



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.
11/799,609	05/01/2007	Anthony Mackay	8247-002(PAT577)	6940
104043	7590	06/29/2020	EXAMINER	
Tarter Krinsky & Drogin LLP 1350 Broadway New York, NY 10018			CAMPEN, KELLY SCAGGS	
			ART UNIT	PAPER NUMBER
			3691	
			NOTIFICATION DATE	DELIVERY MODE
			06/29/2020	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):

patentdocket@tarterkrinsky.com
sformicola@tarterkrinsky.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ANTHONY MACKAY

Appeal 2019-001970
Application 11/799,609
Technology Center 3600

Before MURRIEL E. CRAWFORD, NINA L. MEDLOCK, and
TARA L. HUTCHINGS, *Administrative Patent Judges*.

CRAWFORD, *Administrative Patent Judge*.

DECISION ON APPEAL
STATEMENT OF THE CASE

Appellant¹ seeks our review under 35 U.S.C. § 134 of the Examiner's final rejection of claims 44–71. We have jurisdiction under 35 U.S.C. § 6(b). Appellant appeared for oral hearing on June 2, 2020.

SUMMARY OF DECISION

We AFFIRM.

¹ We use the word Appellant to refer to “applicant” as defined in 37 C.F.R. § 1.42(a). Appellant identifies the real party in interest as Instinet Europe Limited. Appeal Br. 3.

THE INVENTION

Appellant claims an anonymous block trade matching system. (Spec. ¶ 7, Title.)

Claim 44 is representative of the subject matter on appeal.

44. An electronic trading system for anonymously trading blocks of securities across markets that permits a user to control the visibility of orders placed therein, the system comprising:

(a) a plurality of clients, wherein each client is segregated into one or more interaction groups; and

(b) a computer server, the computer server being coupled to each of the clients through one of (1) an interface with an inhouse trading application, (2) an internet connection that communicates with a web infrastructure server and (3) an interface with an external trading system, wherein the web infrastructure server is a secure interface, the computer server being programmed to:

(i) receive from a first client an order for a security, the order of the security including order data;

(ii) identify an interaction group to which the first client belongs;

(iii) store the order data in a core database and alert generator;

(iv) match, using a matching engine, the order of the security with an opposite side order if a matching order is available;

(v) determine, using the core database and alert generator, if the order data includes one or more indications provided by the first client to modify interaction groups that alerts will be transmitted to;

(vi) generate an alert anonymously describing the order if the matching engine determines that a match is not available; and

(vii) transmit the alert to one or more of the plurality of clients, said transmission being directed to clients in particular interaction groups based upon the interaction group to which the first client belongs, as modified by indications determined to be present in the order data.

THE REJECTION

Claims 44–71 are rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more.

ANALYSIS

35 U.S.C. § 101 REJECTION

We will sustain the rejection of claims 44–71 under 35 U.S.C. § 101.

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, . . . 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. v. CLS Bank Int’l, 573 U.S. 208, 217–218 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 72–73 (2012)) (citations omitted).

To perform this test, we must first determine whether the claims at issue are directed to a patent-ineligible concept. The Federal Circuit has explained that “the ‘directed to’ inquiry applies a stage-one filter to claims, considered in light of the [S]pecification, based on whether ‘their character as a whole is directed to excluded subject matter.’” *See Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016) (quoting *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015)). It asks whether the focus of the claims is on a specific improvement in relevant technology or on a process that itself qualifies as an “abstract idea” for which computers are invoked merely as a tool. *See id.* at 1335–36.

In so doing we apply a “directed to” two prong test: 1) evaluate whether the claim recites a judicial exception, and 2) if the claim recites a judicial exception, evaluate whether the judicial exception is integrated into a practical application. 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50–57 (Jan. 7, 2019) (“Guidance”).

The Examiner determines that the claims are directed to facilitating trade transactions and more particularly to facilitating block order securities with alerts which is a commercial arrangement involving data comparisons. (Final Act. 3.) The Examiner determines that the claims are directed to a fundamental economic practice and collecting and comparing known information. (Final Act. 4–5.) The Examiner finds the claims do not effect an improvement to the functioning of a computer itself, and, the claims do not move beyond a general link of an abstract idea to a particular technological environment. (Final Act. 3).

The Specification discloses that an object of the invention is to provide a system which enables participants to cross large blocks of

international or national stocks anonymously to cut ticket, execution, and settlement costs while also reducing market impact and spread cost. (Spec. ¶ 8.) The invention provides a mutually beneficial trading solution where both trade parties can benefit from trading directly with a natural counterpart. (Spec. ¶ 10.) The Specification teaches, and Figure 3 depicts, that the steps of the invention include the step of the user entering a firm order (collecting information). That order is then sent to the core database and analyzed to determine if the user has met certain criteria (analyzing information). If the user meets these criteria, the system generates an alert for display (displaying information). The order is further analyzed to determine whether the user included sell side instructions (analyzing information). (Spec. ¶ 32.)

Consistent with this disclosure, claim 44 recites “[a] system for anonymously trading blocks of securities,” “receive from a first client an order,” “store the order data,” “match . . . the order of the security,” “the order of the security including order data,” “determine . . . if the order includes one or more indications provided by the first client,” “generate an alert,” “transmit the alert.”

We, thus, agree with the Examiner’s findings (Final Act. 3–4) that the claims are directed to a judicial exception in the form of a commercial interaction, which is a certain method of organizing human activity and, thus, an abstract idea. Guidance, 84 Fed. Reg. at 52. We also agree with the Examiner’s determination that the recited steps are similar to other concepts related to collecting and comparing information that the Federal Circuit has held to be abstract. *See* Final Act. 4–5.

Specifically, we find the steps of the claims that include transmitting data, storing data, and analyzing data constitute “analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, as essentially mental processes within the abstract-idea category.” *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016); *see also buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) (claims directed to certain arrangements involving contractual relations are directed to abstract ideas). Thus, we find that claim 44 recites the judicial exceptions of a commercial interaction and in the alternative, a mental process.

Turning to the second prong of the “directed to test,” claim 44 recites a “computer server,” an “interface,” an “infrastructure server,” “database” and an “alert generator.” These computer components do not impose “a meaningful limit on the judicial exception, such that the claim is more than a drafting effort designed to monopolize the judicial exception.” *Guidance*, 84 Fed. Reg. at 53. We find no indication in the Specification, nor does Appellant direct us to any indication, that the operations recited in independent claim 44 invoke any inventive programming, require any specialized computer hardware or other inventive computer components, i.e., a particular machine, or that the claimed invention is implemented using other than generic computer components to perform generic computer functions. *See DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014) (“[A]fter *Alice*, there can remain no doubt: recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible.”).

We also find no indication in the Specification that the claimed

invention effects a transformation or reduction of a particular article to a different state or thing. Nor do we find anything of record, short of attorney argument, that attributes any improvement in computer technology and/or functionality to the claimed invention or that otherwise indicates that the claimed invention integrates the abstract idea into a “practical application,” as that phrase is used in the revised Guidance. *See* Guidance, 84 Fed. Reg. at 55.

We conclude that claim 44 is directed to judicial exceptions that are not integrated into a practical application and therefore claim 44 is directed to “abstract ideas.”

Turning to the second step of the *Alice* analysis, because we find that claim 44 is directed to abstract ideas, the claim must include an “inventive concept” in order to be patent eligible, i.e., there must be an element or combination of elements that is sufficient to ensure that the claim in practice amounts to significantly more than the abstract idea itself. *See Alice*, 573 U.S. at 217–18 (alteration in original) (quoting *Mayo*, 566 U.S. at 72–73).

