



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.
12/541,842	08/14/2009	Dan Rothman	GOLD11-00037	4290
132787	7590	10/26/2017	EXAMINER	
Docket Clerk-GOLD P.O. Drawer 800889 Dallas, TX 75380			HAMILTON, SARA CHANDLER	
			ART UNIT	PAPER NUMBER
			3693	
			NOTIFICATION DATE	DELIVERY MODE
			10/26/2017	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):

john.maxin@gs.com
patents@munckwilson.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte DAN ROTHMAN and MARK HIGGINS

Appeal 2015-002561
Application 12/541,842¹
Technology Center 3600

Before HUBERT C. LORIN, MICHAEL W. KIM, and
CYNTHIA L. MURPHY, *Administrative Patent Judges*.

LORIN, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Dan Rothman, et al. (Appellants) seek our review under 35 U.S.C. § 134(a) of the Examiner's Final Rejection of claims 21–38, which constitute all the claims pending in this application. We have jurisdiction under 35 U.S.C. § 6(b)(2002).

SUMMARY OF DECISION

We AFFIRM.

¹ The Appellants identify Goldman, Sachs & Co. as the real party in interest. App. Br. 2.

THE INVENTION

Claim 21, reproduced below, is illustrative of the subject matter on appeal.

21. A computerized method for selecting a price comprising:

determining, by a computer, a currency associated with each individual price included in a set of submitted prices for an asset electronically traded in a multicurrency environment;

receiving, by the computer, an indication of a market participant currency;

accessing, by the computer, a currency exchange to retrieve currency data for converting the individual prices in the set of submitted prices into different price currencies based on a midmarket foreign exchange spot rate, the market participant currency having respective currency exchange fees associated to each of the different price currencies;

ranking, by the computer, the individual prices in the set of submitted prices in order of a pecuniary value from a perspective of the market participant currency based on the midmarket foreign exchange spot rate, wherein the prices are ranked using a sorting algorithm;

displaying/outputting, by the computer, the ranked individual prices in the set of submitted prices in order of the pecuniary value from the perspective of the market participant currency;

determining, by the computer, an individual price that is a best bid price representing a maximum pecuniary value from the perspective of the market participant currency;

selecting, by the computer, the individual price, included in the set of submitted prices, which represents the maximum pecuniary value from the perspective of the market participant currency; and

determining, by the computer, a threshold delta for currency exchange fees that excludes from active consideration the market participant currency if the currency exchange fees for the market participant currency exceeds the threshold delta,

wherein the threshold delta represents a maximum tolerance for currency exchange fees.

THE REJECTIONS

The Examiner relies upon the following as evidence of unpatentability:

Heinzle et al. (“Heinzle”)	US 6,199,046 B1	Mar. 6, 2001
Rackson et al. (“Rackson”)	US 6,415,270 B1	July 2, 2002
Kinney et al (“Kinney”)	WO 00/58862 A2	Oct. 5, 2000
Rothman (“Rothman”)	US 7,593,884 B1	Sept. 22, 2009

The following rejections are before us for review:

1. Claims 21–38 are rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter.
2. Claims 21–38 are rejected under 35 U.S.C. § 112, first paragraph, for failing to comply with the written description requirement.
3. Claims 21–38 are rejected under 35 U.S.C. §103(a) as being unpatentable over Heinzle, Kinney and Rackson.
4. Claims 21–38 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1–17 of Rothman.

ISSUES

Did the Examiner err in rejecting claims 21–38 under 35 U.S.C. §101 as being directed to non-statutory subject matter?

Did the Examiner err in rejecting claims 21–38 under 35 U.S.C. §112, first paragraph, for failing to comply with the written description requirement?

Did the Examiner err in rejecting claims 21–38 under 35 U.S.C. §103(a) as being unpatentable over Heinzle, Kinney and Rackson?

Did the Examiner err in rejecting claims 21–38 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1–17 of Rothman?

ANALYSIS

The rejection of claims 21–38 under 35 U.S.C. §101 as being directed to non-statutory subject matter.

The Appellants argued these claims as a group. *See* Reply Br. 2–6. We select claim 21 as the representative claim for this group, and the remaining claims 22–38 stand or fall with claim 1. 37 C.F.R. § 41.37(c)(1)(iv).

