner’s rejection, we would need to resort to impermissible speculation or unfounded assumptions or rationales to cure the deficiencies in the factual bases of the rejection before us. *In re Warner*, 379 F.2d 1011, 1017 (CCPA 1967). We decline to do so.

For the reasons discussed *supra*, and constrained by the record before us, we do not sustain the Examiner’s rejection under 35 U.S.C. § 102(a)(1) of independent claim 1. For similar reasons, we also do not sustain the Examiner’s rejection under 35 U.S.C. § 102(a)(1) of independent claims 12 and 23, which recite similar limitations. Additionally, we do not sustain the

Examiner's rejection under 35 U.S.C. § 102(a)(1) of claims 2–6, 8–11, 13–17, and 19–22, which depend therefrom.

Rejection under 35 U.S.C. § 103

Claim 7 depends indirectly from claim 1 and recites “wherein the predefined allocation data includes predefined percentage values associated with the payment card accounts.” Dependent claim 18 recites a similar limitation. The Examiner rejected claims 7 and 18 under 35 U.S.C. § 103 over the combined teachings of Rogers and Glatt. Final Act. 8. In particular, the Examiner relies on the same findings and disclosure of Rogers regarding the underlying limitations of the independent (and intervening claims), but relies on Glatt to teach “apportioning a bill amongst several credit cards by percentage.” Final Act. 8 (citing Glatt ¶ 26).

As discussed above, Rogers does not disclose—nor does the Examiner persuasively assert that Rogers suggests—the limitations recited in the independent claims. Further, the Examiner does not rely on Glatt to cure the deficiencies of Rogers. Accordingly, we do not sustain the Examiner's rejection of claims 7 and 18 under 35 U.S.C. § 103.

DECISION

We affirm the Examiner's decision rejecting claims 1–23 under 35 U.S.C. § 101.

We reverse the Examiner's decision rejecting claims 1–6, 8–17, and 19–23 under 35 U.S.C. § 102(a)(1).

We reverse the Examiner's decision rejecting claims 7 and 18 under 35 U.S.C. § 103.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv). *See* 37 C.F.R. § 41.50(f).

AFFIRMED