



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/219,215	03/19/2014	David GROSSMAN	0076412-000219	4337

21839 7590 03/26/2019
BUCHANAN, INGERSOLL & ROONEY PC
POST OFFICE BOX 1404
ALEXANDRIA, VA 22313-1404

EXAMINER

TINKLER, MURIEL S

ART UNIT	PAPER NUMBER
----------	--------------

3692

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

03/26/2019

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPDOC1@BIPC.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte DAVID GROSSMAN

Appeal 2017-011233
Application 14/219,215
Technology Center 3600

Before JENNIFER S. BISK, LINZY T. McCARTNEY, and
JOYCE CRAIG, *Administrative Patent Judges*.

BISK, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant¹ appeals under 35 U.S.C. § 134 from a rejection of claims
1–20. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ Appellant identifies the real party in interest as MasterCard International Incorporated. App. Br. 2.

BACKGROUND²

The claims are directed to predicting consumer behavior. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A method for predicting consumer behavior based on a propensity to have available funding, comprising:

storing, in a consumer database of a processing server of a payment network, a plurality of consumer profiles, wherein each consumer profile includes data related to one or more consumers including at least consumer data and a profile identifier;

receiving, by a receiving device of the processing server of the payment network, an authorization request or clearing record for a payment transaction, wherein the authorization request or clearing record includes at least an indication of the payment transaction as an installment transaction, transaction data, a specific profile identifier, a repayment length, and an installment amount;

identifying, by a processing device in the consumer database of the processing server of the payment, a specific consumer profile comprising an indication of a propensity to have available funding, where the included profile identifier corresponds to the specific profile identifier, and the propensity to have available funding is determined based on the repayment length and the installment amount of the payment transaction; and

transmitting, by a transmitting device of the processing server of the payment network to a content provider, the specific consumer profile comprising the indication of the propensity to have available funding, wherein the indication of the propensity to have available funding includes at least the consumer data included in the identified specific consumer profile and the

² Throughout this Decision we have considered the Specification filed March 19, 2014 (“Spec.”), the Final Rejection mailed November 03, 2016 (“Final Act.”), the Appeal Brief filed May 3, 2017 (“Appeal Br.”), the Examiner’s Answer mailed June 29, 2017 (“Ans.”), and the Reply Brief filed August 29, 2017 (“Reply Br.”).

Appeal 2017-011233
Application 14/219,215

installment amount included in the received authorization request or clearing record.

REJECTIONS

The Examiner made the following rejections:

Claims 5 and 15 are rejected under 35 U.S.C. § 112(a), first paragraph, as failing to comply with the written description requirement.

Claims 1–20 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1–20 are rejected under 35 U.S.C. § 102(a)(2) as being anticipated by US 2009/0037323 A1, published February 5, 2009 (“Feinstein”).

ANALYSIS

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). To the extent Appellant has not advanced separate, substantive arguments for particular claims, or other issues, such arguments are waived. 37 C.F.R. § 41.37(c)(1)(iv).

We have considered all of Appellant’s arguments and any evidence presented. We highlight and address specific findings and arguments for emphasis in our analysis below.

Rejection of Claims 5 and 15 under 35 U.S.C. § 112

The Examiner rejects dependent claims 5 and 15 under 35 U.S.C. § 112(a)³ as failing to comply with the written description requirement

³ Because this application was filed on March 19, 2014, we apply § 112 as amended on Sept. 16, 2011.

Appeal 2017-011233
Application 14/219,215

because the term “microsegment” was not defined in the Specification.
Final Act. 7.

Appellant disagrees, arguing that the term “microsegment” is sufficiently described by the Specification. Appeal Br. 5. Specifically, Appellant points to paragraph 25, which states “in one embodiment, the consumer 102 may be included in a microsegment of other consumers, and the third party 110 may be provided with information regarding available funding or consumer behavior models for the microsegment of consumers.” Spec. ¶ 25. According to Appellant, “[i]t is clear from this context that the term microsegment is used to mean a small group and/or small cluster of consumers by the plain meaning of the term itself (micro means small and segment meaning portion, in context of a population of people).” Appeal Br. 5. Appellant adds that “‘microsegments’ is a term used in the industry.” *Id.* (citing US 2013/0024242 A1, published Jan. 24, 2013 (“Villars I”); US 2013/0024274 A1, published Jan. 24, 2013 (“Villars II”)). Based on these arguments, Appellant contends that a person of ordinary skill in the art “would understand the term ‘microsegment’ to be a term of art” and “sufficiently described to allow one skilled in the art to reasonably conclude that the inventor had possession of the claimed invention.” Reply Br. 2.