Alice Corp. Proprietary Ltd. v. CLS Bank International, 134 S. Ct. 2347 (2014) identifies a two-step framework for determining whether claimed subject matter is judicially-excepted from patent-eligibility under 35 U.S.C. § 101.

According to *Alice* step one, “[w]e must 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.

In that regard, the Examiner determined that “[t]he claimed invention is directed to selecting a price in a multi-currency marketplace” (Ans. 6), which the Examiner determined to be “a fundamental economic practice (selecting a price) [that] employs mathematical relationships/formulas (algorithms) to achieve this outcome” (Ans. 6) and for that reason the claimed invention is directed to an abstract idea.

The Appellants do not dispute the Examiner's characterization of the claims as being directed to "selecting a price in a multi-currency marketplace." Nor do the Appellants dispute the Examiner's position that if the claims are directed to "selecting a price in a multi-currency marketplace," they are directed to an abstract idea because "selecting a price in a multi-currency marketplace" is a fundamental economic practice.

Rather, the Appellants argue that the rejection (a) is "insufficient to establish a *prima facie* case" (Reply Br. 3); (b) fails "to consider the claims as a whole" (Reply Br. 4); and, (c) "states that '[s]electing a price in a multi-currency marketplace is a fundamental economic practice (selecting a price) and employs mathematical relationships/formula (algorithms) to achieve this outcome'" providing "no reasoning or support for the conclusory statement" (Reply Br. 4). In other words, the Appellants take issue with the path to the outcome, not the outcome itself. Nevertheless, we disagree with the Appellants' assessment of the adequacy of the Examiner's position in reaching the determination that the claims are directed to an abstract idea, as the Examiner articulated it.

(a) The Examiner appears to have followed the Guidelines and the Appellants do not state otherwise. To the extent the Appellants suggest that the July 2015 Update or May 2016 Memorandum requires particular steps to be performed in specific ways to establish that a claim is directed to an abstract idea, i.e., a "prima facie" case, which steps were not followed, the Appellants are mistaken. 35 U.S.C. § 132 sets forth a more general notice requirement whereby the applicants are notified of the reasons for a rejection together with such information as may be useful in judging the propriety of continuing with prosecution of the application. *See, e.g., In re Jung*, 637

F.3d 1356, 1362 (Fed. Cir. 2011); *see also* July 2015 Update 6 (setting forth a general notice requirement whereby the Examiner should “clearly articulat[e] the reason(s) why the claimed invention is not eligible” when rejecting on under 35 U.S.C. § 101); May 2016 Memorandum 2 (“the rejection . . . must provide an explanation . . . which [is] sufficiently clear and specific to provide applicant sufficient notice of the reasons for ineligibility.”) (emphasis added). In this case, we find the Examiner has provided an adequate explanation to meet said notice requirement. The Appellants were adequately notified of the determination under *Alice* step one that the claims are directed to “selecting a price in a multi-currency marketplace” and that that is an abstract idea.

(b) We do not see and the Appellants do not adequately explain in what way the Examiner has not considered the claims as whole. The Appellants point out that the Examiner states that the claims “include” an abstract idea. Reply Br. 3–4. It is true that the *Alice* step one is a determination of what the claims as a whole are directed to, and not whether they “include” an abstract idea. But the Examiner clearly stated that the “claimed invention is *directed to* selecting a price in a multi-currency marketplace” (Ans. 6). Notwithstanding the word “include” is used later in the discussion, it is clear that a determination had been made in accordance with *Alice* step one. *See* Ans. 4 (“a determination whether the claim is directed to a judicial exception (i.e., abstract idea).”)

(c) The Appellants appear to require evidentiary support for a conclusion that a claim is directed to an abstract idea, something the Appellants find the Examiner has not provided.

