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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte TUOMAS SANDHOLM

Appeal 2019-004188
Application 13/555,576
Technology Center 3600

Before BRYAN F. MOORE, BETH Z. SHAW, and SCOTT B. HOWARD,
Administrative Patent Judges.

HOWARD, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 2–8, 11–18, and 20–25. *See* Final Act. 1. Claims 1, 9, 10, and 19 have been cancelled. Appeal Br. 4. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ We use the word Appellant to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant does not identify a real party in interest.

CLAIMED SUBJECT MATTER

The claims are directed to barter chains. *See Spec.* ¶ 2. Claim 25, reproduced below with emphasis added, is illustrative of the claimed subject matter:

25. A system, comprising:

a user device having a user interface and a display;

a network connection to the user device, the user device receiving from the user interface a user input identifying a first participant and an item the first participant desires;

a database, accessible by a barter market and connected to the user device through the network connection, storing information that identifies at least one donor willing to give an item and receive nothing in return and identifies at least one other participant that has the item the first participant desires and is willing to receive an item that the donor has donated;

a processor, connected to the user device through the network connection, wherein the processor is further configured to automatically download a software application to the user device;

the software application being configured to collect, through the user interface and send through the network connection to the database accessible by the barter market, information identifying the first participant and at least one item the first participant desires to donate, receive or trade;

the processor executing at least one matching run to *create a barter chain by identifying, from the database, the first participant, the donor, and thereafter the at least one other participant, wherein the barter chain starts with a first participant who donates one or more items without consideration and does not receive an item in the matching run and ends with a last participant who receives one or more items in the matching run and does not give up an item in exchange for the one or more items in the matching run;*

wherein executing at least one matching run comprises analyzing, using the processor, all of the information about the available trades and donations to create a ranked and ordered list in order to select the optimum trades that will result in the largest

possible barter chain of trades before the chain ends and transmitting a suggestion to one or more participants of an item for inclusion by the one or more participants within the barter chain to facilitate advancement of the barter chain;

wherein the barter chain comprises the first participant, the donor, the at least one other participant and the items each is willing to either donate, receive, or trade;

and the processor:

automatically identifying at least one suggested item from the barter chain and displaying on the user device display the at least one suggested item;

facilitating a trade of the item that the donor has donated from the donor to the at least one other participant; and

facilitating trade of the item the first participant desires between the at least one other participant and the first participant.

REFERENCES

The prior art relied upon by the Examiner is:

Name	Reference	Date
Moore	US 6,847,938 B1	Jan. 25, 2005
Sobh	US 8,078,513 B1	Dec. 13, 2011 (filed July 16, 2007)
Bocheck	US 2008/0103987 A1	May 1, 2008
Basham	US 2011/0258069 A1	Oct. 20, 2011 (filed Apr. 14, 2011)
http://www.reddit.com/r/bookexchange. November 30, 2010 to March 13, 2011 (recovered from www.archive.org). (hereinafter "Reddit Book Exchange"). ²		

REJECTIONS

Claims 2–8, 11–18, and 20–25 stand rejected under 35 U.S.C. § 101 because the claimed invention is directed patent-ineligible subject matter.

² Reddit Book Exchange is referred to as 892-V during prosecution.

Claims 2, 3, 5–8, 11–14, 16–18, 20, 21, 23, and 25 stand rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Moore, Reddit Book Exchange, and Sobh.

Claims 4, 15, and 22 stand rejected under pre-AIA 35 U.S.C. §103(a) as being unpatentable over Moore, Reddit Book Exchange, Sobh, and Basham.

Claim 24 stands rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Moore, Reddit Book Exchange, Sobh, and Bocheck.

OPINION

We have reviewed the Examiner’s rejection in light of Appellant’s arguments that the Examiner erred. In reaching this decision, we have considered all evidence presented and all arguments made by Appellant. We are not persuaded by Appellant’s arguments regarding claims 2–8, 11–18, and 20–25 and we incorporate herein and adopt as our own: (1) the findings, conclusions, and reasons set forth by the Examiner in the action from which this appeal is taken (Final Act. 2–16), and (2) the findings, conclusions, and reasons and rebuttals set forth in the Examiner’s Answer in response to Appellants’ arguments (Ans. 4–9). We incorporate such findings, conclusions, reasons, and rebuttals herein by reference unless otherwise noted. However, we highlight and address specific findings and arguments for emphasis as follows.

