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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte DAHAI REN

Appeal 2016-005865
Application 13/538,247
Technology Center 3600

Before ANTON W. FETTING, NINA L. MEDLOCK, and
MATTHEW S. MEYERS, *Administrative Patent Judges*.

FETTING, *Administrative Patent Judge*.

DECISION ON APPEAL
STATEMENT OF THE CASE¹

Dahai Ren (“Appellant”) seeks review under 35 U.S.C. § 134 from a final rejection of claims 1–9 and 11–21, the only claims pending in the application on appeal. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b).

We affirm.

¹ Our decision will make reference to the Appellant’s Appeal Brief (“Br.,” filed September 8, 2015) and the Examiner’s Answer (“Ans.,” mailed March 4, 2016), and Final Action (“Final Act.,” mailed May 13, 2015).

The Appellant invented a way of providing a cloud based customer incentive program. Spec., para. 13.

An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below (bracketed matter and some paragraphing added).

1. A computer-implemented method comprising:

[1] receiving, by a processing device, at a third party network location,

a first business profile from a first business partner,
wherein the first business profile includes a first
customer incentive program identifier that identifies

the first business partner

and

a first customer incentive program provided by the
first business partner;

[2] receiving, by the processing device,

a second business profile from a second business partner,
wherein the second business profile includes a second
customer incentive program identifier that identifies

the second business partner

and

a second customer incentive program provided by
the second business partner;

[3] adding, by the processing device,

the first business partner and the second business partner
to a list of available retailers;

[4] receiving, by the processing device and from a user device,

customer profile information for

a customer

and

at least one selected retailer from the list of
available retailers;

[5] storing, by the processing device,

a customer profile that includes the customer profile
information in association with the at least one selected
retailer;

[6] generating, by the processing device,

at least one customer incentive program user identifier
associated with each of the at least one selected retailer,
wherein the customer incentive program user identifier
identifies a particular customer account for the customer
with the at least one selected retailer;

and

[7] sending, by the processing device and to the user device,

the at least one[]customer incentive program user
identifier,

wherein the user device is operable to present the
customer incentive program user identifier to a business
device,

the business device being operable

to identify the customer in association with the
particular customer account

and

to allow the customer to participate in a customer
incentive program provided by the at least one
selected retailer

based on the customer incentive program
user identifier,

and

each customer is eligible for rewards associated with the customer incentive program based on one or more qualifying purchases.

The Examiner relies upon the following prior art:

Figueroa	US 2009/0222328 A1	Sept. 3, 2009
Hendrickson	US 2011/0040655 A1	Feb. 17, 2011
Reuthe	US 2011/0137717 A1	June 9, 2011

Claims 1–9 and 11–21 stand rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter.

Claims 1–9 and 11–21 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Hendrickson, Figueroa, and Reuthe.²

ISSUES

The issues of eligible subject matter turn primarily on whether the claims recite more than abstract conceptual advice of what a computer is to provide without implementation details.

² Although the statutory statement of rejection omits claim 21, claim 21 is included in the analysis. The omission is taken as a typographic error.

The issues of obviousness turn primarily on the degree of patentable weight afforded the non-functional limitations, whether the non-functional limitations are sufficiently broad in any event to encompass the art, and whether the references describe reasons for combining them.

FACTS PERTINENT TO THE ISSUES

The following enumerated Findings of Fact (FF) are believed to be supported by a preponderance of the evidence.

Facts Related to the Prior Art

Hendrickson

01. Hendrickson is directed to improving the accuracy of marketing to consumers by compiling a consumer profile database using inputs from web-based, point-of-service-based, and mobile device-based systems that collect data relating to consumer preferences and purchases, by developing profiles based on consumer preferences and purchases in certain industry sectors and the like, and by using such profiles and purchase information in conjunction with the geographic position of the customer to make purchasing recommendations and marketing offers across several industry sectors and to submit preregistered retail orders for purchase.

Hendrickson, para. 2.

02. Hendrickson describes entering plural different service providers who desire to participate in the same network.

Hendrickson, para. 24.

03. Hendrickson describes entering a user identifier by way of the user's mobile device. Hendrickson, para. 27.
04. Hendrickson describes using this user identifier to pre-order purchases. Hendrickson, para. 27. Pre-ordering is a service that augments and, therefore, promotes a purchase and as such is within the scope of a promotional activity.
05. Hendrickson describes a promotional loyalty program in which each customer would receive his/her most frequently purchased, most recently purchased, or least expensive dessert purchased complimentary from the vendor. Hendrickson, para. 37.
06. Hendrickson describes a promotional text alert a vendor can personalize as a message regarding, for example, a comic's background, rating, accomplishments, and other individual information or offer special discounts in the same fashion as that of the embodiment of the method for the travel industry. As tickets sell quickly, promotion prices can be lifted. For customers that prefer a certain seat or section at an event, he/she will be notified when the option to purchase these tickets becomes available. Hendrickson, para. 40.

