



UNITED STATES PATENT AND TRADEMARK OFFICE

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.
14/592,754	01/08/2015	Rob Pace	60353-0017	1084
29989	7590	11/30/2018	EXAMINER	
HICKMAN PALERMO BECKER BINGHAM LLP 1 ALMADEN BOULEVARD FLOOR 12 SAN JOSE, CA 95113			ROTARU, OCTAVIAN	
			ART UNIT	PAPER NUMBER
			3624	
			NOTIFICATION DATE	DELIVERY MODE
			11/30/2018	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):

usdoCKET@h35g.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ROB PACE

Appeal 2017-009437
Application 14/592,754
Technology Center 3600

Before CARL W. WHITEHEAD JR., JEFFREY S. SMITH and
JOHN R. KENNY, *Administrative Patent Judges*.

WHITEHEAD JR., *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant is appealing the final rejection of claims 1, 3, 4, 6, and 13–16 under 35 U.S.C. § 134(a). Appeal Brief 1. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

Introduction

The invention is directed to, “computer user interface display techniques for computer generation of visual or graphical feedback matrices that accept computer input selection of both positive and negative feedback options and generating additional feedback matrices in computer device displays based on the selection of both positive and negative feedback options.” Appeal Brief 2.

Illustrative Claim

1. A computer implemented method comprising:

displaying, by at least one of one or more hardware processors of a mobile computing device, on a video display of the computing device, one or more selectable items;

wherein each of the one or more selectable items relates to a business or entity to provide feedback on;

obtaining, by the at least one of the hardware processors, first user input selecting an item of the one or more selectable items;

after obtaining the first user input, displaying on the video display of the computing device, by the at least one of the hardware processors, a matrix of first-level binary selectable choices of positive and negative feedback for providing initial feedback on the one or more aspects related to the business or entity;

obtaining, by the at least one of the hardware processors, second user input selecting, on the matrix of first-level binary selectable feedback choices of positive and negative feedback, both the positive and the negative binary selectable feedback choices for a particular aspect of the one or more aspects related to the business or entity;

generating, by the at least one of the hardware processors, a set of expanded matrices of second-level feedback choices based, at least in part, on the first user input selecting the item of the one or more selectable items, the second level input selecting the positive selectable feedback choice for the particular aspect, and the second level input selecting the negative binary selectable feedback choice for the particular aspect;

displaying, by the at least one of the hardware processors, by the video display of the mobile computing device, subsequent to obtaining the second user input, the set of expanded matrices of second-level feedback choices resulting from the previous selection of both the positive and

negative binary selectable feedback choices for the particular aspect of the one or more aspects related to the business or entity,

obtaining, by the at least one of the hardware processors, third user input selecting additional feedback from the set of expanded matrices of second-level feedback choices;

sending, by the at least one of the hardware processors, to a server via a data network, structured data representing the second user input and the third user input.

Rejection on Appeal

Claims 1, 3, 4, 6 and 13–16 stand rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. The claimed invention is directed to non-statutory subject matter because the claims as a whole, considering all claim elements both individually and in combination, do not amount to significantly more than an abstract idea. Final Action 4–20.

ANALYSIS

Rather than reiterate the arguments of Appellant and the Examiner, we refer to the Appeal Briefs (filed January 9 and February 16, 2017), the Reply Brief (filed June 23, 2017), the Answer (mailed May 1, 2017) and the Final Action (mailed September 8, 2016) for the respective details.

35 U.S.C. § 101 Rejection

Section 101 defines patentable subject matter: “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. The Supreme Court, however, has “long held that this provision contains an important implicit exception” that “[l]aws of nature, natural phenomena, and abstract ideas are not patentable.” *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 70 (2012) (quotation omitted). To determine patentable subject matter, the Supreme Court has set forth a two-part test.

“First, we determine whether the claims at issue are directed to one of those patent-ineligible concepts” of “laws of nature, natural phenomena, and abstract ideas.” *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2355 (2014). “The inquiry often is whether the claims are directed to ‘a specific means or method’ for improving technology or whether they are simply directed to an abstract end-result.” *RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1326 (Fed. Cir. 2017) (citation omitted). A court must be cognizant that “all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas” (*Mayo*, 566 U.S. at 71), and “describing the claims at . . . a high level of abstraction and untethered from the language of the claims all but ensures that the exceptions to § 101 swallow the rule” (*Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1337 (Fed. Cir. 2016)). Instead, “the claims are considered in their entirety to ascertain whether their character as a whole is directed to excluded subject matter.” *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015).