Section 101 Rejection

Principles of Law

Section 101

An invention is patent-eligible if it claims a “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101.

However, the U.S. Supreme Court has long interpreted 35 U.S.C. § 101 to include implicit exceptions: “[l]aws of nature, natural phenomena, and abstract ideas” are not patentable. *E.g.*, *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014).

In determining whether a claim falls within an excluded category, we are guided by the Court’s two-part framework, described in *Mayo* and *Alice*. *Id.* at 217–18 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 75–77 (2012)). In accordance with that framework, we first determine what concept the claim is “directed to.” *See Alice*, 573 U.S. at 219 (“On their face, the claims before us are drawn to the concept of intermediated settlement, *i.e.*, the use of a third party to mitigate settlement risk.”); *see also Bilski v. Kappos*, 561 U.S. 593, 611 (2010) (“Claims 1 and 4 in petitioners’ application explain the basic concept of hedging, or protecting against risk.”).

Concepts determined to be abstract ideas, and thus patent ineligible, include certain methods of organizing human activity, such as fundamental economic practices (*Alice*, 573 U.S. at 219–20; *Bilski*, 561 U.S. at 611); mathematical formulas (*Parker v. Flook*, 437 U.S. 584, 594–95 (1978)); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)). Concepts determined to be patent eligible include physical and chemical processes, such as “molding rubber products” (*Diamond v. Diehr*, 450 U.S. 175, 191

(1981)); “tanning, dyeing, making waterproof cloth, vulcanizing India rubber, smelting ores” (*id.* at 182 n.7 (quoting *Corning v. Burden*, 56 U.S. 252, 267–68 (1853))); and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))).

In *Diehr*, the claim at issue recited a mathematical formula, but the Court held that “a claim drawn to subject matter otherwise statutory does not become nonstatutory simply because it uses a mathematical formula.” *Diehr*, 450 U.S. at 187; *see also id.* at 191 (“We view respondents’ claims as nothing more than a process for molding rubber products and not as an attempt to patent a mathematical formula.”). Having said that, the Court also indicated that a claim “seeking patent protection for that formula in the abstract . . . is not accorded the protection of our patent laws, and this principle cannot be circumvented by attempting to limit the use of the formula to a particular technological environment.” *Id.* (citation omitted) (citing *Benson* and *Flook*); *see, e.g., id.* at 187 (“It is now commonplace that an *application* of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.”).

If the claim is “directed to” an abstract idea, we turn to the second step of the *Alice* and *Mayo* framework, where “we must 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.” *Alice*, 573 U.S. at 221 (quotation marks omitted). “A claim that recites an abstract idea must include ‘additional features’ to ensure ‘that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].’” *Id.* (alterations in original) (quoting *Mayo*,

566 U.S. at 77). “[M]erely requir[ing] generic computer implementation[] fail[s] to transform that abstract idea into a patent-eligible invention.” *Id.*

USPTO Section 101 Guidance

In January 2019, the U.S. Patent and Trademark Office (USPTO) published revised guidance on the application of § 101. 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) (“2019 Revised Guidance”).³ “All USPTO personnel are, as a matter of internal agency management, expected to follow the guidance.” *Id.* at 51; *see also* October 2019 Update at 1.

Under the 2019 Revised Guidance and the October 2019 Update, we first look to whether the claim recites:

- (1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activity such as a fundamental economic practice, or mental processes) (“Step 2A, Prong One”); and
- (2) additional elements that integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)–(c), (e)–(h) (9th ed. Rev. 08.2017, Jan. 2018)) (“Step 2A, Prong Two”).⁴

³ In response to received public comments, the Office issued further guidance on October 17, 2019, clarifying the 2019 Revised Guidance. USPTO, *October 2019 Update: Subject Matter Eligibility* (the “October 2019 Update”) (available at https://www.uspto.gov/sites/default/files/documents/peg_oct_2019_update.pdf).

