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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JACOB PECHENIK, GREGORY CAMPBELL,
and BLAKE BARNES

Appeal 2018-005790
Application 13/312,004[1]
Technology Center 3600

Before MICHAEL W. KIM, MURRIEL E. CRAWFORD, and
JOSEPH A. FISCHETTI, *Administrative Patent Judges*.

FISCHETTI, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant seeks our review under 35 U.S.C. § 134 of the Examiner's Non-final rejection of claims 1–27. We have jurisdiction under 35 U.S.C. § 6(b).

SUMMARY OF DECISION

We AFFIRM.

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[1] Appellant identifies "YellowJacket, Inc." as the real party in interest. Appeal Br. 1.

THE INVENTION

Appellant's application covers converting a trade transaction agreement into allowable structured products. Title.

Claim 1, reproduced below, is representative of the subject matter on appeal.

> 1. A computer-implemented method of electronically converting a data set into a plurality of data subsets that are each compatible for processing by at least one from among multiple processing facilities, the method comprising:
>
> receiving, electronically by at least one computing device, the data set comprising trade information defining a trade transaction agreement between a first party and a second party, said at least one computing device including a non-transitory memory storing computer-readable instructions and a processor executing said computer-readable instructions, said computer-readable instructions causing the at least one computing device to perform the steps of:
>
> converting the data set into a plurality of data subsets that define a plurality of structured products based on the trade information, each of the plurality of structured products being defined to comply with product specifications of one or more processing facilities such that at least two of the defined structured products are defined according to different product specifications associated with different processing facilities,
>
> said converting comprising:
>
> electronically receiving a selection of a pre-defined grouping of one or more structured product types,
>
> identifying, based on the selected pre-defined grouping, additional information needed to define each of the plurality of structured products,
>
> electronically receiving a subset of the additional information to define each individual structured product in the plurality of structured products;
>
> comparing the received subset of the additional information to product specifications of one or more of the multiple processing facilities to identify any further information

still needed to define each individual structured product;

electronically receiving the further information needed to define each individual structured product in the plurality of structured products;

defining, based on the received additional information, the individual structured products such that each is compatible to be received and processed by at least one of the multiple processing facilities, and

defining at least two of the individual structured products according to different product specifications of at least two different processing facilities such that said at least two of the individual structured products are compatible for processing by the at least two different processing facilities;

determining a sequence for submission of each individual structured product to at least one of the multiple processing facilities, the sequence comprising one of submitting the structured products individually or as a bundle; and

electronically submitting, according to the determined sequence, to the multiple processing facilities for processing, each individual structured product including identification information of at least one of the first party to the trade transaction agreement, or a representative thereof, and the second party to the trade transaction agreement, or a representative thereof.

THE REJECTIONS

The Examiner relies upon the following as evidence of unpatentability:

Glinberg	US 2006/0059069 A1	Mar. 16, 2006
Pinkava	US 2006/0224494 A1	Oct. 5, 2006
Wyatt	US 2007/0022093 A1	Jan. 25, 2007

The following rejections are before us for review.[2][3]

[2] The Examiner withdrew the rejection of claims 1 and 22 under 35 U.S.C. § 112, second paragraph. (Answer 3).

Claims 1-27 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to a judicial exception without significantly more.

Claims 1-27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Pinkava in view of Glinberg in further in view of Wyatt.

FINDINGS OF FACT

We adopt the Examiner's findings as set forth on pages 3–8 in the Non–final Office Action[4] and on pages 5–23 in the Examiner's Answer, concerning only the 35 U.S.C. § 101 Rejection.

35 U.S.C. § 101 REJECTION

We will affirm the rejection of claims 1–27 under 35 U.S.C. § 101.

The Appellants argue claims 1–27 as a group. (Appeal Br. 8). We select claim 1 as the representative claim for this group, and so the remaining claims stand or fall with claim 1. *See* 37 C.F.R. § 41.37(c)(1)(iv) (2016).

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[3] The Non–final on page 2 included an Objection to the Specification. Appellant responds to the Objection on pages 6–7 of the Appeal Brief. On pages 4–5 of the Answer, the Examiner re–asserts the Objection and responds to Appellant's arguments. But, an Objection to the Specification is not an appealable to PTAB. This relates to a petitionable matter and not to an appealable matter. *See In re Schneider*, 481 F.2d 1350, 1356–57 (CCPA 1973) and *In re Mindick,* 371 F.2d 892, 894 (CCPA 1967). *See also* the MPEP § 1002.02(c), item 4. Thus, the relief sought by the Appellant would have been properly presented by a petition to the Commissioner under 37 C.F.R. § 1.181 instead of by appeal to this Board. Accordingly, we will not further consider this issue.

[4] All references to the Non-Final Office Action refer to the Non–final Office Action mailed on Apr. 7, 2017.

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 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. Pty. Ltd. 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 Supreme Court's two-step framework, described in *Mayo* and *Alice*. *Alice*, 573 U.S. 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 id.* 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 water-proof cloth, vulcanizing India rubber, smelting ores" (*id.* at 182 n.7 (quoting *Corning v. Burden*, 56 U.S.

252, 267–68 (1854))); 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 Supreme 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 Supreme 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.* (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.*

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) ("Guidance").[5] "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").[6]

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:

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[5] 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).

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

> (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.

Guidance, 84 Fed. Reg. at 52–56. The U.S. Court of Appeals for the Federal Circuit has explained that "the 'directed to' inquiry applies a stage-one filter to claims, considered in light of the [S]pecification, based on whether 'their character as a whole is directed to excluded subject matter.'" *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016) (quoting *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015)). It asks whether the focus of the claims is on a specific improvement in relevant technology or on a process that itself qualifies as an "abstract idea" for which computers are invoked merely as a tool. *See Enfish*, 822 F.3d at 1335–36.

In so doing, as indicated above, we apply a "directed to" two prong test: 1) evaluate whether the claim recites a judicial exception, and 2) if the claim recites a judicial exception, evaluate whether the claim "appl[ies], rel[ies] on, or use[s] the judicial exception in a manner that imposes a meaningful limit on the judicial exception, such that the claim is more than a drafting effort designed to monopolize the judicial exception." Guidance, 84 Fed. Reg. at 53; *see also* MPEP § 2106.05(a)–(c), (e)–(h).

Accordingly, we find the following:

The Specification states:

> Submission and processing at a post-trade processing facility of a trade transaction agreement between a first party and a second party may be a complicated and time consuming process based upon various features of the trade transaction

> agreement. For example, trade transaction agreements executed Over-the-Counter (OTC) may often be composed of bundles of "vanilla" products such as a swap, call, or put. Post-trade processing facilities, such as clearing houses, often do not list or accept submission of these complex bundles, instead requiring that the bundles be decomposed prior to submission and submitted as one or more listed products.

Specification ¶ 3.

> Manually submitting the products independently, instead of as a package/bundle, introduces a number of potential problems. First, the submission is time consuming due to the necessity to separate, analyze, and individually submit and process the various components of the transaction agreement. Second, the existing process is highly manual and as such leads to a large number of mistakes due to human error. Third, reconciliation is confusing and complicated because a single trade transaction agreement may necessitate reviewing multiple responses from the post-trade processing facilities.

Id. ¶ 4.

Claim 1 recites in pertinent part:

> receiving, . . . [a] data set comprising trade information defining a trade transaction agreement between a first party and a second party,
>
> . . .
>
> converting the data set into a plurality of data subsets that define a plurality of structured products based on the trade information, each of the plurality of structured products being defined to comply with product specifications of one or more processing facilities such that at least two of the defined structured products are defined according to different product specifications associated with different processing facilities,
>
> said converting comprising: . . . receiving a selection of a pre-defined grouping of one or more structured product types,

> identifying, based on the selected pre-defined grouping, additional information needed to define each of the plurality of structured products,
>
> . . . .receiving a subset of the additional information to define each individual structured product in the plurality of structured products;
>
> comparing the received subset of the additional information to product specifications of one or more of the multiple processing facilities to identify any further information still needed to define each individual structured product;
>
> . . .receiving the further information needed to define each individual structured product in the plurality of structured products;
>
> defining, based on the received additional information, the individual structured products such that each is compatible to be received and processed by at least one of the multiple processing facilities, and
>
> defining at least two of the individual structured products according to different product specifications of at least two different processing facilities such that said at least two of the individual structured products are compatible for processing by the at least two different processing facilities;
>
> determining a sequence for submission of each individual structured product to at least one of the multiple processing facilities, the sequence comprising one of submitting the structured products individually or as a bundle; and
>
> . . . submitting, according to the determined sequence, to the multiple processing facilities for processing, each individual structured product including identification information of at least one of the first party to the trade transaction agreement, or a representative thereof, and the second party to the trade transaction agreement, or a representative thereof.

The Examiner found that the claims are directed to "converting a trade transaction agreement into one or more structured products for submission to a post-trade processing facility." (Non-Final Act. 3).

Therefore, we find that claim 1 recites processing a trade transaction of a plurality of structured products defined by an agreement to comply with product specifications of one or more processing facilities, and thus constitutes, 1) a certain method of organizing human activity, namely commercial or legal interactions (agreements in the form of contracts), and 2) a mental process.

Concerning item 1, claim 1 recites, "trade information defining a trade transaction agreement between a first party and a second party," and "determining a sequence for submission of each individual structured product to at least one of the multiple processing facilities, . . . each individual structured product including identification information of at least one of the first party to the trade transaction agreement, or a representative thereof, and the second party to the trade transaction agreement, or a representative thereof." Identifying parties to an agreement, enumerating the terms of the agreement and how the agreement is to be executed, are fundamental elements of contract formation, which is one of certain methods of organizing human activity that are judicial exceptions. Guidance, 84 Fed. Reg. at 52, *citing Alice*, 573 U.S. at 219–20.

As to item 2, the mental process aspect of claim 1, we find that the following steps mimic human thought processes, particularly, the italicized functions of: *converting the data* set into a plurality of data subsets that define a plurality of structured products based on the trade information, . . . *receiving a selection* of a pre-defined grouping of one or more structured product types, *identifying*, based on the selected pre-defined grouping, additional information needed to define each of the plurality of structured products, *receiving* a subset of the additional information to define each

individual structured product in the plurality of structured products; *comparing* the received subset of the additional information to product specifications of one or more of the multiple processing facilities to *identify* any further information still needed to define each individual structured product; . . . *receiving the further information* needed to define each individual structured product in the plurality of structured products; *defining*, based on the received additional information, the individual structured products such that each is compatible to be received and processed by at least one of the multiple processing facilities, and *defining* at least two of the individual structured products according to different product specifications of at least two different processing facilities such that said at least two of the individual structured products are compatible for processing by the at least two different processing facilities; *determining a sequence* for submission of each individual structured product to at least one of the multiple processing facilities . . . .

The Federal Circuit has held similar concepts to be abstract. Thus, for example, the Federal Circuit has held that abstract ideas include the concepts of collecting data, analyzing the data, and reporting the results of the collection and analysis, including when limited to particular content. *See, e.g.*, *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1340–41 (Fed. Cir. 2017) (identifying organizing, displaying, and manipulating data); *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016) (characterizing collecting information, analyzing information by steps people go through in their minds, or by mathematical algorithms, and presenting the results of collecting and analyzing information, without more, as matters within the realm of abstract ideas).

Thus, under the first prong, claim 1 also recites the patent ineligible judicial exception of a mental process. *See also*, Guidance, 84 Fed. Reg. at 52.

Turning to the second prong of the "directed to" test, claim 1 only generically requires "at least one computing device," "non-transitory memory," and " a processor." These components are described in the specification at a high level of generality. *See* Spec. ¶¶ 17–19. We fail to see how the generic recitations of these most basic computer components and/or of a system so integrates the judicial exception as to "impose[] a meaningful limit on the judicial exception, such that the claim is more than a drafting effort designed to monopolize the judicial exception." Guidance, 84 Fed. Reg. at 53.

Thus, we find that the claims recite the judicial exceptions of a certain method of organizing human activity and a mental process that are not integrated into a practical application.

That the claims do not preempt all forms of the abstraction or may be limited to structured products based on the trade information, does not make them any less abstract. *See OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362–63 (Fed. Cir. 2015) ("And that the claims do not preempt all price optimization or may be limited to price optimization in the e-commerce setting do not make them any less abstract.").

Turning to the second step of the *Alice* analysis, because we find that the claims are directed to abstract ideas/judicial exceptions, the claims must include an "inventive concept" in order to be patent-eligible, i.e., there must be an element or combination of elements sufficient to ensure that the claim in practice amounts to significantly more than the abstract idea itself. *See*

Alice, 573 U.S. at 217–18 (quoting *Mayo Collaborative Servs.*, 566 U.S. at 72–73).

Concerning this step, the Examiner found the following:

> The claim(s) do not include additional elements that are sufficient to amount to significantly more than the judicial exception because the additional computer elements, which are recited at a high level of generality, provide conventional computer functions that do not add meaningful limitations to practicing the abstract idea.

Non–Final Act. 4. We agree with the Examiner. "[T]he relevant question is whether the claims here do more than simply instruct the practitioner to implement the abstract idea . . . on a generic computer." They do not. *Alice*, 573 U.S. at 225.

Taking the claim elements separately, the function performed by the computer at each step of the process is purely conventional. Using a computer to receive, convert, identify, compare, define, submit, and apply decision criteria to data amounts to electronic data query and retrieval—one of the most basic functions of a computer. All of these computer functions are well-understood, routine, conventional activities previously known to the industry. *See Elec. Power Grp.,* 830 F.3d 1354; *see also In re Katz Interactive Call Processing Patent Litig.*, 639 F.3d 1303, 1316 (Fed. Cir. 2011) ("Absent a possible narrower construction of the terms 'processing,' 'receiving,' and 'storing,' . . . those functions can be achieved by any general purpose computer without special programming"). In short, each step does no more than require a generic computer to perform generic computer functions. The claims do not, for example, purport to improve the functioning of the computer itself. In addition, as we stated above, the claims do not affect an improvement in any other technology or technical

field. The Specification spells out different generic equipment and parameters that might be applied using this concept and the particular steps such conventional processing would entail based on the concept of information access under different scenarios (*see, e.g.*, Spec. ¶¶ 17–19). Thus, the claims at issue amount to nothing significantly more than instructions to apply the abstract idea using some unspecified, generic computer. Under our precedents, that is not enough to transform an abstract idea into a patent-eligible invention. *See Alice*, 573 U.S. at 225–226.

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

We have reviewed all the arguments Appellant has submitted concerning the patent eligibility of the claims before us that stand rejected under 35 U.S.C. § 101. (Appeal Br. 8–19, Reply Br. 3–10). We find that our analysis above substantially covers the substance of all the arguments,

which have been made. But, for purposes of completeness, we will address various arguments in order to make individual rebuttals of same.

Citing to *Bascom Global Internet v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016) and *Enfish*, