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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte FREDERICK MICHAEL PACHER,
ANA PAULA MARTINEZ PRADA PEYSER,
MICHAEL D. MCCARTHY, FLAVIO SHIBAO,
CRAIG ROBERT DINSMORE, and
MARY MARGARET WILLIAMS

Appeal 2017-004164
Application 13/940,818
Technology Center 3600

Before MURRIEL E. CRAWFORD, MICHAEL W. KIM, and PHILIP J. HOFFMANN, *Administrative Patent Judges*.

CRAWFORD, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

This is an appeal from the final rejection of claims 1, 3–9, 15, and 17–23. We have jurisdiction to review the case under 35 U.S.C. §§ 134 and 6.

The invention relates generally to "the calculation of spending limits taking into account ongoing installment transactions." Spec. ¶ 1.

Claim 1 is illustrative:

1. A method for identifying a spending budget for a payment account, comprising:

storing, in an account database, a plurality of account data entries, wherein each account data entry includes data related to a payment account and includes at least an account identifier and a base monthly spending limit;

storing, in an installment database, a plurality of installment data entries, wherein each installment data entry includes data related to an ongoing installment transaction and includes at least an account identifier and an installment amount of the ongoing installment transaction;

identifying, for a specific account data entry in the account database, at least one installment data entry wherein the account identifier included in each of the at least one installment data entry corresponds to the account identifier included in the specific account data entry;

calculating, by a processing device, an effective monthly spending limit, wherein the effective monthly spending limit is based on the base monthly spending limit and the installment amount included in each of the identified at least one installment data entry;

associating, in the account database, the calculated effective monthly spending limit with the specific account data entry;

receiving, by a receiving device, an authorization request for a financial transaction, wherein the authorization request includes at least a transaction amount and the account identifier included in the specific account data entry;

updating, by the processing device, the authorization request to indicate if the transaction amount is less than or equal to the effective monthly spending limit or exceeds the effective monthly spending limit; and

transmitting, by a transmitting device, the updated authorization request for approval or denial of the financial transaction, wherein the authorization request is updated by the processing device and the updated authorization request indicates whether the transaction amount is less than or equal to

the effective monthly spending limit or exceeds the effective monthly spending limit.

The Examiner rejected claims 1, 3–9, 15 and 17–23 under 35 U.S.C. § 101 as directed to ineligible subject matter in the form of an abstract idea.

We AFFIRM.

PRINCIPLES OF LAW

An invention is patent-eligible if it claims a "new and useful process, machine, manufacture, or composition of matter." 35 U.S.C. § 101. The Supreme Court, however, has long interpreted § 101 to include implicit exceptions: "[l]aws of nature, natural phenomena, and abstract ideas" are not patentable. *E.g.*, *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2354 (2014).

In determining whether a claim falls within the excluded category of abstract ideas, we are guided in our analysis by the Supreme Court's two-step framework, described in *Mayo* and *Alice*. *Id.* at 2355 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 76–78 (2012)). In accordance with that framework, we first determine whether the claim is "directed to" a patent-ineligible abstract idea. *See Alice*, 134 S. Ct. at 2356 ("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."); *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."); *Diamond v. Diehr*, 450 U.S. 175, 184 (1981) ("Analyzing respondents' claims according to the above statements from our cases, we think that a physical and chemical process for molding precision synthetic rubber products falls within the § 101 categories of possibly patentable

subject matter."); *Parker v. Flook*, 437 U.S. 584, 594–95 (1978) ("Respondent's application simply provides a new and presumably better method for calculating alarm limit values."); *Gottschalk v. Benson*, 409 U.S. 63, 64 (1972) ("They claimed a method for converting binary-coded decimal (BCD) numerals into pure binary numerals.").

The patent-ineligible end of the spectrum includes fundamental economic practices, *Alice*, 134 S. Ct. at 2357; *Bilski*, 561 U.S. at 611; mathematical formulas, *Parker*, 437 U.S. at 594–95; and basic tools of scientific and technological work, *Gottschalk*, 409 U.S. at 69. On the patent-eligible side of the spectrum are physical and chemical processes, such as curing rubber, *Diamond*, 450 U.S. at 184 n.7, "tanning, dyeing, making waterproof cloth, vulcanizing India rubber, smelting ores," and a process for manufacturing flour, *Gottschalk*, 409 U.S. at 69.

If the claim is "directed to" a patent-ineligible abstract idea, we then consider the elements of the claim—both individually and as an ordered combination—to assess whether the additional elements transform the nature of the claim into a patent-eligible application of the abstract idea. *Alice*, 134 S. Ct. at 2355. This is a search for an "inventive concept"—an element or combination of elements sufficient to ensure that the claim amounts to "significantly more" than the abstract idea itself. *Id.*

In addition, the Federal Circuit has held that if a method can be performed by human thought alone, or by a human using pen and paper, it is merely an abstract idea and is not patent-eligible under § 101. *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 and is not patent-eligible under § 101.").

Claims involving data collection, analysis, and display are directed to an abstract idea. *Elec. Power Grp. v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (holding that "collecting information, analyzing it, and displaying certain results of the collection and analysis" are "a familiar class of claims 'directed to' a patent-ineligible concept"); *see also In re TLI Commc'ns LLC Patent Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016); *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093–94 (Fed. Cir. 2016). Claims that recite an improvement to a particular computer technology have been found patent eligible. *See, e.g.*, *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314–15 (Fed. Cir. 2016) (determining claims not abstract because they "focused on a specific asserted improvement in computer animation").

ANALYSIS

The Appellants argue all claims together as a group. *See* Appeal Br. 6–14, Reply Br. 2–7. We select claim 1 as representative. *See* 37 C.F.R. § 41.37(c)(1)(iv).

The Examiner finds the claims "are directed to a method for identifying a spending budget." Answer 2. The Examiner further finds the claims recite "comparing and formatting information for transmission during a transaction. This is simply the organization and manipulation of data which can be performed mentally." *Id.*

We agree with the Examiner. Claim 1 recites steps that store, or receive, a budget amount and recurring installment payment amounts for a billing cycle, calculate a spending limit by subtracting the installment payment amounts from the budget amount (*see* Spec. ¶ 60), compare a

received transaction authorization request to the calculated spending limit, and communicate the result of the comparison. This is nothing more than data collection, analysis, and display, which is an abstract idea. *See Elec. Power Grp* at 1353.

In addition, the steps recited in the claim can be performed mentally by a person who can receive, remember, and communicate information and perform simple mathematical functions, except for the requirement that the calculating and updating of the request be performed by a "processing device." The claims recite steps of setting spending limits and comparing expenditures to the remaining limits as they occur, in light of regular expenditures that were already authorized. This is a basic description of managing an account to a budget, which is a common practice in our system of commerce, which can be performed mentally.

We next examine the claim looking for an "inventive concept" or "something more" that may transform the abstract idea into eligible subject matter. We begin by focusing on the use of a processing device, which goes beyond the mental process of data collection, analysis, and display. In describing the claimed "processing device" (*see e.g.,* Spec. ¶¶ 32–34), the Specification does not define or describe the processing device, except to say the "processing server 106 may also include a processing unit 204." Spec. ¶ 34. The Specification provides examples of implementations, such as that "[i]f programmable logic is used, such logic may execute on a commercially available processing platform." *Id.* ¶ 74.

Because the "processing device" only receives, stores, updates, and transmits data, and performs simple calculations, the operations of the claim can be performed on a general purpose computer. In addition, because the

claim can otherwise be performed by a human, the "processing device" language is merely an instruction to implement the manual mental process on a computer. Mental processes, e.g., computing a score, as recited in claim 1, remain unpatentable even when automated to reduce the burden on the user of what once could have been done with pen and paper. *CyberSource* at 1375 ("That purely mental processes can be unpatentable, even when performed by a computer, was precisely the holding of the Supreme Court in *Gottschalk v. Benson*, [409 U.S. 63 (1972)].").

Therefore, we find nothing recited in the claim, either as individual limitations or as an ordered whole, which transforms the abstract idea into eligible subject matter, through an "inventive concept" or "something more."

We are not persuaded by the Appellants' arguments that the claim is are not similar to those in *Cyberfone* or *SmartGene*, because, according to the Appellants, the claims recite a "technical solution" (Appeal Br. 8) and involve "solving a problem which exists entirely within the realm of electronic transaction processing" (*id.* 9). The claim is similar to those in *Elec. Power Grp*, and can be performed through mental thought, as set forth above, and, thus, we are unpersuaded that it requires any particular technology or transaction processing implementation.

We are unpersuaded by the Appellants' argument that "the Examiner ignores recited features such as the organization of the databases of the claims, the format of the authorization request, [and] the manner in which the authorization request is updated." Appeal Br. 10. We find no specific language about these topics recited in the claim in such a way that distinguishes the claim from the abstract idea it is directed to.

The Appellants also argue the claim is "directed to improvements to a particular type of computer network" (*id.* 11), and "are directed to solving a technical problem which exists within electronic transaction systems and software related thereto," generally citing *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016) (*id.* 12), and, therefore, "are directed to methods and systems for improving the functioning of an electronic transaction processing system (*id.* 13). These arguments are unpersuasive. First, no particular network is recited in claim 1. The "payment network" recited in some dependent claims is defined broadly in the Specification as a "system or network used for the transfer of money via the use of cash-substitutes." Spec. ¶ 22. This, for example, could simply refer to mailing a check. Second, because the claim represents a mental task directed to be implemented on a "processor," the claim is not limited to electronic transaction (processing) systems.

We separately and additionally point out that the claim ends with transmitting an updated message that "indicates whether the transaction amount is less than or equal to the effective monthly spending limit or exceeds the effective monthly spending limit." This indication data, however, does not appear to be used within the scope of the claim. Our reviewing court has held that non-functional descriptive material cannot lend patentability to an invention that would have otherwise been anticipated by the prior art. *In re Ngai*, 367 F.3d 1336, 1339 (Fed. Cir. 2004); *cf. In re Gulack*, 703 F.2d 1381, 1385 (Fed. Cir. 1983) (noting that when descriptive material is not functionally related to the substrate, the descriptive material will not distinguish the invention from the prior art in terms of patentability). *King Pharm., Inc. v. Eon Labs, Inc.*, 616 F.3d 1267, 1279 (Fed. Cir. 2010)

("[T]he relevant question is whether 'there exists any new and unobvious functional relationship between the printed matter and the substrate.'") (citations omitted). The request update appears to amount to no more than the addition of printed matter.

We are unpersuaded by the Appellants' argument that the claims are an "improvement to technology (e.g., electronic transaction processing systems)," because, as Appellants argue, the claimed method and system provide their "benefit to a consumer," not to any particular "technology." This actually works against Appellants, is if it is the budget-conscious consumer who is provided with benefits surrounding comparing a transaction to a spending limit, then the "processor" is merely implementing the functions to receive, store, compare, and transmit data and perform simple math, which we are unpersuaded is "significantly more.".

The Appellants have failed to show error on the part of the Examiner in rejecting the claims as directed to abstract ideas. For this reason, we sustain the rejection of claims 1, 3–9, 15, and 17–23 under 35 U.S.C. § 101.

DECISION

We affirm the rejection of claims 1, 3–9, 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)(1)(iv).

AFFIRMED