The introduction of computer components into the claims does not alter the analysis at *Alice* 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 “implemen[t]” an abstract idea “on . . . a computer,” that addition cannot impart patent eligibility. This conclusion accords with the preemption 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, 573 U.S. at 223 (alterations in original) (citations omitted).

Instead, “the relevant question is whether claim 44 does more than simply instruct the practitioner to implement the abstract idea . . . on a generic computer.” *Id.* at 225. It does not.

Taking the claim elements separately, the function performed by the computer components at each step of the process is purely conventional. Using computer components to retrieve, select, and apply decision criteria to data and modify the data as a result amounts to electronic data query and retrieval—one of the most basic functions of a computer. All of these computer functions are well-understood, routine, conventional activities previously known to the trading industry. *See Elec. Power Grp.*, 830 F.3d at 1354; *see also In re Katz Interactive Call Processing Patent Litig.*, 639 F.3d 1303, 1316 (Fed. Cir. 2011) (“Absent a possible narrower construction of the terms ‘processing,’ ‘receiving,’ and ‘storing,’ . . . those functions can be achieved by any general purpose computer without special programming”). In short, each step does no more than require a generic computer to perform generic computer functions. As to the data operated upon, “even if a process of collecting and analyzing information is ‘limited to particular content’ or a particular ‘source,’ that limitation does not make

the collection and analysis other than abstract.” *SAP Am. Inc. v. InvestPic, LLC*, 890 F.3d 1016, 1022 (Fed. Cir. 2018).

Considered as an ordered combination, the computer components of claim 44 add nothing that is not already present when the steps are considered separately. The sequence of data reception-analysis-access/display is equally generic and conventional or otherwise held to be abstract. *See Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014) (sequence of receiving, selecting, offering for exchange, display, allowing access, and receiving payment recited an abstraction), *Inventor Holdings, LLC v. Bed Bath & Beyond, Inc.*, 876 F.3d 1372, 1378 (Fed. Cir. 2017) (holding that sequence of data retrieval, analysis, modification, generation, display, and transmission was abstract), *Two-Way Media Ltd. v. Comcast Cable Commc’ns, LLC*, 874 F.3d 1329, 1339 (Fed. Cir. 2017) (holding sequence of processing, routing, controlling, and monitoring was abstract). The ordering of the steps is, therefore, ordinary and conventional.

Claim 44 does not, for example, purport to improve the functioning of the computer components. As we stated above, the claims do not effect an improvement in any other technology or technical field. The Specification spells 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 information access under different scenarios. (*See, e.g.*, Spec. ¶¶ 20, 22.) Thus, claim 44 at issue amounts to nothing significantly more than instructions to apply the abstract idea of information access using some unspecified, generic computer. Under our precedents, that is not enough to transform an abstract idea into a patent-eligible invention. *See Alice*, 573 U.S. at 226.

We have reviewed all the arguments (Appeal Br. 15–26; Reply Br. 2–11) Appellant has submitted concerning the patent eligibility of the claims before us that stand rejected under 35 U.S.C. § 101. We find that our analysis above substantially covers the substance of all the arguments, which have been made. But, for purposes of emphasis and completeness, we will address various arguments in order to make individual rebuttals of the same.

We are not persuaded of error on the part of the Examiner by Appellant’s argument that the Examiner erred because the pending claims recite specific, narrow, novel and non-obvious improvements in electronic systems used to trade securities. (Appeal Br. 17). To the extent Appellant argues that the pending claims recite “significantly more” because the claimed invention is “novel” and “non-obvious,” Appellant misapprehend the controlling precedent. Although the second step in the *Alice/Mayo* framework is termed a search for an “inventive concept,” the analysis is not an evaluation of novelty or non-obviousness, but rather, a search for “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*, 573 U.S. at 217–18. A novel and nonobvious claim directed to a purely abstract idea is, nonetheless, patent-ineligible. *See Mayo*, 566 U.S. at 90. *See, e.g., Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151 (Fed. Cir. 2016) (“[A] claim for a *new* abstract idea is still an abstract idea.”).