The Examiner does not agree, explaining that the language of paragraph 25 quoted above does not actually define the term “microsegment” and noting that Appellant did not add the purported definition to the claims. Ans. 11–12. However, the Examiner does not address Appellant’s argument that a person of ordinary skill in the art would have understood the term “microsegments” to be a term of art meaning a small group or cluster. The Examiner also does not address Appellant’s proffered evidence—the two previously published applications—supporting

Appeal 2017-011233
Application 14/219,215

the position that the term “microsegment” is a term of art that would have been understood by a person of ordinary skill. Finally, the Examiner does not address Appellant’s argument that the plain meaning of the term “microsegment” supports a meaning of small group or cluster.

We agree with Appellant that the evidence supports a finding that a person of ordinary skill in the art would have understood the term “microsegment,” which was referred to in the originally filed Specification (Spec. ¶ 25), as a small group or cluster. For example, Villars I describes “microsegments, each microsegment including a group of entities, wherein every entity of the group of entities has at least one characteristic or activity in common.” Villars I ¶ 9. Similarly, Villars II describes “generating a plurality of microsegments, each microsegment including a subset of the plurality of entities based on the associated characteristic information.” Villars II, Abstract. We also agree that a person of ordinary skill in the art would recognize, based on the prefix “micro” and the root “segment,” the plain meaning of the term “microsegment” to be consistent with a meaning of small group or cluster.

For these reasons, we agree with Appellant that the Specification describes the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention at the time of filing. *See Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010).

We, therefore, do not sustain the Examiner’s rejection of claims 5 and 15 under U.S.C. § 112(a).

Appeal 2017-011233
Application 14/219,215

Rejection of Claims 1–20 under 35 U.S.C. § 101

For the § 101 rejection, Appellant argues claims 1–20 together. *See* Appeal Br. 6–15. As permitted by 37 C.F.R. § 41.37, we decide the appeal for this rejection based on claim 1. *See* 37 C.F.R. §41.37(c)(1)(iv).

Section 101 of the Patent Act provides that “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof” is patent eligible. 35 U.S.C. § 101. But the Supreme Court has long recognized an implicit exception to this section: “Laws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014) (quoting *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013)). To determine whether a claim falls within one of these excluded categories, the Court has set out a two-part framework. The framework requires us first to consider whether the claim is “directed to one of those patent-ineligible concepts.” *Alice*, 573 U.S. at 217. If so, we then examine “the elements of each claim both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Alice*, 573 U.S. at 217 (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 78, 79 (2012)). That is, we examine the claims for an “inventive concept,” “an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.’” *Alice*, 573 U.S. at 217–18 (alteration in original) (quoting *Mayo*, 566 U.S. at 72–73).

The Patent Office recently issued guidance regarding this framework. *See* 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) (“Revised Guidance”). Under the Revised Guidance, to

Appeal 2017-011233
Application 14/219,215

decide whether a claim is “directed to” an abstract idea, we evaluate whether the claim (1) recites subject matter falling within an abstract idea grouping listed in the Revised Guidance *and* (2) fails to integrate the recited abstract idea into a practical application. *See* Revised Guidance, 84 Fed. Reg. at 51. If the claim is “directed to” an abstract idea, as noted above, we then determine whether the claim recites an inventive concept. The guidance explains that when making this determination, we should consider whether the additional claim elements add “a specific limitation or combination of limitations that are not well-understood, routine, conventional activity in the field” or “simply append[] well-understood, routine, conventional activities previously known to the industry.” Revised Guidance, 84 Fed. Reg. at 56.

With these principles in mind, we turn to the Examiner’s § 101 rejection.

“Directed to an Abstract Idea”—Abstract Idea

The Examiner determined that claim 1 is “directed to” an abstract idea because the claim recites a fundamental economic practice. Final Act. 10. For the reasons explained below, we see no error in this determination.

