



# 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.
13/028,392	02/16/2011	Robert S. Cahn	Cahn 0109	8652
27981	7590	02/23/2018	EXAMINER	
WENDY W. KOBA PO BOX 556 SPRINGTOWN, PA 18081			MANDEL, MONICA A	
			ART UNIT	PAPER NUMBER
			3621	
			NOTIFICATION DATE	DELIVERY MODE
			02/23/2018	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):

wendykoba@usa.net

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

*Ex parte* ROBERT S. CAHN

---

Appeal 2016-006443<sup>1</sup>  
Application 13/028,392  
Technology Center 3600

---

Before LARRY J. HUME, CATHERINE SHIANG, and  
MATTHEW J. McNEILL, *Administrative Patent Judges*.

HUME, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134(a) of the Final Rejection of claims 6–11. Appellant has withdrawn claims 1–5 from consideration, and, thus, these claims are not before us on appeal. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

---

<sup>1</sup> According to Appellant, the real party in interest is the sole inventor, Robert S. Cahn. Br. 1.

STATEMENT OF THE CASE<sup>2</sup>

*The Invention*

Appellant's

present invention relates to a system for protecting individuals (including institutions) involved in securities transactions and, more particularly, to the utilization of an "independent" depository as an intermediary between a security owner and a brokerage firm to protect the security owner from untoward actions on the part of the brokerage firm.

Spec. ¶ 2.

*Exemplary Claim*

Claim 6, reproduced below, is representative of the subject matter on appeal (*emphasis* added to contested limitations):

6. A method of performing securities transactions between an account owner and a broker *through an independent intermediary defined as a depository*, the depository retaining possession of securities on behalf of an account owner, the method including the steps of:

establishing an account record in an account owner database at the depository, the account record including an account owner ID and listing of securities possessed by the depository on behalf of the account owner;

*receiving, at the depository, a transaction message from the account owner defining a transaction involving a predetermined security;*

---

<sup>2</sup> Our Decision relies upon Appellant's Appeal Brief ("Br.," filed Oct 8, 2015); Examiner's Answer ("Ans.," mailed Apr. 8, 2016); Final Office Action ("Final Act.," mailed May 8, 2015); and the original Specification ("Spec.," filed Feb. 16, 2011). We note Appellant did not file a Reply Brief in response to the factual findings and legal conclusions in the Examiner's Answer.

performing an authentication process on the transaction message at the depository and sending an error message to the account owner to terminate the transaction if the transaction message cannot be authenticated, otherwise if the transmission message is authenticated;

retrieving the account owner record and determining if the transaction can be processed based upon the record information associated with the predetermined security, sending a rejection message to the account owner and terminating the transaction if the transaction cannot be processed, otherwise processing the transaction by affirming the transaction message at the depository and;

transmitting the affirmed transaction message to the broker for action involving only the predetermined security, with all other securities possessed by the account owner remaining in the possession of the depository.

#### *Prior Art*

The Examiner relies upon the following prior art as evidence in rejecting the claims on appeal:

David et al. ("David")	US 6,493,683 B1	Dec. 10, 2002
Wheeler et al. ("Wheeler")	US 6,978,369 B2	Dec. 20, 2005

#### *Rejections on Appeal*

R1. Claims 6–11 stand rejected under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter. Final Act. 4.

R2. Claims 6–11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of David and Wheeler. Final Act. 5.

## CLAIM GROUPING

Based on Appellant's arguments (Br. 5 *et seq.*), we decide the appeal of patent-ineligible subject matter Rejection R1 of claims 6–11 on the basis of representative claim 6; and we decide the appeal of obviousness Rejection R2 of claims 6–11 on the basis of representative claim 6.<sup>3</sup>

## ISSUES AND ANALYSIS

In reaching this decision, we consider all evidence presented and all arguments actually made by Appellant. We do not consider arguments Appellant could have made but chose not to make in the Briefs, and we deem any such arguments waived. 37 C.F.R. § 41.37(c)(1)(iv).