⁴ This evaluation is performed by (a) identifying whether there are any additional elements recited in the claim beyond the judicial exception, and (b) evaluating those additional elements individually and in combination to

2019 Revised Guidance, 84 Fed. Reg. at 52–55.

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then look, under Step 2B, to whether the claim:

(3) adds a specific limitation beyond the judicial exception that is not “well-understood, routine, conventional” in the field (*see* MPEP

§ 2106.05(d)); or

(4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.

2019 Revised Guidance, 84 Fed. Reg. at 52–56.

USPTO Step 2A, Prong 1

The Examiner concludes that representative claim 25 “set[s] forth [a] system for facilitating multiple barter transactions between users [and that] [t]hese limitations amount to certain methods of organizing human activity, including commercial or legal interactions (e.g. advertising, marketing or sales activities or behaviors). Ans. 5; *see also* Final Act. 2 (concluding that “the claims are drawn to the idea of facilitating multiple barter transactions between users (see claim 25),” which is a fundamental economic practice). The Examiner further determines that “[s]uch concepts have been identified by the courts as abstract ideas.” Ans. 5 (citing 2019 Revised Guidance).

determine whether the claim as a whole integrates the exception into a practical application. *See* 2019 Revised Guidance - Section III(A)(2), 84 Fed. Reg. 54–55.

The Examiner specifically identifies the following claim limitations as setting forth a barter system:

- receiving a user input identifying a first participant and an item the first participant desires;
- storing information that identifies at least one donor willing to give an item and receive nothing in return and identifies at least one other participant that has the item the first participant desires and is willing to receive an item that the donor has donated;
- collecting and sending information identifying the first participant and at least one item the first participant desires to donate, receive or trade;
- executing at least one matching run to create a barter chain by identifying the first participant, the donor, and thereafter the at least one other participant;
- analyzing all of the information about the available trades and donations to create a ranked and ordered list in order to select the optimum trades that will result in the largest possible barter chain of trades before the chain ends and transmitting a suggestion to one or more participants of an item for inclusion by the one or more participants within the barter chain to facilitate advancement of the barter chain;
- automatically identifying at least one suggested item from the barter chain and
- facilitating a trade of the item that the donor has donated from the donor to the at least one other participant; and
- facilitating trade of the item the first participant desires between the at least one other participant and the first participant.

Ans. 4–5.

Appellant argues the Examiner’s conclusions are “unsupported by the evidence of record and is formed as nothing more than a conclusory statement” and “a broad overgeneralization of the claims.” Appeal

Br. 23–24.⁵ Appellant also argues “that the Office has not identified any particular *abstract idea* allegedly claimed as corresponding to any *abstract idea* defined by the courts.” *Id.* at 25.

Appellant further argues that the claims are not directed to an abstract idea; instead, according to Appellant, the claims are directed to a technological improvement. *See* Appeal Br. 25–31; Reply Br. 24–25. Specifically, Appellant argues “that the claims are directed to an improvement to the technical field of barter markets by providing a system that can automatically identify and generate barter chains using” specific requirements. Appeal Br. 25–26; *see also id.* at 26 (“Applicant respectfully submits that the claims are directed to technological improvements to the technological field of barter markets.”); *id.* at 27 (“Applicant respectfully point to the specification which identifies that the claimed invention achieves benefits over conventional techniques for barter markets.”).

According to Appellant, “the present application provides a technique that is faster than conventional techniques, allows for generation of barter chains, and allows for suggestions of items and/or participants for inclusion in the barter chain that is not possible using conventional techniques.” *Id.* at 28; *see also id.* at 28–30 (arguing the claims are similar to those found eligible in *Trading Techs. Int’l, Inc. v. COG, Inc.*); *id.* at 30 (“Applicant’s specification describes the specific technical improvements to programming that permit the system to evaluate product features in novel, non-obvious ways.”).

⁵ Appellant repeats every statement from the Appeal Brief in the Reply Brief. For ease of reference, we refer only to the Appeal Brief for those statements.

We are not persuaded by Appellant’s arguments that the Examiner erred. Contrary to Appellant’s arguments, the Examiner made specific findings and conclusions regarding the abstract idea. *See* Ans. 4–5. Moreover, the Examiner’s determinations were not conclusory. Rather, the Examiner specifically identified claim limitations that recited the abstract idea and referenced and applied the 2019 Revised Guidance.

We are also not persuaded that the claims are directed to a technological solution. The Specification identifies the claimed invention as directed to “barter systems” and more specifically, “commercial applications for barter chains.” Spec. ¶ 2. This is consistent with the claims, which, as discussed below, recite steps of a barter system.⁶

Instead, we agree with the Examiner that the claims recite an abstract idea. The limitations identified by the Examiner—and reproduced above—recite a barter system. Specifically, the limitations refer to identifying users who will participate in the barter, information regarding the items available and wanted for barter, and using that information to create a barter chain. A barter system involves the exchange of goods or services. Thus, like the concept of intermediated settlement in *Alice*, and the concept of hedging in *Bilski*, the concept of a barter chain/system in Appellant’s claims “is a fundamental economic practice long prevalent in our system of commerce.” *Alice*, 573 U.S. at 216 (citations and internal quotation marks omitted); *see also OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362–63 (Fed. Cir. 2015) (concluding that claimed concept of “offer-based price optimization” is an abstract idea “similar to other ‘fundamental economic

⁶ Appellant’s technological solution arguments are addressed in more details with regard to USPTO step 2A, Prong 2, *infra*.

concepts’ found to be abstract ideas by the Supreme Court and this court”); *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) (holding that concept of “creating a contractual relationship—a ‘transaction performance guaranty’” is an abstract idea); *In re Ferguson*, 558 F.3d 1359, 1364 (Fed Cir. 2009) (holding methods “directed to organizing business or legal relationships in the structuring of a sales force (or marketing company)” to be ineligible). Accordingly, we conclude the claims recite a fundamental economic practice, which is one certain methods of organizing human activity identified in the 2019 Revised Guidance, and thus an abstract idea.

USPTO Step 2A, Prong 2

The Examiner concludes that claim 25 recites additional elements which are not part of the abstract idea:

- automatically download a software application to the user device;
- displaying on the user device display the at least one suggested item.

Ans. 6. The Examiner determines that the steps, whether considered individually or as a whole, “do[] not integrate the recited judicial exception into a practical application of the exception.” *Id.* The Examiner further determines that the steps “merely includes instruction to implement an abstract idea of a computer, or to merely use a computer as a tool to perform an abstract idea, while the additional elements do no more than generally link the use of a judicial exception to a particular field of technological environment or field of use.” *Id.*

The Examiner also determines that the claim

fails to (i) reflect an improvement in the functioning of a computer, or an improvement to other technology or technical field, (ii) implement a judicial exception with a *particular* machine, (iii) effect a transformation or reduction of a particular article to a different state or thing, or (iv) apply the judicial exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment.

Ans. 6.

Appellant relies on its arguments directed to USPTO Step 2A, prong 1, set forth above. Reply Br. 32.

We are not persuaded by Appellant's arguments that the Examiner erred. Claim 25 does not constitute an improvement to computer technology; rather, it merely improves the abstract idea of a barter system in which people exchange goods and services. Moreover, the claims here do not improve computer functionality itself or cover a technology-based solution that improves an existing technological process. *See* Final Act. 3–4; Ans. 6. For instance, the claims do not recite an advance in hardware or software that improves the functionality of, for example, a processor or client device, or of the servers. Instead, we agree with the Examiner that the additional limitations recited in claim 25 simply use the computer as a tool to perform the abstract idea.

The sections of the Specification cited by the Appellant do not persuade us that the claims are directed to a technological improvement. Instead, the cited sections—paragraphs 3 and 14 (Appeal Br. 27–28)—simply describe the abstract idea of the improved barter system. Spec. ¶¶ 3, 14. However, those sections do not describe any technological improvement

that improves computer functionality. *See* MPEP § 2106.05(a) (9th ed. rev. 08.2017 Jan. 2018).

We are also not persuaded that claim 25 is analogous to the claims found patent-eligible in *Trading Technologies*.⁷ In *Trading Technologies*, U.S. Patent Nos. 6,772,132 (“’132 patent”) and 6,766,304 (“’304 patent”) describe “[a] method and system for reducing the time it takes for a trader to place a trade when electronically trading on an exchange, thus increasing the likelihood that the trader will have orders filled at desirable prices and quantities.” ’132 patent, Abstract; ’304 patent, Abstract. In particular, the *Trading Technologies* patents describe a trading system in which a graphical user interface “display[s] the market depth of a commodity traded in a market, including a dynamic display for a plurality of bids and for a plurality of asks in the market for the commodity and a static display of prices corresponding to the plurality of bids and asks.” ’132 patent, 3:11-16; ’304 patent, 3:15-20. “The claims require a specific, structured graphical user interface paired with a prescribed functionality directly related to the graphical user interface's structure that is addressed to and resolves a specifically identified problem in the prior state of the art.” *Trading Techs.*, 675 F. App’x at 1004. As such, the panel found *Trading Technologies*’ “claimed subject matter is ‘directed to a specific improvement to the way computers operate,’ . . . for the claimed graphical user interface method imparts a specific functionality to a trading system ‘directed to a specific implementation of a solution to a problem in the software arts.’” *Id.* at 1006.

⁷ *Trading Techs. Int’l, Inc. v. CQG, Inc.*, 675 F. App’x 1001 (Fed. Cir. 2017)

In contrast to *Trading Technologies*, the problem identified by Appellant in the Specification is a business problem, and the solution proposed by Appellant is a business solution implemented with a generic display and processor, rather than a technological solution to a technological problem. This is similar to what the court determined to be ineligible in subsequent precedential decisions in the *Trading Technologies* line of cases, in which the generic use of a computer as a tool without improvement of the computer was determined not to be an integration of an abstract idea into a practical application. *See, e.g., Trading Techs. Int'l, Inc. v. IBG LLC*, 921 F.3d 1084, 1093–94 (Fed. Cir. 2019) (holding that the patent owner “argues the claims improve computer functionality by improving on the intuitiveness and efficiency of prior GUI tools. The specification makes clear that this invention helps the trader process information more quickly. This is not an improvement to computer functionality, as alleged by [the patent owner].”). In other words, the problems associated with developing a barter chain is not brought about by technology and does not require technology for resolution. Appellant’s claimed invention does not “improve the functioning of a known system” similar to the “interface” improvements that occurred in *Trading Technologies*. 675 F. App’x 1004–05. Any purported improvements are to the underlying barter system, not the underlying generic computer elements.

Accordingly, we are not persuaded of error in the Examiner’s determination that claim 25 is directed to an abstract idea, and we find the claimed additional elements do not integrate the abstract idea into a practical application.

USPTO Step 2B

The Examiner determines that the limitations recited in claim 25, taken individually or as a whole, do not provide an inventive concept because “[t]he claim merely appends well-understood, routine, and conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.” Ans. 6. Specifically, the Examiner finds that claim 25

merely utilizes computer function that the courts have recognized as well-understood, routine, and conventional, such as receiving or transmitting data over a network (receiving a user input . . . , collecting and sending information . . . , transmitting a suggestion . . .), performing repetitive calculations (executing at least one matching run . . . , analyzing all of the information. . . , identifying at least one suggested item . . .), and storing and retrieving information in memory (storing information that identifies at least one donor . . .).

Id. at 6–7 (citing MPEP 2106.05(d)).

Appellant argues that “the Office must provide evidence of a factual determination that supports a conclusion that the additional elements represent well-understood, routine, or conventional activity.” Appeal Br. 31. According to Appellant, “the Office has not provided such evidence that would support a conclusion that the additional elements represent well-understood, routine, or conventional activity.” *Id.* In fact Appellant argues that “these limitations confine any abstract idea to the particular, practical application of the abstract idea, and, as explained in the specification, this combination of limitations is not well-known, understood, routine, or conventional activity. *Id.* at 33.