The Supreme Court has identified as abstract ideas claims employing mathematical relationships or formulas, which are similar to the instant

claimed invention. Specifically, the Supreme Court stated that the concept of applying a mathematical formula to hedging risk and the application of that concept to energy markets was not patentable because of similarities to *Gottschalk v. Benson*, 409 U.S. 63 (1972), *Parker v. Flook*, 437 U.S. 584 (1978), and *Diamond v. Diehr*, 450 U.S. 175 (1981). *Bilski v. Kappos*, 561 U.S. 593, 611–12 (2010). Further, the Supreme Court noted that the claims, like those in *Flook*, were unpatentable because “*Flook* established that limiting an abstract idea to one field of use or adding token postsolution components did not make the concept patentable.” *Bilski*, 561 U.S. at 612.

Additionally, the Federal Circuit has identified abstract ideas that do not describe an inventive concept that is more than an abstract idea, even when embodied in specific system or structure. Specifically, the Federal Circuit stated “not every claim that recites concrete, tangible components escapes the reach of the abstract-idea inquiry,” including a finding that “claims reciting an ‘interface,’ ‘network,’ and a ‘database’ are nevertheless directed to an abstract idea.” *In re TLI Commc’ns LLC Patent Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016) (citing *Mortg. Grader, Inc. v. First Choice Loan Serv. Inc.*, 811 F.3d 1314, 1324–25 (Fed. Cir. 2016)). The Federal Circuit found the “eleven steps for displaying an advertisement in exchange for access to copyrighted media” was directed to an abstract idea, despite the claim at issue reciting “certain additional limitations . . . [that] add a degree of particularity.” *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 714–15 (Fed. Cir. 2014). Further, the Federal Circuit noted “the concept embodied by the majority of the limitations describes only the abstract idea of showing an advertisement before delivering free content,” and the addition of novel

or non-routine components did not “necessarily turn[] an abstraction into something concrete.” *Id.* at 715.

In contrast, the Federal Circuit has found claims that “are not simply directed to *any* form of storing tabular data, but instead are specifically directed to a *self-referential* table for a computer database” are “directed to an improvement of an existing technology . . . achiev[ing] other benefits over conventional databases, such as increased flexibility, faster search times, and smaller memory requirements.” *Enfish*, 822 F.3d at 1337. However, the heart of the claimed invention must be focused on the underlying technology itself and *how* the underlying technology is altered “in a way that leads to an improvement in the technology.” *Intellectual Ventures I LLC v. Erie Indem. Co.*, 850 F.3d 1315, 1328 (Fed. Cir. 2017) (citing *Enfish*, 822 F.3d 1327); *see also TLI Commc ’ns*, 823 F.3d at 612.

If the claims are not directed to a patent-ineligible concept, the inquiry ends. Otherwise, the inquiry proceeds to the second step, where 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.” *Alice*, 134 S. Ct. at 2355 (quoting *Mayo*, 566 U.S. at 79, 78). The Supreme Court has “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.” *Id.* (brackets and quotation omitted). For computer-related technology, the Federal Circuit has held that a claim may pass the second step if “the claimed solution is necessarily rooted in

computer technology in order to overcome a problem specifically arising in the realm of computer [technology],” e.g., “a challenge particular to the Internet.” *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257 (Fed. Cir. 2014).

In *Bilski*, the Supreme Court rejected the machine-or-transformation test as the exclusive test for determining patentability, but nonetheless held the claims were ineligible because the claims were preemptory of risk hedging in all fields. 561 U.S. at 612–13 (citing *Flook*, 437 U.S. 584; *Benson*, 409 U.S. 63). The Federal Circuit has also identified when abstract ideas do not amount to significantly more than the judicial exception. The Federal Circuit held the abstract idea of classifying and storing digital images in an organized manner was not significantly more than an abstract idea because “the recited physical components behave exactly as expected according to their ordinary use” and the claimed invention “fails to provide the requisite details necessary to carry out th[e] idea.” *TLI Commc ’ns*, 823 F.3d at 615. Moreover, the Federal Circuit held the idea of “receiving copyrighted media, selecting an ad, offering the media in exchange for watching the selected ad, displaying the ad, allowing the consumer access to the media, and receiving payment from the sponsor of the ad” was not significantly more than the abstract idea because “the claims simply instruct the practitioner to implement the abstract idea with routine, conventional activity.” *Ultramercial, Inc.*, 772 F.3d at 715. Additionally, the Federal Circuit noted “[n]one of these eleven individual steps, viewed ‘both individually and ‘as an ordered combination,’” transform the nature of the claim into patent-eligible subject matter.” *Id.* (citations omitted).