We disagree with Appellant's arguments with respect to claims 6–11 and, unless otherwise noted, we incorporate by reference herein and adopt as our own: (1) the findings and reasons set forth by the Examiner in the action from which this appeal is taken, and (2) the reasons and rebuttals set forth in the Examiner's Answer in response to Appellant's arguments. We highlight and address specific findings and arguments regarding claim 6 for emphasis as follows.

---

<sup>3</sup> "Notwithstanding any other provision of this paragraph, the failure of appellant to separately argue claims which appellant has grouped together shall constitute a waiver of any argument that the Board must consider the patentability of any grouped claim separately." 37 C.F.R. § 41.37(c)(1)(iv). In addition, when Appellant does not separately argue the patentability of dependent claims, the claims stand or fall with the claims from which they depend. *In re King*, 801 F.2d 1324, 1325 (Fed. Cir. 1986).

ANALYSIS

1. § 101 Rejection R1 of Claims 6–11

Issue 1

Appellant argues (Br. 6) the Examiner's rejection of claim 6 under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter is in error. These contentions present us with the following issue:

Did the Examiner err (Final Act. 4) in concluding the representative claim is directed to the abstract idea of

performing securities transactions which is a basic economic practice . . . [and does] not include additional elements . . . sufficient to amount to significantly more than the judicial exception because although a computer is utilized as the depository as an intermediary in the claimed method, the claims do no more than implement the abstract idea of performing securities transactions on a generic computer,

as generally recited in claim 6, and claims 7–11 depending therefrom?

Analysis

*Alice Step 1 — Abstract Idea*

Appellant asserts . . . the claims are not directed to performing a "securities transaction" between buyer and seller, as that term is understood in the banking industry. Rather, the invention as defined by the claims is related to a method for using a depository to hold securities for an owner, and only transfer securities to the owner's broker (for example, to *initiate a transaction with a third party*) at the time the transaction is initiated. This is not a "basic practice" of the industry, where the various brokerage firms often perform transactions using securities held in its "street name", as described above.

Br. 6.

Appellant further alleges:

The steps in independent claim 6 allow for an "affirmed transaction message" to be transmitted to a broker "for action", "with all other securities possessed by the account owner remaining in the possession of the depository". The act of using the depository to "hold" all securities not involved in a current transaction goes beyond any type of "abstract concept" related to the buying/selling of a specific security."

*Id.*

The Examiner concludes the claims "are directed to the abstract idea of performing securities transactions which is a basic economic practice." Final Act. 4.

Section 101 provides that anyone who "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. 35 U.S.C. § 101. The Supreme Court has repeatedly emphasized that patent protection should not extend to claims that monopolize "the basic tools of scientific and technological work." *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972); *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 71 (2012); *Alice Corp. Pty Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2354 (2014). Accordingly, laws of nature, natural phenomena, and abstract ideas are not patent-eligible subject matter. *Id.*

The Supreme Court's two-part *Mayo/Alice* framework guides us in distinguishing between patent claims that impermissibly claim the "building blocks of human ingenuity" and those that "integrate the building blocks into something more." *Alice*, 134 S. Ct. at 2354 (quotation marks, citation, and bracketing omitted). First, we "determine whether the claims at issue are

directed to a patent-ineligible concept." *Id.* at 2355. If so, we "examine the elements of the claim to determine whether it contains an 'inventive concept' sufficient to 'transform' the claimed abstract idea into a patent-eligible application." *Id.* at 2357 (quoting *Mayo*, 566 U.S. at 72, 79). While the two steps<sup>4</sup> of the *Alice* framework are related, the "Supreme Court's formulation makes clear that the first-stage filter is a meaningful one, sometimes ending the § 101 inquiry." *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016). We note the Supreme Court "has not established a definitive rule to determine what constitutes an 'abstract idea'" for the purposes of step one. *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016) (citing *Alice*, 134 S. Ct. at 2357).

However, our reviewing court has held claims ineligible as being directed to an abstract idea when they merely collect electronic information, display information, or embody mental processes that could be performed by humans. *Elec. Power Grp.*, 830 F.3d at 1353–54 (collecting cases). At the same time, "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. Under this guidance, we must, therefore, ensure at step one that we articulate what the claims are directed to with enough specificity to ensure the step one inquiry is meaningful. *Alice*, 134 S. Ct. at 2354 ("[W]e tread carefully in construing this exclusionary principle lest it swallow all of patent law").

---

<sup>4</sup> Applying this two-step process to claims challenged under the abstract idea exception, the courts typically refer to step one as the "abstract idea" step and step two as the "inventive concept" step. *Affinity Labs of Tex., LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016).



Under the "abstract idea" step, we must evaluate "the 'focus of the claimed advance over the prior art' to determine if the claim's 'character as a whole' is directed to excluded subject matter." *Affinity Labs*, 838 F.3d at 1257 (citation omitted).

Turning to the claimed invention, claim 6 recites:

A method of performing securities transactions between an account owner and a broker through an independent intermediary defined as a depository, the depository retaining possession of securities on behalf of an account owner . . . .

Claim 6 (preamble).

Method claim 6's limitations also require the steps of:

- (1) "establishing an account record in . . . [a] database";
- (2) "receiving . . . a transaction message";
- (3) if the transaction message is not authenticated, "sending an error message . . . to terminate the transaction";
- (4) if the transaction message is authenticated, "retrieving the account owner record and determining if the transaction can be processed . . . [and] sending a rejection message . . . and terminating the transaction if the transaction cannot be processed";
- (5) "otherwise processing the transaction by affirming the transaction message"; and
- (6) "transmitting the affirmed transaction message to the broker for action involving only the predetermined security, with all other securities possessed by the account owner remaining in the possession of the depository."

In response to Appellant's arguments, the Examiner is of the position that whether or not an idea is a "basic practice" is not relevant to the determination of whether it is similar to those found by the courts to be abstract. Appellant's argument that "the invention as a whole amounts to significantly more than simply organizing and comparing data" is not relevant because the rejection did not allege that the claims amount to no more than "simply organizing and comparing data." In response to Applicant's statement: "[t]he act of using the depository to 'hold' all securities . . . goes beyond any type of 'abstract concept,'" it is noted that in addition to being a basic economic practice, the method as claimed can also technically be carried out by a human being with a ledger (manually).

Ans. 2; *see also* Final Act. 4.<sup>5</sup>

Under step one, we agree with the Examiner that the invention claimed in independent claim 6 is directed to an abstract idea, i.e., organizing human activities pertaining to securities transactions. Final Act. 4; *see also* Ans. 2.

As the Specification itself observes, "[t]he present invention relates to a system for protecting individuals (including institutions) involved in securities transactions and, more particularly, to the utilization of an 'independent' depository as an intermediary between a security owner and a

---

<sup>5</sup> In the Final Office Action, the Examiner concludes, "[e]stablishing an account record in a database and using it to determine whether a transaction on a security can be carried out amounts to looking up information in a database, which is one of the most basic functions of a computer. The same is true of using a computer . . . [for] receiving, sending and authenticating messages." Final Act. 4.

brokerage firm to protect the security owner from untoward actions on the part of the brokerage firm." Spec. ¶ 2.<sup>6</sup> We find this type of activity, i.e., protecting individuals involved in securities transactions includes longstanding conduct that existed well before the advent of computers and the Internet, and could be carried out by a human with pen and paper. *See CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1375 (Fed. Cir. 2011) ("That purely mental processes can be unpatentable, even when performed by a computer, was precisely the holding of the Supreme Court in *Gottschalk v. Benson*").<sup>7</sup>

Our reviewing court has previously held other patent claims ineligible for reciting similar abstract concepts. For example, while the Supreme Court has altered the § 101 analysis since *CyberSource* in cases like *Mayo*

---

<sup>6</sup> *See also*, Spec. 29 ("Abstract"):

A system for protecting individuals (including institutions) involved in securities transactions has been created that utilizes an "independent" depository as an intermediary between a security owner and a brokerage firm. The inclusion of a depository is considered to protect the security owner from untoward actions on the part of the brokerage firm. The depository is used to "hold" the securities behalf of the owner. The security owners and brokerage firms must be registered with the depository and maintain accounts with the depository. All transactions involving the securities are still performed by the broker, but the requests are transmitted from the security owner to the depository, and the depository then relays messages regarding the transactions to the broker. Thus, the securities are only in the possession of the broker on a transaction-by-transaction basis.