Notwithstanding the *Alice* Court relied, *inter alia*, on Emery, Speculation on the Stock and Produce Exchanges of the United States, in 7 Studies in History, Economics and Public Law 283, 346–56 (1896) in reaching the determination that intermediated settlement is an abstract idea, as a general matter, what a court relies on in determining the abstract nature of what claims are directed to, under a different set of facts, is not dispositive of the basis on which such a determination must be made in this case. However, consideration of evidence in making a determination under the first step of the *Alice* framework has merit. A similar approach was taken in *Apple, Inc. v. Ameranth, Inc.*, No. 2015-1703, 2016 WL 6958650 (Fed. Cir. Nov. 29, 2016). But no decision to date has stated that Examiners must provide evidentiary support in every case before a conclusion can be made that a claim is directed to an abstract idea. There is no such requirement. *See, e.g.*, para. IV “July 2015 Update: Subject Matter Eligibility” to 2014 Interim Guidance on Subject Matter Eligibility (2014 IEG), 79 Fed. Reg. 74618 (Dec. 16, 2014) (“The courts consider the determination of whether a claim is eligible (which involves identifying whether an exception such as an abstract idea is being claimed) to be a question of law. Accordingly, courts do not rely on evidence that a claimed concept is a judicial exception, and in most cases resolve the ultimate legal conclusion on eligibility without making any factual findings”.) Evidence may be helpful in certain situations where, for instance, facts are in dispute. But it is not always necessary. It is not necessary in this case. This is so because numerous decisions have now issued finding various economic practices, like “selecting a price in a multi-currency marketplace,” to be abstract ideas.

[T]he decisional mechanism courts now apply is to examine earlier cases in which a similar or parallel descriptive nature can be seen—what prior cases were about, and which way they were decided. See, e.g., *Elec. Power Grp.*, 830 F.3d at 1353–54. That is the classic common law methodology for creating law when a single governing definitional context is not available. See generally Karl N. Llewellyn, *The Common Law Tradition: Deciding Appeals* (1960). This more flexible approach is also the approach employed by the Supreme Court. See *Alice*, 134 S. Ct. at 2355–57.

Amdocs (Israel) Limited v. Openet Telecom, Inc., 841 F.3d 1288, 1294 (Fed. Cir. 2016). In that regard, see e.g., *In re Chorna*, 656 Fed.Appx. 1016 (Fed. Cir. 2016) (“financial instruments that are designed to protect against the risk of investing in financial instruments” is an abstract idea); *OIP Technologies, Inc. v. Amazon.com, Inc.*, 788 F.3d 1359 (Fed. Cir. 2015), cert. denied, 136 S. Ct. 701 (2011) (“offer-based price optimization” is an abstract idea); and, *Chicago Bd. Options Exch., Inc. v. Int’l Sec. Exch., LLC*, (Fed Cir., 2015-1728, March 25, 2016) (nonprecedential) (Rule 36) (“managing trading risk (‘risk management’)” is an abstract idea).

The Appellants also argue that the claims are “directed toward specific systems, methods and techniques that allow a computerized marketplace to facilitate the determination of a best bid or best offer in a multi-currency setting” and “there is no concern of a monopolization of the basic tools of scientific and technology work that might impede innovation more than it would promote it.” Reply Br. 5. These are not persuasive arguments. The “specific” scheme claim 1 describes does not make the concept to which it is directed to any less abstract. It simply narrows its scope. The other argument is one of pre-emption (which Appellants further discuss at Reply Br. 4 (“**No Preemptive Effect**”). With respect to the pre-emption concern, “[w]hat matters is whether a claim threatens to subsume

the full scope of a fundamental concept, and when those concerns arise, we must look for meaningful limitations that prevent the claim as a whole from covering the concept's every practical application.” *CLS Bank Intern. v. Alice Corp. Pty. Ltd.*, 717 F.3d 1269, 1281 (Fed. Cir. 2013) (Lourie, J., concurring). Here, the claim limitations to the scheme for facilitating buying and selling currencies simply narrows the abstract idea so that it is described at a lower level of abstraction. It does not render the abstract idea to which the claim is directed to any less an abstract idea.

We have considered all of the Appellants' remaining arguments with respect to the Examiner's determination under *Alice* step one and have found them unpersuasive as well.

Step two is “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*, 134 S. Ct. at 2355 (quoting *Mayo*, 566 U.S. at 72–73).