We do not agree with Appellant that the invention solves a technical problem that allows a user to control which users or types of users will receive alerts about orders available for trading. Appellant argues that the technical solution is achieved by providing a core database and an alert

generator. (Appeal Br. 18.) We agree with the Examiner that the claims are not directed to a technical problem but rather a business problem or trading problem which is solved by categorizing users according to user type and creating rules for distribution of alerts to other user types placing orders and limiting visibility of orders and alerts. (Ans. 8.) As we noted above, the Specification discloses that the operation of the steps of claim 44 (such as these steps performed by the core database and the alert generator) can be performed by computer program instructions provided to a general purpose computer. As such, the Specification does not disclose an improvement to these computer components themselves. The improvement touted by Appellant is an improvement to the field of block trading rather than an improvement to the computer components used to make the trades. The computer components including the alert generator and the core database are not improved. And “[n]o matter how much of an advance in the . . . field the claims recite, the advance lies entirely in the realm of abstract ideas, with no plausibly alleged innovation in the non-abstract application realm.” *SAP Am.*, 898 F.3d at 1163. Although Appellant argues that the invention’s ability to generate and transmit alerts to particular interaction groups is a technical improvement, there is no evidence that this ability is a result of improvement to the core database and the alert generator or any other computer component.

Appellant argues that the claims are similar to the claims in *DDR Holdings* and *Trading Technologies International, Inc. v. CQG, Inc.*, 675 F. App’x 1001 (Fed. Cir. 2017) (nonprecedential). We agree with the Examiner’s response to these arguments found on pages 7–9 of the Final Action and pages 9–10 of the Answer and adopt the Examiner’s response as

our own. In this regard, we agree with the Examiner that the claims do not recite a technical improvement and they are not similar to the claims in *DDR*.

In regard to the reliance on *Trading Technologies* specifically, we agree with the Examiner that because this case is not precedential, it is not binding on this panel of the Board. In any case, the claims in *Trading Technologies* recited “dynamically displaying a second indicator in one of a plurality of locations in an ask display region, each location in the ask display region corresponding to a price level along the common static price axis.” *Trading Techs.*, 675 F. App’x at 1003. No such dynamic positioning of data is recited in the claims at hand. In a related, precedential *Trading Technologies* case, also reciting a graphical user interface, the court held “[t]he claims are focused on providing information to traders in a way that helps them process information more quickly, not on improving computers or technology.” *Trading Techs. Int’l, Inc. v. IBG LLC*, 921 F.3d 1378, 1384 (Fed. Cir. 2019). Similarly, the claims here are focused on providing information to users in a way that helps them process information more quickly, not on improving computers or technology.

We are not persuaded of error on the part of the Examiner by Appellant’s argument that there is no evidentiary basis to support the assertion that the claimed elements are well-understood, routine and conventional as required by *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1367–70 (Fed. Cir. 2018).

The court in *Berkheimer* held that “[t]he patent eligibility inquiry may contain underlying issues of fact.” *Berkheimer*, 881 F.3d at 1365 (quoting *Mortgage Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d

1314, 1325 (Fed. Cir. 2016) (“The § 101 inquiry ‘*may* contain underlying factual issues.’”). The inquiry as to whether a claim element or combination is well-understood, routine, and conventional falls under step two in the § 101 framework. *Berkheimer v. HP Inc.*, 890 F.3d 1369, 1374 (Fed. Cir. 2018) (citation omitted). As such, there is no genuine issue of material fact when the only alleged “inventive concept” is the abstract idea. *Id.* (“*Berkheimer* and *Aatrix* leave untouched the numerous cases from this court which have held claims ineligible because the only alleged ‘inventive concept’ is the abstract idea”) (citation omitted). “When there is no genuine issue of material fact regarding whether the claim element or claimed combination is well-understood, routine, [and] conventional to a skilled artisan in the relevant field, this issue can be decided on summary judgment as a matter of law.” *Berkheimer*, 881 F.3d at 1368. *See also Aatrix Software, Inc. v. Green Shades Software, Inc.*, 890 F.3d 1354, 1368 (Fed. Cir. 2018) (“A factual allegation or dispute should not automatically take the determination out of the court’s hands; rather, there needs to be justification for why additional evidence must be considered—the default being a legal determination.”). Thus, evidence *may* be helpful where, for instance, facts are in dispute, but evidence is not always necessary.