<sup>7</sup> *CyberSource* further guides that "a method that can be performed by human thought alone is merely an abstract idea and is not patent-eligible under § 101." *CyberSource*, 654 F.3d at 1373.

and *Alice*, they continue to "'treat[ ] 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.'" *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1146–47 (Fed. Cir. 2016) (alteration in original) (quoting *Elec. Power Grp.*, 830 F.3d at 1354).

In this regard, the claims are similar to claims our reviewing court has found patent ineligible in *Elec. Power Grp.*, 830 F.3d at 1353–54 (collecting information and "analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, . . . [are] essentially mental processes within the abstract-idea category").

Therefore, in agreement with the Examiner, we conclude claim 6 involves nothing more than collecting, storing, comparing, authenticating, and transmitting data, without any particular inventive technology — an abstract idea. See *Elec. Power Grp.*, 830 F.3d at 1354. We further refer to *Content Extraction*, where the Federal Circuit has provided additional guidance on the issue of statutory subject matter by holding claims to collecting data, recognizing certain data within the collected data set, and storing that recognized data in memory were directed to an abstract idea and, therefore, unpatentable under § 101. *Content Extraction & Transmission LLC v. Wells Fargo Bank, N.A.*, 776 F.3d 1343 (Fed. Cir. 2014).

Accordingly, on this record, and under step one of *Alice*, we agree with the Examiner's conclusion the claims are directed to an abstract idea.

*Alice Step 2—Inventive Concept*

If the concept is directed to a patent-ineligible concept such as an abstract idea, as we conclude above, we proceed to the "inventive concept"

step. For that step we must "look with more specificity at what the claim elements add, in order to determine 'whether they identify an "inventive concept" in the application of the ineligible subject matter' to which the claim is directed." *Affinity Labs*, 838 F.3d at 1258 (quoting *Elec. Power Grp.*, 830 F.3d at 1353).

In applying step two of the *Alice* analysis, our reviewing court guides we must "determine whether the claims do significantly more than simply describe . . . [the] abstract method" and, thus, transform the abstract idea into patentable subject matter. *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014). We look to see whether there are any "additional features" in the claims that constitute an "inventive concept," thereby rendering the claims eligible for patenting even if they are directed to an abstract idea. *Alice*, 134 S. Ct. at 2357. Those "additional features" must be more than "well-understood, routine, conventional activity." *Mayo*, 566 U.S. at 79.

Evaluating representative claim 6 under step 2 of the *Alice* analysis, we agree with the Examiner that it lacks an "inventive concept" that transforms the abstract idea of performing securities transactions into a patent-eligible application of that abstract idea. *See* Final Act. 4;<sup>8</sup> *see also* Ans. 2. We agree with the Examiner because, as in *Alice*, we find the recitation of a method of "performing securities transactions between an account owner and a broker through an independent intermediary defined as

---

<sup>8</sup> "The claims do not include additional elements that are sufficient to amount to significantly more than the judicial exception because although a computer is utilized as the depository as an intermediary in the claimed method, the claims do no more than implement the abstract idea of performing securities transactions on a generic computer." Final Act. 4.

a depository, the depository retaining possession of securities on behalf of an account owner" is simply not enough to transform the patent-ineligible abstract idea here into a patent-eligible invention. *See Alice*, 134 S. Ct. at 2357 ("[C]laims, which merely require generic computer implementation, fail to transform . . . [an] abstract idea into a patent-eligible invention").

Accordingly, based upon the findings above, on this record, we are not persuaded of error in the Examiner's conclusion that the appealed claims are directed to patent-ineligible subject matter. Therefore, we sustain the Examiner's § 101 rejection of independent claim 6, and grouped claims 7–11 which fall therewith. *See Claim Grouping, supra*.