Figueroa

07. Figueroa is directed to providing business information and facilitating contact between businesses and consumers. Figueroa, para. 2.

08. Figueroa describes a network based business and consumer resource system for businesses to open a dialog channel with customers and clients, and for potential customers and clients to open a dialog channel with businesses. By creating business profile pages on the publicly available system, business owners can perform such tasks as updating business information, scheduling meetings, responding to customer requests for service in an area, creating coupons that are available in any of the areas in which the business owner is subscribed, and improving the business's ranking in popular publicly accessible search engines. This gives the business owner (particularly small business owners in single locations) an improved ability to market to a specific area.

Figueroa, para. 26.

Reuthe

09. Reuthe is directed to digital incentives for electronic financial transactions. Reuthe, para. 2.

10. Reuthe describes loyalty and rewards programs as popular incentive tools used by merchants and service providers. These programs generally reward customer loyalty by crediting a consumer's rewards account with reward currency—points, miles, reward dollars, etc.—upon the completion of a qualifying transaction and allowing the consumer to redeem accumulated reward currency for merchandise, services, or discounts. Some loyalty and reward program implementations provide rebates or discounts to the consumer based on the achievement of preset

milestones. In general, loyalty and reward programs reward a pattern of customer loyalty performed in the past with a future reward. While these programs provide an incentive for consumers, the consumers must wait until a point in time after one or more purchases have been made before realizing any program-related benefit. Consumers do not receive any immediate benefit at the point of sale as they would with coupon-type incentives. Reuteh, para. 14.

ANALYSIS

Claims 1–9 and 11–21 rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter

Method claim 1 recites receiving data representing provider profiles, adding those provider identities to a list, receiving and storing data representing customer profiles, and generating and sending data representing a customer incentive program user identifier. Thus, claim 1 recites receiving, storing, generating, and transmitting data. None of the limitations recites implementation details for any of these steps; instead, the limitations recite functional results to be achieved by any and all possible means. Data reception, generation and storage, and transmission are all generic, conventional data processing operations to the point they are themselves concepts awaiting implementation details. The sequence of data reception-storage-generation-transmission is equally generic and conventional. The ordering of the steps is, therefore, ordinary and conventional. The remaining

claims merely describe parameters for the data content and destinations, with no implementation details.

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) (citing *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66 (2012)).

To perform this test, we must first determine whether the claims at issue are directed to a patent-ineligible concept. The Examiner finds the claims directed to manipulating data to perform the fundamental economic practice of providing incentives to customers. Final Act. 6.

Although the Court in *Alice* made a determination 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.

The preamble to claim 1 does not recite what it is directed to, but the steps in claim 1 result in sending a piece of data representing a customer incentive program user identifier. The Specification at paragraph 13 recites that the invention relates to providing a cloud based customer incentive program. Thus, all this evidence shows that claim 1 is directed to creating customer incentives, i.e. sales promotion.

It follows from prior Supreme Court cases, and *Bilski* (*Bilski v. Kappos*, 561 U.S. 593 (2010)) in particular, that the claims at issue here are directed to an abstract idea. Like the risk hedging in *Bilski*, the concept of sales promotion is a fundamental business practice long prevalent in our system of commerce. The use of sales promotion is also a building block of human ingenuity in marketing. Thus, sales promotion, like hedging, is an “abstract idea” beyond the scope of § 101. *See Alice*, 134 S. Ct. at 2356.

As in *Alice*, 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 risk hedging in *Bilski* and the concept of sales promotion at issue here. Both are squarely within the realm of “abstract ideas” as the Court has used that term. *See Alice*, 134 S. Ct. at 2357.

Further, claims involving data collection, analysis, and display are directed to an abstract idea. *Elec. Power Grp., LLC 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). Claim 1, unlike the claims found non-abstract in prior cases, uses generic computer technology to perform data reception, generation, and transmission and does not recite an improvement to a particular computer technology. *See, e.g., McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314–15 (Fed. Cir. 2016) (finding claims not abstract because they “focused on a specific asserted improvement in computer animation”). As such, claim 1 is directed to the abstract idea of receiving, generating, and transmitting data.

The remaining claims merely describe parameters for the data content and destinations. We conclude that the claims at issue are directed to a patent-ineligible concept.

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

[T]he 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 pre-emption concern that undergirds our §101 jurisprudence. Given the ubiquity of computers, wholly generic computer implementation is not generally the sort of “additional

featur[e]” that provides any “practical assurance that the process is more than a drafting effort designed to monopolize the [abstract idea] itself.”

Alice, 134 S. Ct. at 2358 (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*, 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 receive, generate, and transmit data amounts to electronic data query and retrieval—one of the most basic functions of a computer. The limitation of

wherein the user device is operable to present the customer incentive program user identifier to a business device, the business device being operable to identify the customer in association with the particular customer account and to allow the customer to participate in a customer incentive program provided by the at least one selected retailer based on the customer incentive program user identifier, and each customer is eligible for rewards associated with the customer incentive program based on one or more qualifying purchases

is not a step and is aspirational rather than functional, describing aspirational characteristics of the device and data that do not affect the actual recited steps. 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 Appellant's method add nothing that is not already present when the steps are considered separately. Viewed as a whole, Appellant's method claims simply recite the concept of sales promotion as performed by a generic computer. To be sure, the claims recite doing so by advising one to place identifiers in a list and generate and send another identifier for the promotion. But this is no more than abstract conceptual advice on the parameters for such sales promotion and the generic computer processes necessary to process those parameters, and does not recite any particular implementation.

The method 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. The 22 pages of Specification spell out different generic equipment and parameters that might be applied using this concept and the particular steps such conventional processing would entail based on the concept of sales promotion under different scenarios. They do not describe any particular improvement in the manner a computer functions. Instead, the claims at issue amount to nothing significantly more than an instruction to apply the abstract idea of sales promotion using some unspecified, generic computer. Under our precedents, that is not enough to transform an abstract idea into a patent-eligible invention. *See Alice*, 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, 134 S. Ct. at 2360.

We are not persuaded by Appellant’s argument that the Examiner has not provided evidence that the claims are directed to an abstract idea. Br. 9–10. We find sufficient intrinsic evidence *supra*. Beyond that, claims directed to fundamental business ideas have widely been held to be directed to abstract ideas.

Here, the claims are directed to the concept of offer-based price optimization. . . . This concept of “offer based pricing” is similar to other “fundamental economic concepts” found to be abstract ideas by the Supreme Court and this court. *See, e.g., Alice*, 134 S. Ct. at 2357 (intermediated settlement); *Bilski v. Kappos*, 561 U.S. 593, 611 [(2010)] (risk hedging); *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014) (using advertising as an exchange or currency); *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343, 1347 (Fed. Cir. 2014) (data collection); *Accenture Global Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1346 (Fed. Cir. 2013) (generating tasks in an insurance organization). And that the claims do not preempt all price optimization or may be limited to price optimization in the e-commerce setting do not make them any less abstract. *See buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) (collecting cases); *Accenture*, 728 F.3d at 1345.

OIP Technologies, Inc. v. Amazon.com, Inc., 788 F.3d 1359, 1362 (Fed. Cir. 2015). And the court in *Elec. Power Group* further held that claims directed to fundamental data processing operations, such as claim 1, are also directed to abstract ideas. *Electric Power Grp.*, 830 F.3d at 1353.

We are not persuaded by Appellant’s argument that each claim is clearly directed to one of the four statutory categories. Br. 10. Under 35 U.S.C. § 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. The Supreme Court, however, has long interpreted § 101 to include an implicit exception: “[l]aws of nature, natural phenomena, and abstract ideas” are not patentable. *See, e.g., Alice*, 134 S. Ct. at 2354.

We are not persuaded by Appellant’s argument that “the characterization of the alleged abstract idea (i.e., providing incentives to customers) does not correspond to the actual features of claim 1 and the features of claim 1 cannot be fairly construed as an idea of itself.” Br. 12. The features of the claims are recited generically devoid of implementation details.

Features such as network streaming and a customized user interface do not convert the abstract idea of delivering media content to a handheld electronic device into a concrete solution to a problem. The features set forth in the claims are described and claimed generically rather than with the specificity necessary to show how those components provide a concrete solution to the problem addressed by the patent.

Affinity Labs of Texas, LLC v. Amazon.com Inc., 838 F.3d 1266, 1271 (Fed. Cir. 2016).

We are not persuaded by Appellant’s argument that:

The Appellant respectfully submits that these features cannot be reasonably construed to amount to mere instructions to apply an abstract idea or generic computer structure to perform generic computer functions. The Appellant also asserts that these features do effect an improvement to another technology or technical field. For example, the features of claim 1 provide a

computer-implemented customer incentive solution that allows customers to present a customer incentive program user identifier to participate in an incentive program. Similar to the findings in DDR Holdings, LLC v. Hotels.com, (Fed. Cir. 2014) the solution “is necessarily rooted in computer technology” in order to overcome a problem specifically arising in the area of customer incentives (see DDR Holdings, 13-1505, at 20).

Br. 13–14. The argument that “these features cannot be reasonably construed to amount to mere instructions to apply an abstract idea or generic computer structure to perform generic computer functions” is conclusory and provides no evidence or other support. The argument that the features effect an improvement are based on *DDR Holdings*. “The patent claims here do not address problems unique to the Internet, so *DDR* has no applicability.” *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1371 (Fed. Cir. 2015).

The remaining arguments are variations on those *supra*.

Claims 1–9 and 11–21 rejected under 35 U.S.C. § 103(a) as unpatentable over Hendrickson, Figueroa, and Reuthe

First, as we find *supra*, the limitation of

wherein the user device is operable to present the customer incentive program user identifier to a business device, the business device being operable to identify the customer in association with the particular customer account and to allow the customer to participate in a customer incentive program provided by the at least one selected retailer based on the customer incentive program user identifier, and each customer is eligible for rewards associated with the customer incentive program based on one or more qualifying purchases

is not a step and is aspirational rather than functional, describing aspirational characteristics of the device and data that do not affect the actual recited steps. As such this limitation is afforded no patentable weight. *King Pharm., Inc. v. Eon Labs, Inc.*, 616 F.3d 1267, 1279 (Fed. Cir. 2010) (The relevant inquiry here is whether the additional instructional limitation has a “new and unobvious functional relationship” with the method, that is, whether the limitation in no way depends on the method, and the method does not depend on the limitation).

We are not persuaded by Appellant’s argument that the coupons of Figueroa cannot be reasonably construed to correspond to the customer incentive program identifier of claim 1 in which each customer is eligible for rewards associated with the customer incentive program based on one or more qualifying purchases. Further, none of the cited portions of Figueroa, nor any portion of Figueroa discloses a customer incentive program, much less a first customer incentive program identifier that identifies the first business partner and a first customer incentive program provided by the first business partner.

Br. 18. Hendrickson describes a promotional loyalty program in which each customer would receive his/her most frequently purchased, most recently purchased, or least expensive dessert purchased complimentary from the vendor. Hendrickson describes doing so after entering a user identifier by way of the user’s mobile device. Claim 1 recites no particular implementation for the recited identifier, and does not recite how directly or indirectly identification occurs and does not even recite unique identification. Thus, any identifier entered relative to a particular vendor’s sale for which promotions exist is an identifier for the user related to an incentive program for that partner. Moreover, the meaning of the identifier

beyond being related to a user is entirely in the mind of the beholder and afforded no patentable weight. *In re Bernhart*, 417 F.2d 1395, 1399 (CCPA 1969).

We are not persuaded by Appellant’s argument that “neither Hendrickson nor Figueroa discloses sending at least one customer incentive program user identifier to the user device.” Br. 19. Hendrickson describes a promotional text alert a vendor can personalize as a message regarding, for example, a comic’s background, rating, accomplishments, and other individual information or offer special discounts in the same fashion as that of the embodiment of the method for the travel industry. As tickets sell quickly, promotion prices can be lifted. For customers that prefer a certain seat or section at an event, he/she will be notified when the option to purchase these tickets becomes available. Such a text alert sent to a user’s device inherently sends the user’s identifier, for otherwise the message would not be received. As we find *supra*, the remaining limitations regarding the capability of the device and data are aspirational rather than functional, and also are sufficiently broad to encompass the device and data in the art.

We are not persuaded by Appellant’s argument that there is no reason to combine the references. Br. 21–22. The Examiner applies Figueroa for its description of combining similar data into lists. Final Act. 8. Figueroa provides the motivation as facilitating contact between businesses and consumers. The Examiner applies Reuthe for its description of initiating via a qualifying purchase. Reuthe provides the motivation as describing digital incentives for electronic financial transactions.

Separately argued claims 6 and 9 recite further data limitations, which again are discernable only in the mind of the beholder.

CONCLUSIONS OF LAW

The rejection of claims 1–9 and 11–21 under 35 U.S.C. § 101 as directed to non-statutory subject matter is proper.

The rejection of claims 1–9 and 11–21 under 35 U.S.C. § 103(a) as unpatentable over Hendrickson, Figueroa, and Reuthe is proper.

DECISION

The rejection of claims 1–9 and 11–21 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). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2011).

AFFIRMED