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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte DIGANTA KUMAR NAYAK, SHANKAR ARUMUGAVELU,
MAHMOUD MUHIEDDINE ELASSIR, VIVEK GURUMURTHY,
VELAMUR SRINIVASAN SUDHARSAN,
RAVI KANTH KALAVAGUNTA, RASESH YOGESH MANIAR,
SUNIL AVADHANAM, SRINIVASA REDDY PAKALA, and
KRISHNA P. YEMPARALA

Appeal 2016-002296
Application 12/954,066¹
Technology Center 3600

Before ANTON W. FETTING, JOSEPH A. FISCHETTI, and
TARA L. HUTCHINGS, *Administrative Patent Judges*.

FISCHETTI, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants seek our review under 35 U.S.C. § 134 of the Examiner's final rejection of claims 1, 4–13, and 16–20. We have jurisdiction under 35 U.S.C. § 6(b).

¹ Appellants identify Verizon Communications Inc. as the real party in interest. Br. 3.

SUMMARY OF DECISION

We AFFIRM.

THE INVENTION

Appellants' claims "relate to analyzing and tracking promotions associated with customer orders" (Spec. ¶11).

Claim 1, reproduced below, is representative of the subject matter on appeal.

1. A method performed by a promotion analyzer device, the method comprising:

receiving, by the promotion analyzer device via a network from an ordering system, order information associated with a customer order placed by a customer with a service or product provider;

obtaining, by the promotion analyzer device via the network, bundle information associated with the customer order from a bundle management system, wherein the bundle management system maintains information about groupings of services or products offered by the service or product provider;

obtaining, by the promotion analyzer device via the network, promotion information from a product catalog system, wherein the promotion information includes order requirements for available promotions, bundle requirements for the available promotions, and billing balance requirements for the available promotions;

determining, by the promotion analyzer device, whether the customer order is eligible for a promotion, of the available promotions, based on the received order information, the obtained bundle information, and the obtained promotion information, wherein the promotion includes a reward of a free or discounted product or service to be provided to the customer after placing the customer order;

requesting, by the promotion analyzer device via the network, a balance amount for an account associated with the

customer from a billing system, in response to determining that the customer order is eligible for the promotion;

receiving, by the promotion analyzer device via the network, the balance amount, associated with the account, from the billing system;

determining, by the promotion analyzer device, whether the received balance amount is less than a balance threshold specified in the billing balance requirements included in the obtained promotion information; and

sending, by the promotion analyzer device via the network, a message to a fulfillment system to fulfill the promotion, in response to determining that the balance amount is less than the balance threshold.

THE REJECTIONS

The Examiner relies upon the following as evidence of unpatentability:

Williams	US 2002/0049631 A1	Apr. 25, 2002
Gallon	US 2003/0074305 A1	Apr. 17, 2003
Walker	US 6,601,036 B1	July 29, 2003
Marshall	US 2003/0233278 A1	Dec. 18, 2003
Beck	US 7,254,547 B1	Aug. 7, 2007
Chu	US 2008/0270240 A1	Oct. 30, 2008
Posner	US 2010/0161399 A1	June 24, 2010

The following rejections are before us for review.

Claims 1, 4–13, and 16–20 are rejected under 35 U.S.C. § 101.

Claims 1, 4, 5, 9, 10, 13, 16, 19, and 20 are rejected under 35 U.S.C. § 103 as being unpatentable over Posner, Walker, Marshall, Williams, and Gallon.

Claims 6–8, 17, and 18 are rejected under 35 U.S.C. § 103 as being unpatentable over Posner, Walker, Marshall, Williams, Gallon, and Chu.

Claims 11 and 12 are rejected under 35 U.S.C. § 103 as being unpatentable over Posner, Walker, Marshall, Williams, Gallon, and Beck.

ANALYSIS

35 U.S.C. § 101 REJECTION

Claims 1, 4–13, and 16–20 are rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter. We will sustain this rejection.

[The Supreme Court] set forth a framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts. First, . . . determine whether the claims at issue are directed to one of those patent-ineligible concepts. If so, we then ask, “[w]hat else is there in the claims before us?” To answer that question, . . . consider 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. [The Court] described step two of this analysis as a search for an “inventive concept”—*i.e.*, 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 Corp., Pty. Ltd. v. CLS Bank Int’l, 134 S. Ct. 2347, 2355 (2014) (citations omitted) (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 72–73 (2012)).

To perform this test, we must first determine whether the claims at issue are directed to a patent-ineligible concept.

Although the Court in *Alice* made a direct finding as to what the claims were directed to, we find that this case's claims themselves and the Specification provide enough information to inform one as to what they are directed to.