Claim 1 recites the following limitations: (1) “storing . . . a plurality of consumer profiles, wherein each consumer profile includes data related to one or more consumers including at least consumer data and a profile identifier”; (2) “receiving . . . an authorization request or clearing record for a payment transaction, wherein the authorization request or clearing record includes at least an indication of the payment transaction as an installment transaction, transaction data, a specific profile identifier, a repayment length, and an installment amount”; (3) identifying . . . a specific consumer profile comprising an indication of a propensity to have available funding, where the included profile identifier corresponds to the specific profile identifier,

Appeal 2017-011233
Application 14/219,215

and the propensity to have available funding is determined based on the repayment length and the installment amount of the payment transaction”; and (4) “wherein the indication of the propensity to have available funding includes at least the consumer data included in the identified specific consumer profile and the installment amount included in the received authorization request or clearing record.” Appeal Br. 23 (Claims Appendix). These limitations, under their broadest reasonable interpretation, recite a method of predicting the availability of consumer funding for an installment transaction.

For example, “storing . . . a plurality of consumer profiles, wherein each consumer profile includes data related to one or more consumers including at least consumer data and a profile identifier,” as recited in limitation (1) stores data related to various consumers, and from this data, a particular consumer profile is “identif[ied]” that includes “the propensity to have available funding, ” as recited in limitation (3), where that propensity is calculated as in limitation (4), based on a received “authorization request or clearing record for a payment transaction, wherein the authorization request or clearing record includes at least an indication of the payment transaction as an installment transaction, transaction data, a specific profile identifier, a repayment length, and an installment amount,” as recited in limitation (2). All of these limitations contribute to the method of predicting the availability of consumer funding for an installment transaction. The installment transaction at issue is a type of purchase and predicting the availability of consumer funding for that transaction is an economic act similar to processing an application for financing a purchase found to be an abstract idea in *Credit Acceptance Corp. v. Westlake Services*, 859 F.3d 1044 (Fed. Cir. 2017). Similarly, “[w]e see no meaningful distinction between this type

Appeal 2017-011233
Application 14/219,215

of financial industry practice and ‘the concept of intermediated settlement’ held to be abstract in *Alice* . . . or the ‘basic concept of hedging’ held to be abstract in *Bilski*.” *Id.* at 1054 (citing *Alice*, 134 S.Ct. at 2356; *Bilski v. Kappos*, 561 U.S. 593, 611, 1 (2010)); *see also BuySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350 (Fed. Cir. 2014) (holding unpatentable claims “squarely about creating a contractual relationship—a ‘transaction performance guaranty’—that is beyond question of ancient lineage”). Accordingly, we conclude the claims recite a fundamental economic practice, which is a certain method of organizing human activity identified in the Revised Guidance, and thus an abstract idea. Revised Guidance, 84 Fed. Reg. at 52, 53 (listing “Certain methods of organizing human activity—fundamental economic principles or practices” as one of the “enumerated groupings of abstract ideas”).

“Directed to an Abstract Idea”—Practical Application

If a claim recites a judicial exception, we determine whether the recited judicial exception is integrated into a practical application of that exception by: (a) identifying whether there are any additional elements recited in the claim beyond the judicial exception(s); and (b) evaluating those additional elements individually and in combination to determine whether they integrate the exception into a practical application. If the recited judicial exception is integrated into a practical application, the claim is not directed to the judicial exception.

Here, claim 1 recites the additional elements of “a consumer database of a processing server of a payment network,” “a receiving device of the processing server of the payment network,” “a processing device in the consumer database of the processing server,” and “transmitting, by a transmitting device of the processing server of the payment network to a

Appeal 2017-011233
Application 14/219,215

content provider, the specific consumer profile comprising the indication of the propensity to have available funding.” Appeal Br. 23 (Claims Appendix).

Considering claim 1 as a whole, the additional elements do not apply or use the abstract idea in a meaningful way such that the claim as a whole are not more than a drafting effort designed to monopolize the exception. The Supreme Court guides that the “prohibition against patenting abstract ideas ‘cannot be circumvented by attempting to limit the use of the formula to a particular technological environment’ or [by] adding ‘insignificant postsolution activity.’” *Bilski*, 561 U.S. at 610–11 (quoting *Diehr*, 450 U.S. at 191–92).