In that regard, the Examiner determined, in part, that

[t]he steps or acts performed (by a computer) in independent method claims 21 and 25 are not enough to qualify as “significantly more” than the abstract idea itself, since the claims are a mere instruction to apply the abstract idea. Furthermore, there is no improvement to another technology or technical field, no improvements to the functioning of the computer itself, and no meaningful limitations beyond generally linking the use of an abstract idea to a particular technical environment, and the claims require no more than a generic computer to perform generic computer functions that are well-understood, routine and conventional.

Ans. 6–7.

The Appellants argue that “the claims recite a variety of elements in addition to a computer” and that “the currency exchange recited in claims 21 and 25 are used in the operation of the claimed method and plays a significant part in permitting the claimed method to be performed.” Reply Br. 5–6 (citing, in support thereof, *SiRF Tech. Inc. v. Int’l Trade Commission*, 601 F.3d 1319 (Fed. Cir. 2010).)

The argument is unpersuasive as to error in the Examiner's determination. We do not see and the Appellants do not point us to any *claim element* that is in addition to a generic computer.² Claim 21 calls for “a computer” to perform routine information processing tasks such as “determining,” “receiving,” “accessing,” “ranking,” “displaying/outputting,” and “selecting.” The Appellants also do not point with particularity to claim limitations, or even statements in the Specification, that describe the recited computer components as anything more than common generic computer elements that are capable of performing said routine tasks. The record, therefore, supports the Examiner's position. “[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.” *Alice*, 134 S. Ct. at 2358 (quoting *Mayo*, 132 S. Ct. at 1294). See also *Bancorp Services, L.L.C. v. Sun Life Assur. Co. of Canada (U.S.)*, 687 F.3d 1266, 1278 (Fed. Cir. 2012)

² Regarding the "currency exchange" argument, this goes to the content of the information the computer processes. That adds little of significance. See *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016) ("The advance they purport to make is a process of gathering and analyzing information of a specified content, then displaying the results, and not any particular assertedly inventive technology for performing those functions.")

Appeal 2015-002561
Application 12/541,842

(“[T]he use of a computer in an otherwise patent-ineligible process for no more than its most basic function—making calculations or computations—fails to circumvent the prohibition against patenting abstract ideas and mental processes.”).

We have considered all of the Appellants’ remaining arguments with respect to the Examiner’s determination under *Alice* step two and have determined them unpersuasive as well.

For the foregoing reasons, the rejection is sustained.

The rejection of claims 21–38 under 35 U.S.C. §112, first paragraph, for failing to comply with the written description requirement.

We reverse this rejection because the Examiner has not shown that the instant Specification fails to provide adequate written descriptive support for the claims on appeal.

The rejection of claims 21–38 under 35 U.S.C. §103(a) as being unpatentable over Heinzle, Kinney and Rackson.

All the claims call for “determin[ing] a threshold delta for currency exchange fees that excludes from active consideration the market participant currency if the currency exchange fees for the market participant currency exceeds the threshold delta, wherein the threshold delta represents a maximum tolerance for currency exchange fees.” *See* independent claims 21, 25, 27, 31, 34, and 36.

The Examiner found said claim limitation disclosed in Heinzle at “col. 19, lines 33–38; col. 71, lines 51 + – col. 72, line 60.” Final Rej. 13. These passages are reproduced in the Appeal Brief. App. Br. 11–12.

We agree with the Appellants that there is “no teaching or reasonable suggestion of a threshold delta or any mention of currency exchange fees as recited in this element” in said cited passages of Heinzle. App. Br. 12.

Accordingly, a prima facie case of obviousness for the claimed subject matter has not been made out in the first instance. For that reason, the rejection is not sustained.³

The rejection of claims 21–38 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1–17 of Rothman.

Although the statement of the rejection covers claims 21–38, only claims 21–24 and 38 are discussed by the Examiner. *See* Final Rej. 6–9. As to those claims, the subject matter claimed does not include a converting step. They instead call for

accessing, by the computer, a currency exchange to retrieve currency data for converting the individual prices in the set of submitted prices into different price currencies based on a midmarket foreign exchange spot rate, the market participant currency having respective currency exchange fees associated to each of the different price currencies.

Claim 21.

By contrast, all the Rothman claims require converting, by a computer, prices in a set of submitted prices into different price currencies using an algorithm. *See* independent claims 1, 5, 7, 11, 14, and 16. That is the difference.