The steps in claim 1, which claim is exemplary in scope of all the independent claims before us, result in determining whether a received balance amount is less than a balance threshold specified in the billing balance requirements included in the obtained promotion information; and sending a message to a fulfillment system to fulfill the promotion, in response to determining that the balance amount is less than the balance threshold. The Specification at paragraph 1 recites: “[m]oreover, different types of services may be offered together in bundles at a discounted rate. Additionally, customers may be provided with various incentives to sign up for services.” The Specification states:

[a]n implementation described herein may relate to analyzing an order with respect to promotion specifications to determine whether the customer associated with the order is eligible for a promotion, tracking changes in the order to determine whether the customer is still eligible for the promotion, checking a billing history associated with the order to determine whether the billing history satisfies the promotion specifications, fulfilling the promotion if the billing history satisfies the promotion specifications, and disqualifying the promotion if the billing history does not satisfy the promotion specifications.

Spec. ¶ 11. “Billing system 140 may provide information about a billing history associated with the customer order (e.g., an outstanding balance) to promotion analyzer system 110.” Spec. ¶ 18.

Thus, all this evidence shows that claim 1 is directed to determining whether a customer order is eligible for a promotion based on an account balance of the customer. It follows from prior Supreme Court cases, *Gottschalk v. Benson*, 409 U.S. 63 (1972) in particular, that the claims at issue here are directed to an abstract idea. Determining whether a customer order is eligible for a promotion based on account balance being below a given threshold is a fundamental economic practice because it insures solvency. “[A] balance threshold that must be satisfied in order for the customer to remain eligible for the promotion.” Spec. ¶65. The patent-ineligible end of the 35 U.S.C. § 101 spectrum includes fundamental economic practices. *See Alice Corp. Pty. Ltd.*, 134 S. Ct. at 2355–1257. Also, the effect of the scheme is to award responsible money management by a customer, and thus represents a method of organizing human behavior, which is not patentable subject matter. *See Id.* at 2355-56. Thus, determining whether a customer order is eligible for a promotion based on an account balance being below a given threshold is an “abstract idea” beyond the scope of § 101.

As in *Alice Corp. Pty. Ltd.*, we need not labor to delimit the precise contours of the “abstract ideas” category in this case. It is enough to recognize that there is no meaningful distinction in the level of abstraction between the concept of an intermediated settlement in *Alice* and the concept of determining whether a customer order is eligible for a promotion based on account balance being below a given threshold at issue here. Both are squarely within the realm of “abstract ideas” as the Court has used that term. That the claims do not preempt all forms of the abstraction or may be limited to an incentive program, does not make them any less abstract. *See OIP*

Techs., Inc. v. Amazon.com, Inc., 788 F.3d 1359, 1360–61 (Fed. Cir. 2015). Perhaps more to the point, claim 1 does no more than offer an incentive for effecting a desired behavior. Incentive, as such, is a disembodied concept that is the epitome of abstraction.

The introduction of a computer into the claims does not alter the analysis at *Mayo* step two.

the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention. Stating an abstract idea “while adding the words ‘apply it’” is not enough for patent eligibility. Nor is limiting the use of an abstract idea “to a particular technological environment.” Stating an abstract idea while adding the words “apply it with a computer” simply combines those two steps, with the same deficient result. Thus, if a patent’s recitation of a computer amounts to a mere instruction to “implement[t]” an abstract idea “on ... a computer,” that addition cannot impart patent eligibility. This conclusion accords with the preemption concern that undergirds our § 101 jurisprudence. Given the ubiquity of computers, wholly generic computer implementation is not generally the sort of “additional feature[e]” that provides any “practical assurance that the process is more than a drafting effort designed to monopolize the [abstract idea] itself.”

Alice Corp. Pty. Ltd., 134 S. Ct. at 2358 (alterations in original) (citations omitted).

“[T]he relevant question is whether the claims here do more than simply instruct the practitioner to implement the abstract idea . . . on a generic computer.” *Alice Corp. Pty. Ltd.*, 134 S. Ct. at 2359. They do not.

Taking the claim elements separately, the function performed by the computer at each step of the process is purely conventional. Using a computer to take in data, compute a result, and return the result to a user amounts to electronic data query and retrieval—some of the most basic

functions of a computer. All of these computer functions are well-understood, routine, conventional activities previously known to the industry. In short, each step does no more than require a generic computer to perform generic computer functions.

Considered as an ordered combination, the computer components of Appellants' claims add nothing that is not already present when the steps are considered separately. Viewed as a whole, Appellants' claims simply recite the concept of determining whether a customer order is eligible for a promotion based on account balance being below a given threshold. The claims do not, for example, purport to improve the functioning of the computer itself. Nor do they effect an improvement in any other technology or technical field. Instead, the claims at issue amount to nothing significantly more than instructions to determine whether a customer order is eligible for a promotion based on account balance being below a given threshold on a generic computer. Under our precedents, that is not enough to transform an abstract idea into a patent-eligible invention. *See Alice Corp. Pty. Ltd.*, 134 S. Ct. at 2360.

As to the structural claims, they are no different from the method claims in substance. The method claims recite the abstract idea implemented on a generic computer; the system claims recite a handful of generic computer components configured to implement the same idea. This Court has long “warn[ed] ... against” interpreting § 101 “in ways that make patent eligibility ‘depend simply on the draftsman’s art.’”