In contrast, the Federal Circuit held claims directed to methods of organizing human activity may be significantly more “when the claim limitations were considered individually and as an ordered combination, they recited an invention that is not merely the ‘routine or conventional use’ of technology.” *Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1301–02 (Fed. Cir. 2016) (citing *DDR Holdings*, 773 F.3d at 1259; *BASCOM Global Internet Serv., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016)). Additionally, the Federal Circuit held the ordered combination of the claim limitations recited an inventive concept because “the distributed, remote enhancement that *produced an unconventional result*,” which represented “a technical improvement over prior art technologies and served to improve the performance of the system itself.” *Amdocs*, 841 F.3d at 1302 (emphasis added); *see also BASCOM*, 827 F.3d at 1352 (“an inventive concept can be found in the ordered combination of claim limitations that transform the abstract idea of filtering content into a particular, practical application”).

Step One: Whether the Claims Are Directed to a Patent-Ineligible Concept (Abstract Idea)

Appellant argues:

In the present case, the analysis of the Office is clearly directed towards determining if the claims *involve* a patent ineligible concept without performing a determination whether the claims are directed to a patent ineligible concept. Instead, the claims are described at high levels of abstraction completely separated from their actual elements.

Appeal Brief 6 (emphasis omitted).

The Federal Circuit has repeatedly noted that “the prima facie case is merely a procedural device that enables an appropriate shift of the burden of production.” *Hyatt v. Dudas*, 492 F.3d 1365, 1369 (Fed. Cir. 2007) (citing *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992)). The court has, thus, held that the Office carries its procedural burden of establishing a prima facie case when its rejection satisfies the requirements of 35 U.S.C. § 132 by notifying the applicant of the reasons for rejection, “together with such information and references as may be useful in judging of the propriety of continuing the prosecution of [the] application.” *See In re Jung*, 637 F.3d 1356, 1362 (Fed. Cir. 2011).

All that is required of the Office is that it set forth the statutory basis of the rejection in a sufficiently articulate and informative manner as to meet the notice requirement of § 132. *Id.*; *see also Chester v. Miller*, 906 F.2d 1574, 1578 (Fed. Cir. 1990) (noting that section 132 “is violated when a rejection is so uninformative that it prevents the applicant from recognizing and seeking to counter the grounds for rejection”).

Appellant argues, “[t]he claims are not simply directed to any form of ‘customer feedback on product or service aspects of a business entity.’ Instead, the claims are directed to an improvement of a graphical user interface for displaying feedback options in a way to allow for more nuanced feedback.” Appeal Brief 6.

Despite characterizing the claimed invention as using computer technology to overcome a problem specific to the operation of a computer or a computer network per se, Appellant does not present sufficient persuasive evidence or argument that the claims are directed to an improvement specific

to a computer network or the Internet *itself* (e.g., improving the network's operation or configuration, or retaining website visitors). *Compare, e.g., Elec. Power*, 830 F.3d 1350, 1354 (Fed. Cir. 2016) *with DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d at 1257.

Appellant contends the claims:

[A]re directed to a specific improvement to the way computers operate. With the claimed method, a computer is capable of obtaining data using a smaller number of data prompts, thereby reducing the required processing power to receive the same amount of data. Additionally, the claimed invention improves the ability of the computer system to obtain data that was not available under prior methods.

Appeal Brief 7.

Appellant further argues:

Claim 1 improves on the method by reciting specific rules for generating secondary feedback matrices based on selections of both positive and negative feedback options. The rules themselves for creating the secondary feedback matrices are unconventional. These rules allow generation of unique graphical user interfaces that have not been found to exist in any prior setting. Thus, the claims are not directed to an abstract idea because they do not merely use a computer as a tool to automate conventional activity, but instead recite unconventional methods of generating graphical user interfaces based on user selections.

Appeal Brief 8.

Our reviewing court has said that abstract ideas include the concepts of collecting data, recognizing certain data within the collected data set, and storing the data in memory. *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat. Ass'n*, 776 F.3d 1343, 1347 (Fed. Cir. 2014).

Additionally, the collection of information and analysis of information (e.g., recognizing certain data within the dataset) are also abstract ideas. *Elec. Power*, 830 F.3d at 1353. Similarly, “collecting, displaying, and manipulating data” is an abstract idea. *Intellectual Ventures I LLC v. Capital One Financial Corp.*, 850 F.3d 1332, 1340 (Fed. Cir. 2017).

