UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/095,894	12/03/2013	Matthew Tucker	30431-24723	1095

758 7590 07/02/2018

FENWICK & WEST LLP
SILICON VALLEY CENTER
801 CALIFORNIA STREET
MOUNTAIN VIEW, CA 94041

EXAMINER
OYEBISI, OJO O

ART UNIT	PAPER NUMBER
3697	

NOTIFICATION DATE	DELIVERY MODE
07/02/2018	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):

PTOC@Fenwick.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MATTHEW TUCKER and STEPHEN A. LAIPPLY[1]

Appeal 2017-000327
Application 14/095,894
Technology Center 3600

Before JOHN A. EVANS, LARRY J. HUME, and JASON M. REPKO, *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 1–22, which are all claims pending in the application. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

---

[1] According to Appellants, the real party in interest is BlackRock Fund Advisors. App. Br. 1.

STATEMENT OF THE CASE[2]

The Invention

Appellants' disclosed embodiments and claimed invention relate to an investment funds enabling a bond laddering strategy Spec. ¶ 2.

Exemplary Claim

Claim 1, reproduced below, is representative of the subject matter on appeal (*emphasis* added to contested limitations):

> 1. A method for administering a family of exchange-traded funds (ETFs) for use in a bond laddering strategy, the method comprising:
>
> establishing a plurality of open-ended ETFs, each ETF of the plurality of ETFs having a different liquidation date, wherein the liquidation dates of the plurality of ETFs are spread evenly over a time period;
>
> for each of the plurality of ETFs:
>
> receiving, at an order management system from one or more authorized participants, one or more creation orders to create new shares of the ETF,
>
> providing the created shares of the ETF to the one or more authorized participants, the shares of the ETF tradable on a secondary market,
>
> determining, by a fund management information system, a set of distribution payments and a final liquidation payment for each share of the ETF,

---

[2] Our decision relies upon Appellants' Appeal Brief ("App. Br.," filed Jan. 5, 2016); Reply Brief ("Reply Br.," filed Oct. 4, 2016); Examiner's Answer ("Ans.," mailed Aug. 1, 2016); Final Office Action ("Final Act.," mailed Mar. 17, 2015); and the original Specification ("Spec.," filed Dec. 3, 2013).

> paying the determined distribution payments to the investors who own shares of the ETF at a plurality of the intervals before the liquidation date of the ETF, and
>
> paying the final liquidation payment to the investors who own shares of the ETF upon the liquidation date of the ETF; and
>
> closing each of the ETFs based on the liquidation date of the ETF.

Rejections on Appeal

Claims 1–22 stand rejected under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter. Ans. 2.

CLAIM GROUPING

Based on Appellants' arguments (App. Br. 4–12), we decide the appeal of patent-ineligible subject matter Rejection R1 of claims 1–22 on the basis of representative claim 1.[3]

ISSUE

Appellants argue (App. Br. 4–12; Reply Br. 1–11) the Examiner's rejection of claim 1 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:

---

[3] "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 Appellants do 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).

Did the Examiner err in concluding the subject matter of claim 1 is directed to an abstract idea without significantly more?

ANALYSIS

In reaching this decision, we consider all evidence presented and all arguments actually made by Appellants. We do not consider arguments Appellants 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 Appellants' arguments with respect to claims 1–22 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 Appellants' arguments. We highlight and address specific findings and arguments regarding claim 1 for emphasis as follows.

Alice Framework

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. *Alice*, 134 S. Ct. at 2354.

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." *Id.* (internal 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 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 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. Abstract ideas may include, but are not limited to, fundamental economic practices, methods of organizing human activities, an idea of itself, and mathematical formulas or relationships. *Alice* 134 S. Ct. at 2355–57. 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. *Id.* at 2354 ("[W]e tread carefully in construing this exclusionary principle lest it swallow all of patent law.").

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 of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016) (internal citation omitted). If the claims are not directed to a patent-ineligible concept, the inquiry ends. *See Visual Memory LLC v. NVIDIA Corp.*, 867 F.3d 1253, 1262 (Fed. Cir. 2017). If the concept is directed to a patent-ineligible concept, we proceed to the "inventive concept" step. For that second 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).