Alice Corp. Pty. Ltd., 134 S. Ct. at 2360 (alterations in original).

That claim 1 recites a promotional analyzer device does not make it patent eligible because claim 1 does not recite any specific means

constituting an improvement in the technical field or technology of computer networking. *See McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016).

We further disagree with Appellants' assertion that "the claims solve a technological problem in the communication services industry by enabling a provider of communication services to keep track of the fulfillment of promotions, for a large number of customers, when particular requirements are satisfied." (Appeal Br. 14-15). The question is whether the claims as a whole "focus on a specific means or method that improves the relevant technology" or are "directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery." *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016). In this case, claim 1 as a whole is directed to awarding a customer with a promotion by determining whether a customer order is eligible for a promotion based on an account balance being below a given threshold, and not the computer system on which the scheme is implemented.

35 U.S.C. § 103 REJECTION

Each of independent claims 1, 13, and 20 requires in one form or another;

receiving, by the promotion analyzer device via a network *from an ordering system...*

obtaining, by the promotion analyzer device via the network, bundle information associated with the customer order *from a bundle management system...*

obtaining, by the promotion analyzer device via the network, promotion information *from a product catalog system,*

determining, by the promotion analyzer device, whether the customer order is eligible for a promotion, of the available promotions, *based on the received order information...*

requesting, by the promotion analyzer device via the network, a balance amount for an account associated with the customer from *a billing system...*

sending, by the promotion analyzer device via the network, a message to *a fulfillment system* to fulfill the promotion... .

(App. Br. 41, Claim App'x (emphasis added)).

The Examiner however found concerning the claim elements, promotion analyzer device, ordering system, bundle management system, that:

Posner discloses the concept of a utilizing a single server or multiple servers to perform functions within a single system, wherein each of the plurality of servers can be dedicated to individual functions. While the claims include names for the system such as ordering system, the bundle management system, product catalog system, and billing system, the Examiner notes these are merely titles, and as disclosed by Posner, a single system can include multiple server systems which are in communication.

(Answer 6).

Appellants however argue,

The Examiner has not explained 1) which specific device or system of POSNER, WALKER, MARSHALL, WILLIAMS, or GALLON allegedly corresponds to the promotion analyzer device of claim 1; 2) which specific device or system of POSNER, WALKER, MARSHALL, WILLIAMS, or GALLON allegedly corresponds to the ordering system recited in claim 1; 3) which specific device or system of POSNER, WALKER, MARSHALL, WILLIAMS, or GALLON allegedly corresponds to the bundle management system of claim 1; 4) which specific device or system of POSNER, WALKER,

MARSHALL, WILLIAMS, or GALLON allegedly corresponds to the product catalog system of claim 1; 5) which specific device or system of POSNER, WALKER, MARSHALL, WILLIAMS, or GALLON allegedly corresponds to the billing system of claim 1; 6) which device or system of POSNER, WALKER, MARSHALL, WILLIAMS, or GALLON allegedly corresponds to the fulfillment system of claim 1; and 7) how these specific devices or systems would have been combined by one of ordinary skill in the art at the time of the invention to arrive at a combination of devices enabled to carry out the specifically recited method of claim 1. Absent such an explanation, Appellants respectfully submit that the Examiner's allegations regarding "concepts" allegedly disclosed by the cited references do not satisfy the requirements of establishing a prima facie case of obviousness under 35 U.S.C. § 103(a).

(Appeal Br. 27–28)

We agree with Appellants. The claimed systems and associated device components, albeit recited only generically in the claims, are still claim limitations which need to be addressed and specifically accounted for against the prior art to establish a prima facie case in a 35 U.S.C. § 103(a) rejection. The nomenclature of these limitations also serves as markers in the claim to establish the claimed sequencing of the “to and from” flow of information as is illustrated by the italicized excerpt above, which sequencing the Examiner’s findings also do not address. *See Texas Instr. Inc. v. United States Int’l Trade Comm’n*, 988 F.2d 1165, 1171 (Fed. Cir. 1993) (claim language cannot be mere surplusage. An express limitation cannot be read out of the claim); *Unique Concepts, Inc. v. Brown*, 939 F.2d 1558, 1563 (Fed. Cir. 1991) (two distinct claim elements should each be given full effect). Therefore we will not sustain the rejection of independent claims 1, 13 and 20 under 35 U.S.C. § 103(a).

Since claims 4–12 and 16–19 depend from claim 1 and 13 respectively, and since we cannot sustain the rejection of claims 1 and 13 the rejection of claims 4–12 and 16–19 likewise cannot be sustained.

CONCLUSIONS OF LAW

We conclude the Examiner did not err in rejecting claims 1, 4–13, and 16–20 under 35 U.S.C. § 101.

We conclude the Examiner did err in rejecting claims 1, 4–13, and 16–20 under 35 U.S.C. § 103(a).

DECISION

The decision of the Examiner to reject claims 1, 4–13, and 16–20 is affirmed.

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).

AFFIRMED