Appellant also argues that the claims require more than a generic computer. Appeal Br. 32. Appellant further argues that even if the elements are generic, “these known elements are combined in a manner that is unconventional and non-generic, and are, thus, directed to substantially more than any abstract idea.” *Id.* at 33

We are not persuaded by Appellant’s arguments that the Examiner erred. Pursuant to the Berkheimer Memorandum,⁸ the Examiner determined that the claim limitations were not well-understood, routine, or conventional based on the cases cited in MPEP § 2106.05(d). Specifically, the types of generic computer components performing generic computer functions recited in claim 25 have been found to be well understood, routine, and conventional. *See, e.g., Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1355 (Fed. Cir. 2016) (“Nothing in the claims, understood in light of the specification, requires anything other than off-the-shelf, conventional computer, network, and display technology for gathering, sending, and presenting the desired information”); *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) (“That a computer receives and sends the information over a network—with no further specification—is not even arguably inventive”); *In re TLI Commc’ns LLC Patent Litig.*, 823 F.3d 607, 614 (Fed. Cir. 2016) (server that receives data, extracts classification information from the received data, and stores the digital images insufficient to add an inventive concept); *Alice*, 573 U.S. at 225–26 (receiving, storing,

⁸ USPTO Memorandum, Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (*Berkheimer v. HP, Inc.*) (Apr. 19, 2018), *available at* <https://www.uspto.gov/sites/default/files/documents/memo-berkheimer-20180419.PDF>.

sending information over networks insufficient to add an inventive concept); *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1370 (Fed. Cir. 2011) (use of Internet to verify credit-card transaction does not add enough to abstract idea of verifying the transaction); *see also* MPEP § 2106.05(d) (“Courts have held computer-implemented processes not to be significantly more than an abstract idea (and thus ineligible) where the claim as a whole amounts to nothing more than generic computer functions merely used to implement an abstract idea, such as an idea that could be done by a human analog (i.e., by hand or by merely thinking.”)).

Nor does Appellant persuade us that the ordered combination set forth in claim 25 is not well understood, routine, and conventional. Appellant relies solely on attorney argument and a recitation of some of the claim limitations. *See* Appeal Br. 32–33. However, it is well settled that mere attorney arguments and conclusory statements, which are unsupported by factual evidence, are entitled to little probative value. *In re Geisler*, 116 F.3d 1465, 1470 (Fed. Cir. 1997); *see also In re Pearson*, 494 F.2d 1399, 1405 (CCPA 1974) (attorney argument is not evidence). Instead, we agree with the Examiner that the ordered combination of elements in claim 25 “do not add anything further than when they are considered individually.”

Ans. 7.

Conclusion on Section 101 Rejection

Accordingly, we sustain the Examiner’s rejection of claim 25 as being directed to patent-ineligible subject matter, as well as independent claims 12, and 21 with commensurate limitations, and dependent claims 2–8, 11, 13–18, 20, and 22–24, which are not separately argued.

Section 103 Rejection – Claims 2, 3, 5–8, 11–14, 16–18, 20, 21, 23, and 25

Examiner rejects claims 2, 3, 5–8, 11–14, 16–18, 20, 21, 23, and 25 as having been obvious over Moore, Reddit Book Exchange, and Sobh. Below we discuss Appellant’s arguments against this rejection.

Reason to Combine

Appellant argues the Examiner erred in combining Moore, Reddit Book Exchange, and Sobh. Appeal Br. 34. Specifically, Appellant argues “that the Office has not articulated a reason why a person skilled in the art would combine the prior art references, does not have adequate evidentiary basis for that finding, and has not provided a satisfactory explanation for the motivation finding that includes an express and rational connection with the evidence presented.” *Id.* We are not persuaded by Appellant’s argument that the Examiner erred. Contrary to Appellant’s assertion, the Examiner provided a detailed reason to combine the teachings of the references with citations to the record. In particular, the Examiner determines, and we agree, that a person having ordinary skill in the art would have combined the techniques of the Reddit Book Exchange with Moore because it “would have yielded predictable results and resulted in an improved system” and that such “an improved system that would allow some users to get rid of unwanted items while allowing other users to receive items.” Final Act. 11. The Examiner further determines that a person having ordinary skill in the art would have combined the teachings of Sobh with Moore because it “have yielded predictable results and resulted in an improved system” and would have resulted in “an improved system that would allow a plurality of permutations of trading cycles that allow for indirect exchanges between its members, with the option of using cash as an exchange element.” *Id.* at

12. Accordingly, the Examiner provides a “rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006), *cited with approval in KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007).

“Create a Barter Chain” Limitation

Appellant further argues that the Examiner erred in finding Moore teaches the “create a barter chain . . .” limitation⁹ recited in claim 25. Appeal Br. 35–36. Specifically, Appellant argues Moore contemplates a system in which each person both gives and receives an item. *Id.* (citing Moore, 4:10–20, 4:65–5:12). Appellant further argues that Moore “specifically teaches against a system that would use barter chains.” *Id.* (citing Moore, 4:10–20, 4:65–5:12).

First, the Examiner did not rely on Moore alone for the “create a barter chain” limitation. Instead, the Examiner relied on the combination of Moore and Reddit Book Exchange for the “create a barter chain” limitation. Final Act. 10–12. Nonobviousness cannot be established by attacking the references individually when the rejection is predicated upon a combination of prior art disclosures. *In re Merck & Co.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). The test for obviousness is not whether the claimed invention is expressly suggested in any one or all of the references, but whether the claimed subject matter would have been obvious to those of ordinary skill in the art in light of the *combined teachings* of those references. *In re Keller*, 642 F.2d 413, 425 (CCPA 1981). Because Appellant focuses on Moore

⁹ The “create a barter chain” limitation is italicized in the recitation of the claim on pages 2–3, *supra*.

alone and not the combination of references relied on by the Examiner, we are not persuaded the Examiner erred.

Second, we find Appellant has not established that the prior art teaches away from the claimed invention because Appellant has not demonstrated that “a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant.” *In re Gurley*, 27 F.3d 551, 553 (Fed Cir. 1994). The passage, which discusses a preferred embodiment, “does not teach away. . . [as] it merely expresses a general preference for an alternative invention but does not ‘criticize, discredit, or otherwise discourage’ investigation into the invention claimed.” *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1327 (Fed. Cir. 2009) (quoting *In re Fulton*, 391 F.3d 1195, 1201 (Fed. Cir. 2004)). Specifically, the cited sections simply discuss a conventional barter circle—in which every person both gives and receives an item. *See Moore* 4:10–20, 4:65–5:12. However, Appellant does not identify any passage in *Moore* that explicitly discredits or discourages a barter chain in which the end people either receive or give an item, but not both. The cited section do no more than articulate a preference for a conventional barter circle. But that stated preference is insufficient to teach away from the claimed invention. *See DePuy*, 567 F.3d at 1327; *Fulton*, 391 F.3d at 1201.

Accordingly, we sustain the rejection of independent claims 12, 21, and 25—which are argued as a group—along with dependent claims 2, 3, 5–8, 11, 13, 14, 16–18, 20, and 23, which are not argued separately.

Section 103 Rejection – Claims 4, 15, 22, and 24

Appellant does not separately argue dependent claims 4, 15, 22, and 24, which each rely on an additional reference. Because we determine that the rejection of the independent claims is not erroneous for the reasons discussed above, we sustain the rejections of these claims.

CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
2–8, 11–18, 20–25	101	eligibility	2–8, 11–18, 20–25	
2, 3, 5–8, 11–14, 16–18, 20, 21, 23, 25	103(a)	Moore, Reddit Book Exchange, Sobh	2, 3, 5–8, 11–14, 16–18, 20, 21, 23, 25	
4, 15, and 22	103(a)	Moore, Reddit Book Exchange, Sobh, Basham	4, 15, and 22	
24	103(a)	Moore, Reddit Book Exchange, Sobh, Bocheck	24	
Overall Outcome:			2–8, 11–18, 20–25	

TIME PERIOD FOR RESPONSE

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).

AFFIRMED