The Specification describes each of these elements as generic components. The Specification discloses that the data at issue “may be configured in any type of suitable database configuration,” noting that “[s]uitable configurations and storage types will be apparent to persons having skill in the relevant art.” Spec. ¶ 64. Similarly, the Specification discloses that the “processing server” “may be a computing system configured to predict consumer behavior based on installment transactions” and may include “a receiving unit,” “a processing unit,” “a transmitting unit,” “a memory,” and a “transaction database.” *Id.* ¶¶ 22, 28, 31–34. Each of these items is a component of a general-purpose computer. *Id.* ¶ 57–67; *see also* ¶ 19 (“The payment transaction may be conducted . . . via telephone, the Internet, . . . a mobile device 103, such as a cellphone, smartphone, tablet computer, etc.”). Simply programming a general-purpose computer to perform abstract ideas does not integrate those ideas into a practical application. *See Revised Guidance*, 84 Fed. Reg. at 55 (identifying “merely includ[ing] instructions to implement an abstract idea on a

Appeal 2017-011233
Application 14/219,215

computer” as an example of when an abstract idea has not been integrated into a practical application).

As for “transmitting . . . the specific consumer profile comprising the indication of the propensity to have available funding,” this is simply a routine function used to implement the underlying abstract idea of predicting the availability of consumer funding for an installment transaction. *See Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1262 (“The claim simply recites the use of . . . routine functions, such as transmitting and receiving signals, to implement the underlying idea.”); *see also BuySAFE*, 765 F.3d at 1355 (“That a computer receives and sends the information over a network—with no further specification—is not even arguably inventive. The computers in *Alice* were receiving and sending information over networks connecting the intermediary to the other institutions involved, and the Court found the claimed role of the computers insufficient.”). The Specification does not describe any particular way of transmitting data. *See* Spec. ¶ 43 (“The consumer-specific content may be transmitted to the mobile device 103 via methods that will be apparent to persons having skill in the relevant art, such as e-mail, short message service message, multimedia message service message, telephone, an application program, etc.”). The mere *function* of transmitting is not a “specific improvement to the way computers operate.” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016).

Appellant’s arguments have not persuaded us claim 1 is “directed to” a patent-eligible concept. For example, Appellant argues that claim 1 focuses on a technical improvement, but Appellant does not further explain this contention. Appeal Br. 11–13 (citing *BASCOM Global Internet Services v. AT&T Mobility, LLC*, 827 F.3d 1341 (Fed. Cir. 2016)).

Appeal 2017-011233
Application 14/219,215

Appellant, however, does not identify, and we cannot see in the claims, any “specific improvement in the way computers operate” or any other improvement to technology. *Enfish*, 822 F.3d at 1336. Instead, in reviewing the record, we find the claims on appeal are silent regarding specific limitations directed to an improved computer or technology.

Appellant also compares the application’s claims to those in Example 35 of the “Subject Matter Eligibility Examples: Business Methods,” issued by the Office in December, 2016 (“the 2016 Examples”) and those found patentable in *BASCOM Global Internet Services v. AT&T Mobility, LLC*, 827 F.3d 1341 (Fed. Cir. 2016). Appeal Br. 13–14; Reply Br. 2–3. These arguments are unavailing. The Federal Circuit held in *BASCOM* that “the patent described[d] how its particular arrangement of elements [was] a technical improvement over the prior art ways of filtering such content.” *BASCOM*, 827 F.3d at 1350. Appellant does not point out where the Specification provides such description. On the contrary, the Specification provides that the invention can be realized on “various computer system configurations.” Spec. ¶ 58. We also see no language recited in the claims that specifically improves any of the recited generic computer components. As *BASCOM* recognized, claims like these that “merely recite the abstract idea . . . along with the requirement to perform it on . . . a set of generic computer components” do not contain an inventive concept. *BASCOM*, 827 F.3d at 1350.

For these reasons, we determine that claim 1 does not integrate the recited abstract idea into a practical application.

Inventive Concept

Because we agree with the Examiner that claim 1 is “directed to” an abstract idea, we consider whether an additional element (or combination of

elements) adds a limitation that is not well-understood, routine, conventional (“WURC”) activity in the field or whether the additional elements simply append WURC activities previously known to the industry, specified at a high level of generality, to the judicial exception. Revised Guidance, 84 Fed. Reg. at 23. The Examiner’s finding that an additional element (or combination of elements) is WURC activity must be supported with a factual determination. *Id.* (citing MPEP § 2106.05(d), as modified by the *Berkheimer* Memorandum⁴).

Whether the additional elements (“a consumer database of a processing server of a payment network,” “a receiving device of the processing server of the payment network,” “a processing device in the consumer database of the processing server,” and “transmitting, by a transmitting device of the processing server of the payment network to a content provider, the specific consumer profile comprising the indication of the propensity to have available funding”) are WURC activity is a question of fact. *See Berkheimer v. HP Inc.*, 881 F.3d 1360, 1369 (Fed. Cir. 2018) (“Whether something is well-understood, routine, and conventional to a skilled artisan . . . is a factual determination.”).

Here, as the Examiner points out (Ans. 15), Appellant’s Specification demonstrates the WURC nature of the additional elements because it indicates the additional elements are sufficiently well-known that the Specification does not need to describe the particulars of such additional elements. *See, e.g.*, Spec. ¶¶ 19, 33, 43, 59, 60, 63, and 67 (discussed above). In addition, courts have recognized that receiving or transmitting

⁴ “Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (*Berkheimer v. HP, Inc.*),” April 19, 2018 (hereinafter “*Berkheimer* Memorandum”).

Appeal 2017-011233
Application 14/219,215

data over a network is WURC. *OIP Techs., Inc., v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed. Cir. 2015) (sending messages over a network); *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350 1355 (Fed. Cir. 2014) (computer receives and sends information over a network). Courts have also recognized that storing and retrieving information in memory is WURC. *Versata Dev. Group, Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1334 (Fed. Cir. 2015); *OIP Techs.*, 788 F.3d at 1363.

Conclusion

For at least the above reasons, we agree with the Examiner that claim 1 is “directed to” an abstract idea and does not recite an “inventive concept.” Accordingly, we sustain the Examiner’s rejection of claim 1 under 35 U.S.C. § 101. For the same reasons, we also sustain the § 101 rejection of independent claim 11 and dependent claims 2–20, not argued separately.

Anticipation Rejection

The Examiner finds that claims 1–20 are anticipated by Feinstein. Final At. 13–16. Specifically, the Examiner contends that Feinstein discloses “the propensity to have available funding is determined based on the repayment length and the installment amount of the payment transaction” (“the available funding limitation”), as recited by both independent claims 1 and 11. Final Act. 13–14 (citing Feinstein, Abstract). The Examiner adds that Feinstein teaches “simulated balances,” which “can in fact predict a change [of] future credit risk if the individual takes [the] contemplated action.” Ans. 16. Moreover, according to the Examiner, “Feinstein’s ‘credit worthiness’ involves a prediction model that predicts a statistical interaction of performance expectation with likely post-scoring behavior.” *Id.* at 16.

Appellant argues that Feinstein does not teach or suggest the available funding limitation. Appeal Br. 16–18. According to Appellant, Feinstein discloses determining a consumer’s credit risk score based on credit bureau information, but not to using *repayment length* or *installment amount* to determine available funds and a propensity to spend. *Id.* at 18.

We agree with Appellant that the Examiner does not sufficiently explain, nor is it obvious from the cited portion of Feinstein, how Feinstein’s prediction model makes use of a requested repayment length or installment amount to determine a propensity to have available funding as recited by the claims. And while Feinstein uses the term “simulated balance,” the Examiner does not sufficiently explain how Feinstein discloses that those simulated balances are in any way related to the claimed repayment length or installment amount. *See* Ans. 16; Feinstein ¶¶ 41, 165.

We, therefore, do not sustain the Examiner’s rejection of claims 1–20 as unpatentable under 35 U.S.C. §102(a) as anticipated by Feinstein.

CONCLUSION

We conclude the Examiner erred in rejecting claims 5 and 15 under 35 U.S.C. § 112(a) and in rejection claims 1–20 as anticipated by Feinstein.

We conclude Appellant has not demonstrated the Examiner erred in rejecting claims 1–20 under 35 U.S.C. § 101.

DECISION

Because we affirm at least one ground of rejection with respect to each claim on appeal, we affirm the Examiner’s rejection of claims 1–20.

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).

Appeal 2017-011233
Application 14/219,215

AFFIRMED