Generally, an obviousness-type double patenting analysis entails two steps. First, as a matter of law, a court construes the claim in the earlier patent and the claim in the later patent and

³ A determination of priority pursuant to 35 U.S.C. §120 is not necessary for the purposes of this appeal.

determines the differences. *Georgia-Pacific Corp. v. United States Gypsum Co.*, 195 F.3d 1322, 1326, 52 USPQ2d 1590, 1593 (Fed. Cir. 1999). Second, the court determines whether the differences in subject matter between the two claims render the claims patentably distinct. *Id.* at 1327, 52 USPQ2d at 1595. A later claim that is not patentably distinct from an earlier claim in a commonly owned patent is invalid for obvious-type double patenting.

Eli Lilly & Co. v. Barr Labs., Inc., 251 F.3d 955, 968 (Fed. Cir. 2001).

The question is whether the difference between “accessing . . . a currency exchange to retrieve currency data . . . for converting . . . prices . . . based on a . . . rate” (as instantly claimed here) and “converting . . . prices . . . using an algorithm” (as claimed in Rothman) renders claims 21–24 and 38 patentably distinct. On that question, the Examiner has not provided an adequate answer.

The Examiner states that “the claim limitation (i.e., “accessing, by the computer, a currency exchange to retrieve currency data for converting the individual prices”) as recited in application 12/541,842 is broader than the comparable limitation (i.e., “converting, by the computer, the individual bid prices”) recited in US Pat. No. 7,593,884 and is thus obvious.” Final Rej. 8. But “accessing . . . a currency exchange to retrieve currency data” (as claimed) does not necessarily cover “converting . . . prices . . . using an algorithm” (Rothman). Why one of ordinary skill given Rothman would be led to “access[] . . . a currency exchange to retrieve currency data” (as claimed) is not adequately explained.

The Examiner further states that

the [claim] limitation directed to ‘accessing, by the computer, a currency exchange to retrieve currency data for converting the individual prices’ is inherent to any invention pertaining to conversion between at least two different currencies. In other

words, in order to convert between a 1st currency and a 2nd currency, at a minimum you would need to retrieve at least one piece of ‘currency data’ (i.e., an exchange rate) for input into a currency conversion equation [i.e., Rothman].

Final Rej. 8. It may be true that an exchange rate is normally needed to convert between two currencies, and, thus, this currency data might be necessary to “convert[] . . . prices . . . using an algorithm” as claimed in Rothman. But the Examiner does not show sufficiently that it is necessary, or even obvious, to access a currency exchange (as claimed here) to retrieve or otherwise obtain this currency data. The Examiner does not explain why one of ordinary skill would be led to “access[] . . . a currency exchange to retrieve currency data” (as claimed here) given only that one can “convert[] . . . prices . . . using an algorithm” (as claimed in Rothman). One does not necessarily have to access a currency exchange to establish, for example, an exchange rate. It is not necessarily inherent to Rothman’s ‘converting . . . prices . . . using an algorithm.’ The question is whether one of ordinary skill would be led to do so given Rothman’s “converting . . . prices . . . using an algorithm.” Without more by way of evidence, we cannot determine whether one would be led to “access[] . . . a currency exchange to retrieve currency data” (as claimed here) simply knowing prices can be converted using an algorithm (as claimed in Rothman), notwithstanding that converting between two currencies normally involves an exchange rate.

The burden of establishing a prima facie case of obviousness-type double patenting of claims 21–24 and 38 over claims 1–17 of Rothman has not been satisfied and, accordingly, the rejection is not sustained.

CONCLUSIONS

The rejection of claims 21–38 under 35 U.S.C. §101 as being directed to non-statutory subject matter is affirmed.

The rejection of claims 21–38 under 35 U.S.C. §112, first paragraph, for failing to comply with the written description requirement is reversed.

The rejection of claims 21–38 under 35 U.S.C. §103(a) as being unpatentable over Heinzle, Kinney and Rackson is reversed.

The rejection of claims 21–38 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1–17 of Rothman is reversed.

DECISION

The decision of the Examiner to reject claims 21–38 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)(iv).

AFFIRMED