UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/620,302	09/14/2012	Robert Kang Xing Jin	26295-21781	3724
	87851 7590 05/21/2018 EXAMINER Facebook/Fenwick			
Silicon Valley Center 801 California Street			LI, SUN M	
Mountain View	, CA 94041		ART UNIT	PAPER NUMBER
			3681	
			NOTIFICATION DATE	DELIVERY MODE
			05/21/2018	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ptoc@fenwick.com fwfacebookpatents@fenwick.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ROBERT KANG XING JIN, JARED MORGENSTERN, NEVILLE BOWERS, and NAN GAO

Appeal 2017-003331 Application 13/620,302¹ Technology Center 3600

Before ALLEN R. MacDONALD, KARA L. SZPONDOWSKI, and DAVID J. CUTITTA II, *Administrative Patent Judges*.

CUTITTA, Administrative Patent Judge.

DECISION ON APPEAL

Appellants seek our review under 35 U.S.C. § 134(a) of the Examiner's decision rejecting claims 1–26, which are all the claims pending in the application. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ Appellants identify the Real Party in Interest as Facebook, Inc. *See* Appeal Br. 1.

STATEMENT OF THE CASE

Invention

Appellants' invention relates "to advertising to users of a social network." Spec. $\P 2.^2$

Exemplary Claim

Claims 1, 15, 20, and 23 are independent. Claim 1 is exemplary and is reproduced below.

A computer-implemented method comprising: 1.

maintaining a plurality of objects in an object store of a social networking system;

receiving, from one or more advertisers, a plurality of requests to present engagement interfaces to one or more users of a social networking system, each request to present an engagement interface identifying an object of the plurality of objects;

for a viewing user of the social networking system, selecting an engagement interface from the plurality of engagement interfaces for the viewing user based on the selected engagement interface being targeted to the viewing user;

sending a page of content containing the selected engagement interface for display to the viewing user, the selected engagement interface comprising a link that causes the social networking system to create and store a new connection in the social networking system between the viewing user and the object that is associated with the selected engagement interface;

² Our Decision refers to: Appellants' Appeal Brief filed April 15, 2016 and Response to Notification of Non-Compliant Appeal Brief filed July 29, 2016 ("Appeal Br."); Reply Brief filed December 30, 2016 ("Reply Br."); Examiner's Answer mailed November 1, 2016 ("Ans."); Final Office Action mailed November 27, 2015 ("Final Act."); and original Specification filed September 14, 2012 ("Spec.").

receiving a selection of the link by the viewing user to create and store the new connection in the social networking system between the viewing user and the object associated with the selected engagement interface from within the selected engagement interface; and

without navigating away from the page of content containing the selected engagement interface, following the viewing user's selection of the link, creating and storing the new connection in the social networking system between the viewing user and the object associated with the selected engagement interface.

Appeal Br., Claims Appendix, 1.

REJECTION

Claims 1–26 stand rejected under 35 U.S.C. § 101 as directed to non-patentable subject matter. Final Act. 2–5.

Our review in this appeal is limited only to the above rejection and the issues raised by Appellants. Arguments not made are waived. *See* Manual of Patent Examining Procedure (MPEP) § 1205.02; 37 C.F.R. §§ 41.37(c)(1)(iv), 41.39(a)(1).

ANALYSIS

Issue: Whether the Examiner properly rejects the claims under 35 U.S.C. § 101 as being directed to non-patentable subject matter?

Appellants argue the claims as a group. *See* Appeal Br. 7. We select independent claim 1 as exemplary of Appellants' arguments for claims 2–26. 37 C.F.R. § 41.37(c)(1)(iv).

The Examiner finds claim 1 is directed to "a method of organizing human activities," which is an abstract idea. Final Act. 4. The Examiner also finds the claim does not include additional elements sufficient to transform the abstract idea into a patent eligible application of the abstract idea such that the claim amounts to significantly more than the abstract idea itself. *See* Final Act. 5.

Appellants present several arguments against the § 101 rejection. We do not find Appellants' arguments persuasive. Instead, we find the Examiner has provided a comprehensive response to Appellants' arguments supported by a preponderance of evidence. *See* Ans. 3–14. As such, we adopt the Examiner's findings and conclusions. *See* Final Act. 3–15; Ans. 3–14.

Section 101 provides that "[w]hoever 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. The provision, however, "contains an important implicit exception: "[l]aws of nature, natural phenomena, and abstract ideas are not patentable." *Alice Corp. Pty. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2354 (2014) (quoting *Assoc. for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2116 (2013)). The "abstract ideas" category embodies the longstanding rule that an idea, by itself, is not patentable. *Alice*, 134 S. Ct. at 2355 (quoting *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)).