Here Appellant cannot reasonably contend, nor does Appellant, that there is a genuine issue of material fact regarding whether the operations of the computer components are well-understood, routine, or conventional, where, as here, there is nothing in the Specification to indicate that the operations recited in claim 44 require any specialized hardware or inventive computer components or that the claimed invention is implemented using other than generic computer components to perform generic computer

functions, e.g., receiving, transmitting, and processing information. Indeed, the Federal Circuit, in accordance with *Alice*, has “repeatedly recognized the absence of a genuine dispute as to eligibility” where claims have been defended as involving an inventive concept based “merely on the idea of using existing computers or the Internet to carry out conventional processes, with no alteration of computer functionality.” *Berkheimer*, 890 F.3d at 1373 (Moore, J., concurring) (internal citations omitted); *see also BSG Tech LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1291 (Fed. Cir. 2018) (“BSG Tech does not argue that other, non-abstract features of the claimed inventions, alone or in combination, are not well-understood, routine and conventional database structures and activities. Accordingly, the district court did not err in determining that the asserted claims lack an inventive concept.”). In any case, Appellant’s own Specification is evidence at paragraph 20 that the computer components recited in claim 44 are well-understood, routine, and conventional by disclosing that the invention can be performed on a general purpose computer.

We are not persuaded of error on the part of the Examiner by Appellant’s argument that the pending claims are similar to claims that have been deemed patent eligible by other board panels in two related patent applications, because these earlier decisions in the earlier cases are not precedential decisions and therefore are not binding on this panel. (Reply Br. 2–3.) In addition, the earlier decisions involved claims that differ from those before this panel. For example, the claims in Appeal No. 2014-009963 included a two-way messaging interface that is not recited in the instant claims, and it was this element that the board panel found to be “significantly more” than the abstract idea.

In view of the foregoing, we will sustain the Examiner's rejection of independent claim 44 under 35 U.S.C. § 101. We will also sustain this rejection as it is directed to independent claims 59 and 66, because Appellant has not argued the separate eligibility of these claims.

We have reviewed Appellant's arguments as to dependent claims 45–58, 60–65, and 67–71, but we are not persuaded that any of these claims are patent eligible under 35 U.S.C. § 101. (Appeal Br. 22–23.) In other words, the dependent claims may limit the scope of the abstract idea to which independent claims 44, 59, and 66 are directed but their character remains unchanged, especially given that these dependent claims provide no insight to improvements in computer functionality beyond what one would expect from using a generic computer as a tool in performing the scheme as claimed. None of these claims adds anything significantly more to transform the abstract idea. For example, claims 45 and 47 further define the interaction groups recited in claim 44, and claim 46 further defines when the alert recited in claim 44 is sent. Thus, Appellant has not persuaded us that the Examiner erred in rejecting dependent claims 45–58, 60–65, and 67–71 as being directed to patent-ineligible subject matter. Therefore, we determine that the limitations of the dependent claims do not meaningfully limit the claims beyond the claimed abstract idea. In view of the foregoing, we will sustain the Examiner's rejection as it is directed to claims 45–58, 60–65, and 67–71.

CONCLUSION

We conclude the Examiner did not err in rejecting claims 44–71 under 35 U.S.C. § 101.

DECISION

The decision of the Examiner to reject claims 44–71 is affirmed.

In summary:

Claims Rejected	35 U.S.C. §	Basis	Affirmed	Reversed
44–71	101	Eligibility	44–71	

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) (2017).

AFFIRMED