2. § 103(a) Rejection R2 of Claims 6–11

Issue 2

Appellant argues (Br. 7–9) the Examiner's rejection of claim 6 under 35 U.S.C. § 103(a) as being obvious over the combination of David and Wheeler is in error. These contentions present us with the following issues:

Did the Examiner err by:

(1) finding the cited prior art combination teaches or suggests "[a] method of performing securities transactions between an account owner and a broker *through an independent intermediary defined as a depository*, the depository retaining possession of securities on behalf of an account owner" that includes, *inter alia*, the step of "*receiving, at the depository*, a transaction message from the account owner defining a transaction involving a predetermined security," as recited in claim 6 (emphasis added)?

(2) not providing proper motivation to combine Wheeler with David in the manner suggested?

Analysis

*(1) All Limitations are Taught or Suggested*

Appellant contends the David reference "is directed to a specific type of system for performing securities transactions – one where a broker is not used." Br. 7. Further, "[t]here is no 'depository' in David that sits between an account owner and his broker, functioning as a gatekeeper in passing securities on a transaction-by-transaction basis." Br. 8.

In response, the Examiner finds, and we agree:

Applicant's excerpt fails to emphasize that David also mentions "[m]ore particularly, the system allows individuals to trade directly with each other" (C.9, L.1-2). As such, the individuals can be any type of individuals. While David does mention that a third party can be construed in an example as a broker, David does not limit the third parties to brokers. David also does not prohibit or mention anything that would cause the system to become inoperable if a broker was introduced. On the contrary, David explicitly allows brokers in [its] system as evidenced by . . . [citations to David col. 3, ll. 39-42, col. 8, ll. 57-59].

Ans. 3.<sup>9</sup> The Examiner further finds "the claims do not recite 'a 'depository' that sits between an account owner and his broker, functioning as a gatekeeper in passing securities on a transaction-by-transaction basis,'" as argued by Appellant. Ans. 4.

---

<sup>9</sup> "The custodian may be an independent entity; it may be associated with banks, brokerage houses or other similar entities normally involved in trading or may be established specifically for this purpose." David col. 3, ll. 39–42. Further, "[i]n an alternate embodiment of the invention, the customer may be given the option of sending the order to a brokerage-type service. The order is then processed by a broker through a conventional exchange." David col. 8, ll. 57–59.

Thus, on this record, we are not persuaded the Examiner erred in finding the contested limitation is taught or suggested by the cited prior art combination.

*(2) The Examiner Provided Proper Motivation to Combine*

Appellant contends:

Inasmuch as an "advantage" of David is to eliminate the need to pay "commissions or other fees to third parties", it is difficult to understand the motivation as suggested by the examiner to "replace" an end customer by a broker. The brokers are involved in the prior art "standard exchange systems" mentioned by David. There is no reason to revert to such an arrangement in David.

Thus, Appellant asserts that there is no motivation to combine to the teachings of Wheeler et al. with David in the manner suggested by the Examiner. These references, as a result, are not properly combinable to support a finding of obviousness.

Br. 8.

As discussed, *supra*, the Examiner finds "David does not limit the third parties to brokers . . . [and] does not prohibit or mention anything that would cause the system to become inoperable if a broker was introduced."

Ans. 3. "As stated in the respective rejection, a person having ordinary skill in the art would have been motivated to combine these features because it would facilitate the receiving end customer by reducing the amount of time spent performing the transaction and reduce the possibility of error." *Id.*

Therefore, based upon the findings above, on this record, we are not persuaded of error in the Examiner's reliance on the cited prior art combination to teach or suggest the disputed limitation of claim 6, nor do we



find error in the Examiner's resulting legal conclusion of obviousness. Therefore, we sustain the Examiner's obviousness rejection of independent claim 6, and grouped claims 7–11 which fall therewith. *See* Claim Grouping, *supra*.

#### CONCLUSIONS

(1) The Examiner did not err with respect to patent-ineligible subject matter Rejection R1 of claims 6–11 under 35 U.S.C. § 101, and we sustain the rejection.

(2) The Examiner did not err with respect to obviousness Rejection R2 of claims 6–11 under 35 U.S.C. § 103(a) over the cited prior art combination of record, and we sustain the rejection.

#### DECISION

We affirm the Examiner's decision rejecting claims 6–11.

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). *See* 37 C.F.R. § 41.50(f).

AFFIRMED