In *Alice*, the Supreme Court sets forth an analytical "framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those

concepts." Id. at 2355 (citing Mayo Collaborative Servs. v. Prometheus Labs., Inc., 132 S. Ct. 1289, 1296–97 (2012)). The first step in the analysis is to "determine whether the claims at issue are directed to one of those patent-ineligible concepts," such as an abstract idea. *Id*. If the claims are directed to a patent-ineligible concept, the second step in the analysis is to consider the elements of the claims "individually and 'as an ordered combination" to determine whether [there are] additional elements [that] "transform the nature of the claim' into a patent-eligible application." *Id.* (quoting Mayo, 132 S. Ct. at 1298, 1297). 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.* (brackets in original) (quoting Mayo, 132 S. Ct. at 1294). The prohibition against patenting an abstract idea "cannot be circumvented by attempting to limit the use of the formula to a particular technological environment' or adding 'insignificant postsolution activity.'" Bilski v. Kappos, 561 U.S. 593, 610–11 (2010) (quoting Diamond v. Diehr, 450 U.S. 175 (1981)).

First Step

Turning to the first step of the *Alice* inquiry, we agree with the Examiner that Appellants' claim 1 is directed to the abstract idea of generating an advertisement (i.e., the engagement interface) that is capable of user interaction by "creating, [and] storing [a] new connection, associating and linking between objects and the viewing user," which is considered "a method of organizing human activity." Final Act. 4. Such activities are squarely within the realm of abstract ideas. Generating an

advertisement is a fundamental business practice long prevalent in our system of commerce, like the risk hedging in *Bilski* (*see Bilski*, 561 U.S. at 593), the intermediated settlement in *Alice* (*see Alice*, 134 S. Ct. at 2356–57), the verifying of credit card transactions in *CyberSource* (*see CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1370 (Fed. Cir. 2011)), the collecting and analyzing of information to detect and notify of misuses in *FairWarning* (*see FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093–94 (Fed. Cir. 2016)), and the guaranteeing of transactions in *buySAFE* (*see buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1354 (Fed. Cir. 2014)). Generating an advertisement, like the fundamental business practices *supra*, is an "abstract idea" beyond the scope of § 101. *See Alice*, 134 S. Ct. at 2356.

In addition, we agree with the Examiner that Appellants' claim 1 is abstract because "creating, [and] storing [a] new connection" in a social networking website by "associating and linking between objects and the viewing user" is similar in concept to that of 'comparing new and stored information and using rules to identify options', 'using categories to organize, store, and transmit information', which was . . . identified by the courts as an abstract idea in SmartGene." Final Act. 4–5 (citing *SmartGene, Inc. v. Advanced Biological Labs., SA*, 555 Fed. App. 950 (Fed. Cir. 2014)).

Our reviewing court has treated information, as such, as an intangible. *Bayer AG v. Housey Pharms., Inc.*, 340 F.3d 1367, 1372 (Fed. Cir. 2003). Our reviewing court has further treated collecting and analyzing information as within the realm of abstract ideas. *See, e.g., OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed. Cir. 2015); *Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1351 (Fed. Cir.

2014); CyberSource, 654 F.3d at 1370. Furthermore, merely storing the results of abstract processes of collecting information (such as by "stor[ing] the new connection in the social networking system between the viewing user and the object associated with the" advertisement (claim 1)), without more, is abstract as an ancillary part of such collection and analysis. See, e.g., Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n, 776 F.3d 1343, 1347 (Fed. Cir. 2014); Electric Power Group, LLC v. Alstom S.A., 830 F.3d 1350 (Fed. Cir. 2016); Ultramercial, Inc. v. Hulu, LLC, 772 F.3d 709, 715 (Fed. Cir. 2014). Generating information in the form of an advertisement, as recited in claim 1, even one "that allows a member of a social network to interact with the advertisement," (Spec. ¶ 5) is still merely an abstract idea. Moreover, the remaining elements of claim 1 are clearly focused on the combination of various other abstract-idea processes, i.e., "maintaining a plurality of objects in an object store," "selecting an engagement interface from the plurality of engagement interfaces," "sending a page of content containing the selected engagement interface," and "storing the new connection in the social networking system." Thus, the advance Appellants purport to make in generating an advertisement is essentially a process of collecting and analyzing information of a specified content, and then storing a link connecting the results. The claim is, therefore, directed to an abstract idea.

Appellants argue the Examiner's abstract idea analysis "is a rather generic view of the claims that ignores whole aspects of the claimed invention." Appeal Br. 9. We are unpersuaded, noting the Examiner has directly tied the specific claim language to the identified abstract idea. *See* Final Act. 7–8; Ans. 4.

We conclude that claim 1 focuses on an abstract idea—and hence requires stage-two analysis under § 101.

Second Step

Turning to the second step of the Alice inquiry, we are required to determine whether Appellants' claim 1 adds "significantly more," sufficient to transform the abstract concept of collecting, analyzing, and storing information into a patent-eligible application. Mayo, 132 S. Ct. at 1297. We conclude that the limitations of claim 1 do not transform the abstract idea they recite into patent-eligible subject matter because the claims simply implement the abstract idea with routine, conventional activity. See Ultramercial, 772 F.3d at 715. Claim 1 does not require a new source or type of information, or a new technique for analyzing it. See Elec. Power Grp., 830 F.3d at 1355. And although claim 1 recites a "computerimplemented method" in the preamble, claim 1 fails to recite any hardware in the body of the claim. Consequently, claim 1 does not require an inventive set of components that would generate new data. *Id.* Moreover, the claim does not invoke any arguably inventive programming. Merely manipulating data for storage by itself does not transform the otherwiseabstract processes of information collection and analysis. See Elec. Power Grp., 830 F.3d at 1355; FairWarning, 839 F.3d at 1097. Thus, for the same reasons as discussed in *Electric Power Group* and *FairWarning*, Appellants' claim 1 is also directed to an abstract idea and nothing more and, therefore, is ineligible under § 101.

