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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte DONALD H. RELYEA JR., BRIAN F. ROBERTS, and ALEX ZAVATONE

Application 12/410,588 Technology Center 3600

Before CATHERINE SHIANG, JOHN P. PINKERTON, and STEVEN M. AMUNDSON, *Administrative Patent Judges*.

AMUNDSON, Administrative Patent Judge.

DECISION ON APPEAL

Appellants¹ seek our review under 35 U.S.C. § 134(a) from a final rejection of claims 1–4, 6–10, and 12–22, i.e., all pending claims. Claims 5 and 11 have been cancelled. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

¹ Appellants identify the real parties in interest as Verizon Communications Inc. and its subsidiary companies. App. Br. 3.

STATEMENT OF THE CASE

The Invention

According to the Specification, the invention concerns targeted advertising for a micro-group of users that changes dynamically as different users join or leave the micro-group. Spec. ¶¶ 11, 44, Abstract.² The Specification explains that "[t]he addition/subtraction of one or more users to a micro-group may alter the overall profile for the micro-group, effectively altering the type of advertising that may be targeted toward the micro-group." Spec. ¶ 56.

Exemplary Claims

Independent claims 1 and 10 exemplify the claims at issue and read as follows (with formatting added for clarity):

1. A method comprising:

providing, by one or more devices, broadcast programming to a plurality of user devices, associated with a plurality of users, via a television network;

hosting, by the one or more devices, at least one chat group associated with the broadcast programming provided via the television network,

hosting the at least one chat group including hosting a virtual chat room for the chat group that provides interaction via at least one of text-based discussion or a video client,

² This decision uses the following abbreviations: "Spec." for the Specification, filed March 25, 2009; "Final Act." for the Final Office Action, mailed January 11, 2016; "Adv. Act." for the Advisory Action, mailed March 16, 2016; "App. Br." for the Appeal Brief, filed June 15, 2016; "Ans." for the Examiner's Answer, mailed September 8, 2016; and

[&]quot;Reply Br." for the Reply Brief, filed November 1, 2016.

the at least one chat group being displayed with the broadcast programming;

determining, by the one or more devices and based on hosting the at least one chat group, information identifying a group of users, of the plurality of users, currently in a same chat group, of the at least one chat group, associated with the broadcast programming provided via the television network;

defining, by the one or more devices, a micro-group to include user accounts associated with the group of users in the same chat group, the user accounts being added to the micro-group based on the group of users joining and currently being in the same chat group associated with the broadcast programming;

creating, by the one or more devices, a profile associated with the micro-group based on user information associated with the user accounts;

monitoring, by the one or more devices and based on hosting the at least one chat group, real time behavior of the group of users in the same chat group to detect one or more actions taken by one or more users of the group of users, the one or more actions being associated with content of the chat group;

modifying, by the one or more devices, the profile associated with the micro-group based on the one or more actions;

retrieving, by the one or more devices, advertising content targeted to the group of users in the same chat group based on the profile that is created based on the user information associated with the user accounts of the group of users in the same chat group and that is modified based on the one or more actions taken by the one or more users of the group of users in the same chat group; and

providing, by the one or more devices, the advertising content to user devices, of the plurality of user devices, associated with users currently in the chat group, the advertising content being displayed in a same view as the chat

group and being integrated into a television program included in the broadcast programming provided to the group of users in the same chat group.

10. A device, comprising:

a memory to store instructions; and

a processor to execute the instructions to:

provide a program to a plurality of devices, associated with a plurality of users, via a subscription television network;

host at least one chat group associated with the program provided via the subscription television network, the processor, when hosting the at least one chat group, is to host a virtual chat room for the chat group that provides interaction via at least one of text-based discussion or a video client, the at least one chat group being displayed with the program,

receive information identifying a group of users, of the plurality of users, currently in a same chat group, of the at least one chat group, and accessing the program provided via the subscription television network,

define a micro-group to include user accounts associated with the group of users, the user accounts being added to the micro-group based on the group of users currently being in the same chat group while accessing the program,

determine a profile for the micro-group, the profile being determined based on user account data included in the user accounts,

monitor, based on the chat group being hosted by the processor, real time behavior of the group of users in the same chat group to detect one or more actions taken by one or more users of the group of users, the one or more actions being associated with a content of the chat group; Application 12/410,588

modify the profile associated with the micro-group based on the one or more actions,

obtain advertising content targeted to the group of users in the same chat group based on the profile that is created based on the user account data included in the user accounts of the group of users in the same chat group and that is modified based on the one or more actions taken by the one or more users of the group of users in the same chat group, and

[s]end the advertising content to devices associated with users currently in the chat group, the advertising content being displayed in a same view as the chat group and being integrated into the program provided to the group of users in the same chat group.

App. Br. 20–21, 23–24 (Claims App.).

The Rejection on Appeal

Claims 1–4, 6–10, and 12–22 stand rejected under 35 U.S.C. § 101 as directed to patent-ineligible subject matter. Final Act. 3–5.

ANALYSIS

We have reviewed the § 101 rejection in light of Appellants' arguments that the Examiner erred. Based on the record before us and for the reasons explained below, we concur with Appellants' contention that the Examiner erred in concluding that the claims fail to satisfy § 101.

The § 101 Rejection of Claims 1–4, 6–10, and 12–22

INTRODUCTION

The Patent Act defines patent-eligible subject matter broadly: "Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and

requirements of this title." 35 U.S.C. § 101. In *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66, 70 (2012), and *Alice Corp. v. CLS Bank International*, 134 S. Ct. 2347, 2354 (2014), the Supreme Court explained that § 101 "contains an important implicit exception" for laws of nature, natural phenomena, and abstract ideas. *See Diamond v. Diehr*, 450 U.S. 175, 185 (1981). In *Mayo* and *Alice*, the Court set forth a two-step analytical framework for evaluating patent-eligible subject matter. First, "determine whether the claims at issue are directed to" a patent-ineligible concept, such as an abstract idea. *Alice*, 134 S. Ct. at 2355. If so, "consider the elements of each claim both individually and 'as an ordered combination' to determine whether the additional elements" add enough to transform the "nature of the claim" into "significantly more" than a patent-ineligible concept. *Id.* at 2355, 2357 (quoting *Mayo*, 566 U.S. at 79); *see Affinity Labs of Tex.*, *LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016).

Step one in the *Mayo/Alice* framework involves looking at the "focus" of the claims at issue and their "character as a whole." *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016); *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016). Step two involves the search for an "inventive concept." *Alice*, 134 S. Ct. at 2355; *Elec. Power Grp.*, 830 F.3d at 1353. An "inventive concept" requires more than "well-understood, routine, conventional activity already engaged in" by the relevant community. *Rapid Litig. Mgmt. Ltd. v. CellzDirect, Inc.*, 827 F.3d 1042, 1047 (Fed. Cir. 2016) (quoting *Mayo*, 566 U.S. at 79–80). But "an inventive concept can be found in the non-conventional and non-generic

arrangement of known, conventional pieces." *BASCOM Global Internet*Servs., Inc. v. AT&T Mobility LLC, 827 F.3d 1341, 1350 (Fed. Cir. 2016).

MAYO/ALICE STEP ONE

Appellants argue that the Examiner erred in rejecting the claims at issue because they "are not directed to an abstract idea." App. Br. 11; see Reply Br. 2–5. More specifically, Appellants assert that "the claims are not similar to the previously identified abstract idea of fundamental economic practices because the claims provide an improvement in a computer-related technology." App. Br. 12; see Reply Br. 5–8. Citing DDR Holdings, LLC v. Hotels.com, L.P., 773 F.3d 1245 (Fed. Cir. 2014), Appellants assert that the claims focus on an "improvement to computer technology" and address a problem "necessarily rooted in computer technology at least because the claims do not recite a process that can be performed in the human mind, or by a human using a pen and paper." App. Br. 12–13; see Reply Br. 3, 7. In addition, Appellants contend that "the claims recite specific rules" and, therefore, parallel the claims considered patent eligible in McRO, Inc. v. Bandai Namco Games America Inc., 837 F.3d 1299 (Fed. Cir. 2016). Reply Br. 8–9. Appellants also contend that "the claims do not attempt to preempt every application of the alleged abstract idea." App. Br. 14–15, 18.

Appellants' arguments do not persuade us of Examiner error under *Mayo/Alice* step one. The Examiner determines that the claims are directed to the abstract ideas of "[h]osting a virtual chat room, a chat group, and organizing of users participating in a chat group into a micro-group" and "targeting of advertising content to microgroups of users based on a profile and chat content." Adv. Act. 2; *see* Final Act. 2 ("identification of a microgroup segment based on common actions or parameters" and "targeting

advertisements to a group of users based on group parameters"); Ans. 3 ("determining of a micro-group based on chat group data" and "targeting of advertisements to a micro-group of users based on profile data and chat group content"). Adding one abstract idea to another abstract idea does not render a claim non-abstract. *RecogniCorp*, *LLC* v. *Nintendo Co.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017).

In addition, DDR Holdings does not help Appellants. There, the Federal Circuit determined that certain claims satisfied Mayo/Alice step two because "the claimed solution amount[ed] to an inventive concept for resolving [a] particular Internet-centric problem," i.e., a challenge unique to the Internet. DDR Holdings, 773 F.3d at 1257–59; see Synopsys, Inc. v. Mentor Graphics Corp., 839 F.3d 1138, 1151 (Fed. Cir. 2016) (noting that "[i]n DDR Holdings, we held that claims 'directed to systems and methods of generating a composite web page that combines certain visual elements of a 'host' website with content of a third-party merchant' contained the requisite inventive concept"). In DDR Holdings, the Federal Circuit explained that the patent-eligible claims specified "how interactions with the Internet are manipulated to yield a desired result . . . that overrides the routine and conventional sequence of events ordinarily triggered by the click of a hyperlink." DDR Holdings, 773 F.3d at 1258. The court reasoned that those claims recited a technological solution "necessarily rooted in computer technology" that addressed a "problem specifically arising in the realm of computer networks." Id. at 1257.

According to the Federal Circuit, "DDR Holdings does not apply when . . . the asserted claims do not 'attempt to solve a challenge particular to the Internet." Smart Sys. Innovations, LLC v. Chi. Transit Auth.,

873 F.3d 1364, 1375 (Fed. Cir. 2017) (quoting *In re TLI Commc'ns LLC Patent Litig.*, 823 F.3d 607, 613 (Fed. Cir. 2016)). The claims here do not attempt to solve a challenge particular to the Internet. *See* Adv. Act. 2; Ans. 4–5.

Moreover, Appellants misplace their reliance on the need for a machine to accomplish the claimed functions. *See* App. Br. 12–13. The inability of a human to accomplish each limitation "does not alone confer patentability." *See FairWarning, IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1098 (Fed. Cir. 2016). In *Alice*, for example, "[a]ll of the claims [we]re implemented using a computer." 134 S. Ct. at 2353, 2360.

Appellants also misplace their reliance on *McRO*. The claims in *McRO*—unlike the claims here—recited a "specific . . . improvement in computer animation" using "unconventional rules" that related "sub-sequences of phonemes, timings, and morph weight sets" to automatically animate lip synchronization and facial expressions for three-dimensional characters. *McRO*, 837 F.3d at 1302–03, 1307–08, 1314–15. The claims here do not parallel the patent-eligible claims in *McRO*.

Appellants' lack-of-preemption contention does not persuade us of Examiner error. For claims covering a patent-ineligible concept, preemption concerns "are fully addressed and made moot" by an analysis under the *Mayo/Alice* framework. *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015); *see* Ans. 5.

MAYO/ALICE STEP TWO

Appellants argue that the claims satisfy *Mayo/Alice* step two because they: (1) "improve the technical field of broadcasting television programs by dynamically integrating targeted advertising content into the television

programs that are broadcast to users of the chat group," and thus provide "a detailed level of targeted advertising [that] was not technologically achievable for television broadcasting in the past"; (2) include limitations "not widely prevalent in the field" that "leverage [the] real-time behavior of users in the chat groups to integrate targeted advertising content into broadcast programming"; and (3) are confined to the particular useful application of integrating targeted advertising content "into a television program included in the broadcast programming provided to the group of users in the same chat group." App. Br. 16–18. Further, Appellants assert that "[t]he ability to integrate the claimed level of detailed targeted advertising was not achievable for television broadcasting in the past and the Examiner has cited no reference to show otherwise." Reply Br. 4.

The Examiner explains that "[w]hen considered as an ordered combination, the examiner does not see anything beyond what is well-understood and conventional." Ans. 6. In particular, the Examiner finds the following features "not unconventional at the time of the claimed invention": (1) associating "more than one media platform and more than one device . . . with a user profile"; and (2) displaying "an advertisement in one medium based on user activity in another." *Id.* at 6–7. But the Examiner concedes that "the combination of circumstances is somewhat unique." Final Act. 4. Further, the Examiner does not refute Appellants' assertion that "[t]he ability to integrate the claimed level of detailed targeted advertising was not [technologically] achievable for television broadcasting in the past." Ans. 5–7; *see* Final Act. 4–5.

Accordingly, based on the record before us, we agree with Appellants that the claims recite a particular arrangement of elements that when

considered as an ordered combination include enough to satisfy *Mayo/Alice* step two. Here, the specificity of the technical solution and the particular arrangement of elements required by the claims more closely resemble claims considered patent eligible by the Federal Circuit compared to the patent-ineligible claims in the decisions the Examiner cites. *See Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1123–24, 1126–28 (Fed. Cir. 2018); *Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1299–1306 (Fed. Cir. 2016); *BASCOM*, 827 F.3d at 1349–51; *Trading Techs. Int'l, Inc. v. CQG, Inc.*, 675 F. App'x 1001, 1002–05 (Fed. Cir. 2017) ("*Trading Technologies*").

For instance, in *Trading Technologies*, the patents in suit "describe[d] and claim[ed] a method and system for the electronic trading of stocks, bonds, futures, options and similar products" where a graphical user interface displayed the "market depth of a commodity traded in a market," including a dynamic display of bids and asks for the commodity and a static display of prices. *Trading Techs.*, 675 F. App'x at 1002–03. The claimed method and system "reduc[ed] the time . . . for a trader to place a trade when electronically trading on an exchange, [and] thus increas[ed] the likelihood that the trader will have orders filled at desirable prices and quantities." *Id.* at 1003.

Similarly, the claims here advantageously provide a detailed level of targeted advertising that changes dynamically based on the real-time behavior of users in a chat group. *See* App. Br. 17; Reply Br. 4; *see also* Spec. ¶¶ 11, 44, 53–54, 56, 58. Moreover, the claims recite a technical solution at least as specific as the technical solution recited in the claims at issue in *Trading Technologies*. *See* 675 F. App'x at 1003; *see also Trading*

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Techs. Int'l, Inc. v. CQG, Inc., No. 05-CV-4811, 2015 WL 774655, at *1–2 (N.D. III. Feb. 24, 2015).

For the reasons discussed above, Appellants' arguments have persuaded us that the Examiner erred in rejecting claims 1–4, 6–10, and 12–22 under § 101. Hence, we do not sustain the § 101 rejection.

DECISION

We reverse the Examiner's decision to reject claims 1–4, 6–10, and 12–22.

REVERSED