Alice Step 1 — Abstract Idea

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.").

Appellants contend the Examiner did not "provid[e] a rationale or cit[e] to facts on the record . . . " but instead "simply conclude[d] that 'administering a family of exchange-traded funds is a fundamental financial economic practice.'" App. Br. 4. In response to the Examiner's conclusion (Final Act. 3) that "[t]he claims are directed towards the abstract idea of administering a family of exchange-traded funds", Appellants further allege:

> ETFs are neither abstract nor a fundamental economic practice. Rather, an ETF is a specific type of investment vehicle that must obey specific rules and is created and redeemed by in-kind transfers of underlying fund assets by an authorized pai1icipant on a primary market. Further, unlike many other types of investments-including other funds-ETFs are securitized so they can be traded in the market on a stock exchange. The process of "administering a family of ETFs" cannot be a fundamental economic practice when it encompasses only one specific type of investment product and when there are so many other way to invest. *See Alice*, 134 S. Ct. at 2354 (distinguishing "patents that claim the 'building blocks' of human ingenuity," from those "pose no comparable risk of preemption"). Thus, the examiner's identification of "administering a family of exchange-traded funds" as being a fundamental economic practice is an error.

App. Br. 6.

In addition, Appellants further allege, "[u]nder the standard set forth in the July Update, fundamental economic practices include 'concepts relating to the economy and commerce,' such as 'contracts, legal obligations, and business relations'", and a

> fundamental economic practice, as defined by the July Update, must be "foundational" or "basic." Under this standard, the [E]xaminer has not demonstrated how the alleged abstract idea

> is foundational or basic to any economic practice. Indeed, an ETF is just one specific type of financial product offered in the market, and there are many other ways to invest in a portfolio of assets. In fact, far from being fundamental, ETFs are not even a longstanding economic practice; ETFs were first offered in 1989.

App. Br. 6–7 (citation omitted). "The Final Office Action thus errs by failing to explain why the [E]xaminer's proposed abstract idea is directed to an exception." *Id.* at 7.[4]

In response, the Examiner concluded in the Answer (6), "the recited steps describe the concept of administering a family of exchange-traded funds, which corresponds to concepts identified as abstract ideas by the courts, such as formulation and trading of Risk in Alice; and as a result, claim 1 includes an abstract idea."

---

[4] What arguably is an admission that claim 1 is directed to an abstract idea, Appellants proffer:

> To be consistent with the examples from recent case law, the Final Office Action should have instead defined the abstract idea without limiting it to a specific type of investment product. For example, *the Final Office Action could have defined the abstract idea in more fundamental terms, like "managing investments for others." That way, the abstract idea definition does not scoop up concrete and non-abstract features of the claimed family of ETFs, such as their ability to be traded on an exchange.* This exchange tradability feature is importantly tied to a benefit of the claimed subject matter—to make bond laddering strategies more available to individual investors—and is thus relevant to the second step of the Alice test, discussed below. But by including it in the definition of the abstract idea, the Final Office Action commits reversible error by ignoring the feature when searching for "something more" in the second step of the Alice test.

App. Br. 7–8 (emphasis added).

Although the Examiner modified the § 101 rejection in the Answer by invoking a New Ground of Rejection (*see* App. Br. 2), apparently to better conform to more recent USPTO examination guidance, we find the Examiner's conclusion to be consistent with the Final Action, in which the Examiner concluded, "[i]n the instant case, the claims are directed towards the abstract idea of administering a family of exchange-traded funds. Administering a family of exchange-traded funds is a fundamental financial-economic practice." Final Act. 3.

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 1 recites: "A method for administering a family of exchange-traded funds (ETFs) for use in a bond laddering strategy." Claim 1 (preamble). Method claim 1's limitations also require the steps of:

> (a) "establishing . . . open-ended ETFs";
>
> and for each of the ETFs,
>
> (b) "receiving . . . one or more creation orders to create new shares";
>
> (c) "providing the created shares of the ETF to the one or more authorized participants";
>
> (d) "determining, by a fund management information system, a set of distribution payments and a final liquidation payment for each share of the ETF;"
>
> (e) "paying the determined distribution payments . . . at a plurality of the intervals before the liquidation date"; and

> (f) "paying the final liquidation payment to the investors who own shares of the ETF upon the liquidation date of the ETF."

Under step one, we agree with the Examiner that the inventions claimed in each of independent claims 1 and 15 are directed to an abstract idea, i.e., administering a family of exchange-traded funds, which we also conclude is a fundamental economic practice (*see* Ans. 3) [5] or, alternatively, as Appellants suggest, the fundamental economic practice of "managing investments for others." App. Br. 7.

As for Appellants' argument that "ETFs are not even a longstanding economic practice; ETFs were first offered in 1989" (*id.*), we are not persuaded that an economic practice available for almost 30 years by Appellants' own admission, does not qualify as a "long-standing" practice under the broadest reasonable interpretation standard.[6]

As the Specification discloses,

---

[5] Merely combining several abstract ideas does not render the combination any less abstract. *RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017) ("Adding one abstract idea (math) to another abstract idea . . . does not render the claim non-abstract."); *see also FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093–94 (Fed. Cir. 2016) (determining the pending claims were directed to a combination of abstract ideas).

[6] During prosecution, claims must be given their broadest reasonable interpretation when reading claim language in light of the Specification as it would be interpreted by one of ordinary skill in the art. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). Under this standard, we interpret claim terms using "the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant's specification." *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

> [t]his invention relates generally to financial services and products, and more particularly to financial systems that enable an investor to create bond laddering strategies, and other strategies that typically involve individual fixed-income securities, through a series of open-ended funds (such as exchange traded funds or mutual funds) that hold fixed-income securities.

Spec. ¶ 2.[7]

We conclude this type of activity, i.e., administering a family of exchange-traded funds (ETFs) for use in a bond-laddering strategy, or managing investments for others 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

---

[7] *See also* Spec. 20 ("Abstract"):

> An open-ended fund, such as an ETF, holds fixed-income securities and has a liquidation date. An order management system receives buy orders from a plurality of investors for purchasing shares of the fund receives and sell orders from a plurality of investors for selling shares of the fund. A fund management information system determines a yield for each investor based on the shares of the fund purchased by the investor and the fixed-income securities held by the fund at the time that the shares were purchased. The fund management information system also determines a plurality of distribution payments and a final liquidation payment for each investor so that the distribution payments and the final liquidation payment provide the yield determined for the investor when the investor purchased shares of the fund. This enables investors to use the fund in a bond laddering strategy.

processes can be unpatentable, even when performed by a computer, was precisely the holding of the Supreme Court in *Gottschalk v. Benson*.").[8]

Our reviewing court has previously held other patent claims ineligible for reciting similar abstract concepts. For example, while the Supreme Court has enhanced the § 101 analysis since *CyberSource* in cases like *Mayo* 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 addition, our reviewing court has concluded that abstract ideas include the concepts of collecting data, recognizing certain data within the collected data set, and storing the data in memory. *Content Extraction & Transmission LLC v. Wells Fargo Bank, N.A.*, 776 F.3d 1343, 1347 (Fed. Cir. 2014). Additionally, the collection of information and analysis of information (e.g., recognizing certain data within the dataset) are also abstract ideas. *Elec. Power*, 830 F.3d at 1353–54 (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"). Similarly, "collecting, displaying, and manipulating data" is an abstract idea. *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1340 (Fed. Cir. 2017). Further, a process that employs mathematical algorithms to manipulate existing

[8] *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.

information to generate additional information is abstract. *Digitech Image Techs., LLC v. Elec. for Imaging, Inc.*, 758 F.3d 1344, 1351 (Fed. Cir. 2014). Also, more recently, our reviewing court has also concluded that acts of parsing, comparing, storing, and editing data are abstract ideas. *Berkeimer v. HP Inc.*, 881 F.3d 1360, 1367 (Fed. Cir. 2018).

> Our reviewing court has explained:
>
> [T]he "realm of abstract ideas" includes "collecting information, including when limited to particular content." *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir.2016) (collecting cases). We have also "treated 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." *Id.* And we have found that "merely presenting the results of abstract processes of collecting and analyzing information, without more (such as identifying a particular tool for presentation), is abstract as an ancillary part of such collection and analysis." *Id.*

FairWarning, 839 F.3d at 1093–94.

As in *FairWarning,* the claims here "are directed to a combination of these abstract-idea categories." *Id.* Specifically, the claims here recite steps of establishing a plurality of ETSs, receiving a creation order to create new shares, providing the created shares of the ETF to authorized participants, determining distribution payments and final liquidation payment, paying the distribution payments and final liquidation payment, and closing each of the ETFs based upon the liquidation date of the ETD. And like in *FairWarning*, "[w]hile the claims here recite using one of a few possible rules to analyze the . . . data, this does not make them eligible under our decision in *McRO, Inc. v. Bandai Namco Games America Inc.,* No. 15–1080, 837 F.3d 1299, 2016 WL 4896481 (Fed. Cir. Sept. 13, 2016), which also involved claims

reciting rules." *FairWarning*, 839 F.3d at 1093–94. Accordingly, we agree with the Examiner that claims 1 and 15 are directed to an "abstract idea."

Therefore, in agreement with the Examiner, we conclude claim 1 involves nothing more than administering a family of ETFs— an abstract idea. *See Elec. Power Grp.*, 830 F.3d at 1354.[9] 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 claims are directed to a patent-ineligible concept, 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. For "additional features" to amount to significantly more than the judicial exception, it is normally not sufficient

[9] Merely automating previously manual processing by using computers does not qualify as an eligibility-rejection-defeating improvement. *Credit Acceptance Corp. v. Westlake Servs.*, 859 F.3d 1044 (Fed. Cir. 2017).

for them to be "well-understood, routine, conventional activity." *Mayo*, 566 U.S. at 79.

We note the patent eligibility inquiry may contain underlying issues of fact. *Mortg. Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1325 (Fed. Cir. 2016). In particular, "[t]he question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field is a question of fact." *Berkheimer*, 881 F.3d at 1368.

Appellants argue the Examiner "ignore[d] significant features in the claimed invention, which incorporate unconventional technology to solve existing problems in the prior art." App. Br. 9. Appellants further contend prior art ETFs had several limitations and could not be used for bond laddering. *Id.*

> As made clear in the specification and by the scope of the claims themselves, the present application does not seek to preempt or otherwise cover all ways of "administering a family of exchange-traded funds," limited only to a particular technological environment. Instead, the claims a recite an order management system and fund management information system that employ unconventional techniques to enable a family of ETFs to be used for bond laddering—an offering that had been impossible until the claimed subject matter was invented.

App. Br. 10.

Appellants' argument that the claims do not preempt all methods of administering a family of exchange-traded funds do not make them any less abstract. *See buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) (collecting cases); *Accenture Glob. Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1345 (Fed. Cir. 2013); *Ariosa Diagnostics,*

Inc. v. Sequenom, Inc., 788 F.3d 1371, 1379 (Fed. Cir. 2015) ("While preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility").

Evaluating representative claim 1 under step 2 of the *Alice* analysis, we agree with the Examiner that it lacks an inventive concept that transforms the abstract idea of administering a family of exchange-traded funds into a patent-eligible application of that abstract idea. *See* Ans. 6–10.

We agree because, as the Examiner concludes, when considering the claims as an ordered combination:

> The [E]xaminer [concludes] the recited "computing system" is recited at a high level of generality to simply perform the generic computer functions of receiving data elements, determining payment data elements, processing payment data, and transmitting data elements (i.e., That is, the computer processor is provided to process certain instructions or data; input from the user is received to provide an indication of a first consideration to be applied in the process and to indicate an expression of interest by the user in certain types of the descriptive material; a particular display of information is presented based upon the first consideration and the indication of expressed interest received; and a provision is made to allow the user to complete an instance or session of the process). Thus, generic computer components recited as performing generic computer functions that are well-understood, routine and conventional activities amount to no more than implementing the abstract idea with a computerized system. Thus, taken alone, the additional elements do not amount to significantly more than the above-identified judicial exception (the abstract idea). Looking at the limitations as an ordered combination of elements add nothing that is not already present when looking at the elements taken individually. There is no indication that the combination of the elements improves the functioning of a computer or improves any other technology.

> Their collective functions merely provide conventional computer implementation[.]

Id. at 8–9.

Appellants further argue:

> [T]he claims incorporate unconventional methods of "administering a family of exchange-traded funds" is further supported by [E]xaminer's withdrawal of a previous rejection of the claims as anticipated by U.S. Patent No. 7,865,426 to Volpert. Volpert is an issued patent that also discloses various methods of administering a family of exchange-traded funds. The withdrawal of the rejection based on Volpert confirms that the present claims do not cover all ways of "administering a family of exchange-traded funds," but rather are a departure from conventional ways of administering ETFs.

App. Br. 11. We disagree with Appellants' contentions.

We disagree because, as the Supreme Court guides, "[t]he 'novelty' of any element or steps in a process, or even of the process itself, is of no relevance in determining whether the subject matter of a claim falls within the § 101 categories of possibly patentable subject matter." *Diamond v. Diehr*, 450 U.S. 175, 188–89 (1981). Our reviewing court further indicates that "even assuming" that a particular claimed feature was novel does not "avoid the problem of abstractness." *Affinity Labs*, 838 F.3d at 1263.

As evidence of the conventional nature of the claimed network components and processes, we note Appellants' Specification discloses, for example:

> **[0035]** Any of the steps, operations, or processes described herein may be performed or implemented with one or more hardware or software modules, alone or in combination with other devices. In one embodiment, a software module is implemented with a computer program product comprising a

> computer-readable medium containing computer program code, which can be executed by a computer processor for performing any or all of the steps, operations, or processes described.
>
> **[0036]** Embodiments of the invention may also relate to an apparatus for performing the operations herein. This apparatus may be specially constructed for the required purposes, and/or it may comprise a general-purpose computing device selectively activated or reconfigured by a computer program stored in the computer. Such a computer program may be stored in a non-transitory, tangible computer readable storage medium, or any type of media suitable for storing electronic instructions, which may be coupled to a computer system bus. Furthermore, any computing systems referred to in the [S]pecification may include a single processor or may be architectures employing multiple processor designs for increased computing capability.

Spec. ¶¶ 35, 36.

Notwithstanding Appellants' arguments above, we agree with the Examiner that the claim limitations may be broadly but reasonably construed as reciting conventional computer components and techniques, particularly in light of Appellants' Specification, as quoted above.[10]

Thus, with respect to the Step 2 analysis, we agree with the Examiner because, as in *Alice*, the recitation of either a "method for administering a family of exchange-traded funds (ETFs) for use in a bond laddering strategy" (claim 1), or a " system for administering an exchange-traded funds

[10] During prosecution, claims must be given their broadest reasonable interpretation when reading claim language in light of the Specification as it would be interpreted by one of ordinary skill in the art. *Am. Acad.*, 367 F.3d at 1364. Under this standard, we interpret claim terms using "the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant's specification." *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

(ETF) for use in a bond laddering strategy" (claim 15) 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.").

Our reviewing court has held, "the use of generic computer elements like a microprocessor or user interface do not alone transform an otherwise abstract idea into patent-eligible subject matter." *FairWarning*, 839 F.3d at 1096 (citing *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014)).

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 1, and grouped claims 2–22, not argued separately, and which fall therewith. *See* Claim Grouping, *supra*.

REPLY BRIEF

To the extent Appellants may advance new arguments in the Reply Brief (Reply Br. 1–11) not in response to a shift in the Examiner's position in the Answer, we note arguments raised in a Reply Brief that were not raised in the Appeal Brief or are not responsive to arguments raised in the Examiner's Answer will not be considered except for good cause (*see* 37 C.F.R. § 41.41(b)(2)), which Appellants have not shown.

CONCLUSION

The Examiner did not err with respect to patent-ineligible subject matter Rejection R1 of claims 1–22 under 35 U.S.C. § 101, and we sustain the rejection.

DECISION

We affirm the Examiner's decision rejecting claims 1–22.

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