Appellants argue the claimed engagement interface in combination with the other limitations of claim 1 contains an inventive concept that amounts "to significantly more than the judicial exception." Appeal Br. 15–16; Reply Br. 7–8.

We disagree because, although the limitations add a degree of particularity to the claim, the underlying concept embodied by the limitations merely encompasses the abstract idea itself of collecting, analyzing, and storing information making up an advertisement. *See Ultramercial*, 772 F.3d at 715. There is no "inventive concept" in Appellants' use of a generic processor to perform well-understood, routine, and conventional activities commonly used in the industry. *See Alice*, 134 S. Ct. at 2359.

Similarly, nothing in claim 1, understood in light of the Specification, requires anything other than off-the-shelf, conventional computer technology for collecting, analyzing, and storing the desired data. The portion of the Specification entitled System Architecture indicates the "system environment comprises one or more member devices 205 . . . and a network 210." Spec. ¶ 39. Specifically, "the member devices 205 may be desktop computers, laptop computers, smart phones, personal digital assistants (PDAs), or any other device including computing functionality and data communication capabilities" and "are configured to communicate via network 210, which may comprise any combination of local area and/or wide area networks, using both wired and wireless communication systems." Spec. ¶ 40. Our reviewing court has repeatedly held that such invocations of computers and networks that are not even arguably inventive are "insufficient to pass the test of an inventive concept in the application" of an

abstract idea. buySAFE, Inc., 765 F.3d at 1353, 1355; see also Intellectual Ventures I LLC v. Capital One Bank (USA), 792 F.3d 1363, 1370 (Fed. Cir. 2015).

Appellants argue "the claimed invention is not directed to an abstract idea because the claims do not preempt all means of the abstract idea." Reply Br. 5 (citing *McRO*, *Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016).).

We are unpersuaded because the test for whether claims are statutory is not preemption, but rather is the *Mayo* two step test. "While preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility." *Ariosa Diagnostics*, *Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015). "Where a patent's claims are deemed only to disclose patent ineligible subject matter under the *Mayo* framework, as they are in this case, preemption concerns are fully addressed and made moot." *Id*.

Appellants argue the appealed claim, like the claims in *DDR Holdings*, is rooted in computer technology in order to "overcome a problem specifically arising in the realm of computer networks." Appeal Br. 15 (citing *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1258 (Fed. Cir. 2014) (finding an inventive concept in the modification of the conventional mechanics behind website display to produce a dual-source integrated hybrid display). Appellants further argue that consistent with *DDR Holdings*, "the claims of this application solve a problem that does not have a traditional business analog" because the "engagement interface exists over a computer network and does not have a brick/motor counterpart." Appeal Br. 15.

We disagree. The solution offered by Appellants' claim 1 is not rooted in any novel computer technology, as evidenced by the body of claim 1's failure to recite hardware of any kind. Claim 1's preamble recites a method implemented by a generic computer. Rather than a solution rooted in computer technology, Appellants' Specification identifies a problem that "[t]raditional methods of online advertising, such as banner ads" are not "able to engage users of social networking websites in a meaningful way to present their advertising message to consumers." Spec. ¶ 4. Appellants' claimed invention seeks to solve the identified problem by providing an engagement interface "that allows a member of a social network to interact with the advertisement." Spec. ¶ 5.

This problem is a business problem, not a technical problem. Claim 1 recites a specific way and specific context for "sending a page of content containing [a] selected engagement interface for display to the viewing user" and "receiving a selection of [a] link by the viewing user" that "causes the social networking system to create and store a new connection in the social networking system between the viewing user and the object that is associated with the selected engagement interface." *See* claim 1. Although these steps limit the scope of the abstract concept of collecting, analyzing, and storing information, the limitations are not sufficient to transform Appellants' otherwise patent-ineligible abstract idea into patent-eligible subject matter. Fundamentally, the solution Appellants offer is "an entrepreneurial, rather than a technological, one." *DDR*, 773 F.3d at 1265 (Mayer, J., dissenting).

Because Appellants' representative claim 1 is directed to a patent-ineligible abstract concept and does not recite something "significantly more" under the second prong of the *Alice* analysis, we sustain the Examiner's rejection of this claim under 35 U.S.C. § 101 as being directed to non-patentable subject matter in light of *Alice* and its progeny. The rejection of claims 2–26, which are not argued separately, is sustained for the same reasons.

DECISION

We affirm the Examiner's rejection of claims 1–26 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).

<u>AFFIRMED</u>