At least the following decisions from our reviewing court have found many similar types of fundamental commercial practices patent ineligible: *American Needle, Inc. v. Zazzle Inc.*, 670 Fed. Appx. 717 (Fed. Cir. 2016) (Mem.) (affirming the district court’s holding that showing merchandise to potential customers is patent ineligible.); *Cyberfone Sys., LLC v. CNN Interactive Grp.*, 558 Fed. Appx. 988 (Fed. Cir. 2014) (affirming the district court’s holding that using categories to organize, store, and transmit information is well-established and the idea of collecting information and then separating and transmitting that information according to its classification is patent ineligible.); *Content Extraction and Transmission LLC v. Wells Fargo Bank, Nat. Ass’n*, 776 F.3d 1343 (cert. denied, 136 S.Ct. 119 (2015) (data collection, recognition, and storage is undisputedly well-known and collecting data, recognizing certain data within the collected data set, and storing that recognized data in a memory is patent ineligible.); *Concaten, Inc. v. AmeriTrak Fleet Solutions, LLC*, 669 Fed. Appx. 571 (Fed. Cir. 2016) (Mem.) (cert. denied), 137 S.Ct. 1604 (2017) (receiving, processing, and transmitting data is patent ineligible.); *Elec. Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350 (holding that collecting information, analyzing it, and displaying certain results of the collection and analysis is patent ineligible.).

Regardless of the specificity (or alleged novelty) of Appellant’s claims, we agree with the Examiner’s determination that the claims here are directed to abstract ideas. In particular, as the Examiner determines, and we agree, Appellant’s claims are directed to performing fundamental economic practices more efficiency by organizing human activity such as user feedback. *See* Final Action 15–17.

We agree with the Examiner’s finding that at step one of the *Alice* analysis, the claims are directed to one or more abstract ideas, we turn to the second step of the *Alice* analysis, in which we must determine whether the additional elements of the claims transform them into patent-eligible subject matter.

Step Two: Whether Additional Elements Transform the Idea into Patent-Eligible Subject Matter

Appellant contends, “[t]he Office Action gives no hint that the Examiner actually considered the claims as ordered combinations in any meaningful way, as required by *Bascom v. AT&T*, *supra*, slip op. at 12, 15-19 (noting that an ordered combination supported eligibility both in the case at bar and in *DDR*, 773 F.3d at 1259).” Appeal Brief 8. However, the Examiner finds that claims 1, 3, 4, 6, and 13–16 do not “include additional elements that are sufficient to amount to significantly more than the judicial exception because the additional element(s) or combination of elements in the claim(s) amount(s) to no more than recitation of generic, computer structure.” Final Action 17. The Examiner determines that none of the claim limitations, considered individually and as a combination,

improve another technology or technical field, or the functioning of a computer. *See* Final Action 17–18.

Appellant further contends, “[j]ust as the *DDR* patent claims related to a business challenge yet were not directed to an abstract idea under the *Alice* test, the present claims have some relationship to customer, but ultimately involve generating graphical user interfaces based on user selection and a set of rules.” Appeal Brief 9. As we stated above, we find Appellant’s claims are distinguished from those claims that our reviewing court has found to be patent eligible by virtue of reciting technological improvements to a computer system. *See, e.g., DDR Holdings*, 773 F.3d at 1249, 1257 (holding that claims reciting computer processor for serving “composite web page” were patent eligible because “the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks”); *Enfish*, 822 F.3d at 1338 (holding that claims directed to a self-referential table for a computer database were patent eligible because the claims were directed to an improvement in the functioning of a computer); *Visual Memory LLC v. NVIDIA Corp.*, 867 F.3d 1253, 1259 (Fed. Cir. 2017) (holding that claims directed to “an improved computer memory system” having many benefits were patent eligible).

Appellant argues, “[c]laim 1 recites unconventional steps that confine the claim to a particular useful application, as evidenced by the withdrawal of the rejection under 35 U.S.C. §103.” Appeal Brief 11. As the Federal Circuit has explained, a “claim for a *new* abstract idea is still an abstract idea.” *SAP Am., Inc. v. Investpic, LLC*, 890 F.3d 1016, 1018 (Fed. Cir. 2018) (*quoting Synopsis, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138,

1151 (Fed. Cir. 2016)). Even assuming the technique claimed was “innovative, or even brilliant,” that would not be enough for the claimed abstract idea to be patent eligible. *See SAP Am.*, 890 F.3d at 1018.

We agree with the Examiner’s determination and, therefore, we do not find that the claims recite *significantly more* to transform the abstract idea into a patent-eligible application. We sustain the Examiner’s 35 U.S.C. § 101 rejection of claims 1, 3, 4, 6, and 13–16.

DECISION

The Examiner’s 35 U.S.C. § 101 rejection of claims 1, 3, 4, 6, and 13–16 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). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED