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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte BILLY SHANE FOX

Appeal 2016-005982
Application 14/482,106
Technology Center 3600

Before JEAN R. HOMERE, JOSEPH P. LENTIVECH, and DAVID CUTITTA, *Administrative Patent Judges*.

HOMERE, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134(a) from a Final Rejection of claims 1–20, which constitute all claims pending in this application.[1] Claims App'x. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

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[1] Appellant identifies the real party in interest as iHeartMedia Management Services. App. Br. 2.

Introduction

According to Appellant, the claimed subject matter relates to an inventory management system (54) for a commercial enterprise including a number of member media properties at different geographic locations (51), each having a market area, associated advertising inventory for sale along with advertising time and future time periods. Spec. 1–2, 20–21, Fig. 6. In particular, the inventory management system (54) includes an inventory management software for providing local stations (51) with remote access to the inventory data in a master database (53) via a wide area network (52). *Id.* at 20–21. More particularly, the inventory management software executes a price forecasting module on the inventory data obtained from the database to display advertising time segments; it executes a yield management module to determine inventory pricing; and executes a traffic billing module to maintain advertising inventory order information. *Id.* at 18–19, Fig. 5.

Representative Claim

Independent claim 1 is representative, and reads as follows:

> 1.A computer implemented inventory management system for an enterprise that includes a number of member media properties at different geographic locations each having a market area, and having associated advertising inventory for sale, wherein the inventory comprises advertising time associated with future time periods, comprising:
>
> a master database of advertising inventory data for the number of member media properties;
>
> inventory management software that uses inventory data from the master database, which inventory management software, when executed by the computer implemented inventory management system, includes:

> a price forecasting system that generates, responsive to criteria of a customer request, a display of advertising time segments by accessing inventory information of multiples of the number of member media properties;
>
> a yield management system that generates and maintains advertising inventory pricing information for use by the price forecasting system in accordance with a pricing strategy, in which the pricing strategy includes demand curves applicable to sales of advertising time associated with future time periods for the number of media properties,
>
> wherein:
>
> the yield management system recalculates the advertising inventory pricing information, based on the pricing strategy, in response to order confirmations;
>
> a traffic billing system that maintains advertising inventory order information; and
>
> a wide area network coupled to the computer implemented inventory management system permitting remote access to the master database for each of the number of member media properties.

Rejection on Appeal

Claims 1–20 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Final Act. 4–5.

ANALYSIS

We consider Appellant's arguments *seriatim*, as they are presented in the Appeal Brief, pages 9–21, and the Reply Brief, pages 1–5.[2] We are

[2] Rather than reiterate all the arguments of Appellant and all the Examiner's findings, we refer to the Appeal Brief (filed October 23, 2016), the Reply Brief (filed May 20, 2016), and the Answer (mailed March 21, 2016) ("Ans.") for the respective details. We have considered in this Decision only those arguments Appellant actually raised in the Briefs. Any other arguments Appellant could have made but chose not to make in the Briefs are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(iv).

unpersuaded by Appellant's contentions. Except as otherwise indicated hereinafter, we adopt as our own the findings and reasons set forth in the Final Action, and the Examiner's Answer in response to Appellant's Appeal Brief. Final Act. 2–5, Ans. 2–4. However, we highlight and address specific arguments and findings for emphasis as follows.

Appellant argues the Examiner erred in concluding that claims 1–20 are directed to an abstract idea without considering whether the claims as a whole amount to significantly more than the alleged judicial exception. App. Br. 9. In particular, Appellant argues the following:

> Appellant respectfully submits that the steps taken alone or as an ordered combination do amount to claims as a whole that are significantly more than the judicial exception, because the combination amounts inventory management in view of advertisement requirements by purchasers and on confirmed orders for advertising time for a collection of member stations, and further, pricing data recalculated based on the confirmed orders. *(See July 2015 Update Appendix 1:Examples* at p. 12 (referring to example 24)).
>
> Also, without documentary evidence to support the conclusions, the Final Office Action seems to infer "official notice" in the abstract to the rejection under Section 101, by submitting that the "claims' [generic] use of a 'master database', a 'computer', and a 'wide area network' add no inventive concept." (Final Office Action at p. 2). That is, the Final Office Action relates the claims to base limitations without consideration of the claims as a whole.

App. Br. 11.

According to Appellant, the claimed subject matter is patent eligible under the rationale of *DDR Holdings, LLC v. Hotels.com, LP.* (Fed. Cir. 2014)). In particular, Appellant argues the following:

> Similar to *DDR Holdings,* the Appellant's claims are directed, *inter alia,* to inventory management of advertising inventory data for member media properties at different geographic locations and market

> areas and associated advertising for sale. *(See, e.g.,* Claims 1 and 8). The apparatus is directed towards inventory management in view of requirements and on confirmed orders for advertising time. *(Id.; see also,* Claim 14). In this respect, the solution-advertisement valuation/purchase for disparate geographic regions of member stations is necessarily rooted in computer technology to overcome the problem of nonsensical pricing variations, or advertisement inventory that may occur.

Id. at 11–12.

> Appellant respectfully submits that "the claim is eligible because it recites additional limitations that when considered as an ordered combination demonstrates a technologically rooted solution to an Internet-centric problem and thus amounts to significantly more than comparing and organizing information for transmission." *(See July 2015 Update Appendix 1:Examples* at p. 1 (referring to example 21 based on *Google, Inc. v. Simpleair, Inc.,* Covered Business Method Case No. CBM 2014-00170 (Jan. 22, 2015))).
>
> Appellant respectfully submits that the positive recitation of elements, and coordinated functionality and/or synergy provided by the combination of the elements, bring "enough extra" to overcome the rejection under Section 101, particularly in view of the lack of evidentiary support in the rejection.

Id. at 13.

> With the claim elements recited, with the flow of information to, from, and between the database, the inventory management software with price forecasting program logic, yield management program logic to generate advertising sales for future time periods of radio stations along with traffic billing program logic provides a synergistic combination that provides a vast improvement in handling last minute ad placement changes over geographic areas accessing such capabilities remotely.
>
> The claims, therefore, are respectfully submitted as amounting to significantly more than the underlying minimized characterization by the Final Office Action. The Appellant respectfully submits that the claims contain subject matter eligible for patent protection. *(See*

July 2015 Update: Subject Matter Eligibility at pp. 4–5).

Id. at 14.

These arguments are not persuasive. The U.S. Supreme Court provides a two-step test for determining whether a claim is directed to patent-eligible subject matter under 35 U.S.C. § 101.[3] In the first step, we determine whether the claims are directed to one or more judicial exceptions (i.e., law of nature, natural phenomenon, and abstract ideas) to the four statutory categories of invention (i.e., process, machine, manufacture, and composition of matter). *Id.* (citations omitted) (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1296–97 (2012)) ("*Mayo*"). In the second step, we "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." *Id.* (citing *Mayo*, 132 S. Ct. at 1297–98). In other words, the second step is to "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.'" *Id.* (citing *Mayo*, 132 S. Ct. at 1294).

At the outset, we note Appellant does not dispute the Examiner's conclusion that the claimed subject matter pertains to the abstract idea of "managing commercial inventory", including the notions of "handling intermittent placement of orders and reservations for media commercial time by advertisers, agencies, and customers using price forecasting and traffic

[3] *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 124 S. Ct. 2347, 2354 (2014).

billing." Ans. 2, Final Act. 2, 4. As correctly noted by the Examiner, the cited steps are conventionally carried out by humans mentally or using pen and paper in the course of managing commercial inventory and optimizing prices in the business environment. Ans. 2, s*ee, e.g.*, *Elec. Power Grp. v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (claims directed to collection, manipulation, and display of data); *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1370 (Fed. Cir. 2015) (customizing information and presenting it to users based on particular characteristics); *Content Extraction and Transmission LLC v. Wells Fargo Bank, National Ass'n*, 776 F.3d 1343, 1347 (Fed. Cir. 2014) ("collecting data, . . . recognizing certain data within the collected data set, and . . . storing that recognized data in a memory"). That these claims are directed to an abstract idea is confirmed by the fact that the claimed inventory management system performs actions of the type that could be performed manually. *See 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.").

We likewise find unpersuasive Appellant's argument that, similarly to *DDR Holdings*, the claimed "inventory management of advertising inventory data for member media properties at different geographic locations and market areas and associated advertising for sale… is necessarily rooted in computer technology to overcome the problem of nonsensical pricing variations or advertisement inventory that may occur." App. Br. 11–12. Prior to the Internet, such activities were widely practiced, and became computerized in database systems with the assistance of human

administrators to facilitate inventory management process and optimization of prices. *See OIP Technologies, Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362 (Fed. Cir. 2015), cert. denied, 136 S.Ct. 701 (2015) ("method of pricing a product for sale" and "apparatus for use in electronic commerce" relates to the concept of "offer based pricing" similar to other fundamental economic concepts found to be abstract ideas.). As correctly noted by the Examiner, although the claimed subject matter evokes the use of a computer, a master data base and a wide area network (WAN) to facilitate inventory management and pricing optimization, the recited functions of those elements are conventional, well-understood, and do not go beyond those of a general purpose computer for merely accessing, manipulating, and displaying data in a distributed environment. Ans. 2–4. Therefore, we agree with the Examiner that the *DDR Holdings* precedent is not applicable here because the claimed subject matter merely recites the performance of a business practice known from the pre-Internet era, and it is not necessarily rooted in computer technology. *Id.* Thus, we agree with the Examiner that the elements of claim 1, considered as a whole, do not amount to "significantly more" than the abstract idea of using conventional elements (e.g., general purpose computer, database, and WAN) to facilitate inventory management and price optimization. Therefore, they do not add any meaningful limitations beyond generally linking the abstract idea to the particular technological environment. *Id.*[4] Accordingly, we are not

[4] Considerations for determining whether a claim with additional elements amounts to "significantly more" than the judicial exception itself include improvements to another technology or technical field *(Alice Corp.,* 134 S.

persuaded of error in the Examiner's conclusion that claims 1–20 are directed to non-statutory subject matter.

DECISION

For the above reasons, we affirm the Examiner's nonstatutory subject matter 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)(1)(iv).

AFFIRMED

Ct. at 2359 (citing *Diamond v. Diehr,* 450 U.S. 175, 177–78 (1981))); adding a specific limitation other than what is well-understood, routine and conventional in the field, or adding unconventional steps that confine the claim to a particular useful application *(Mayo,* 132 S. Ct. at 1299, 1302); or other meaningful limitations beyond generally linking the use of the judicial exception to a particular technological environment *(Alice Corp.,* 134 S. Ct. at 2360). *See, e.g., Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1370 (Fed. Cir. 2015) ("[M]erely adding computer functionality to increase the speed or efficiency of the process does not confer patent eligibility on an otherwise abstract idea.").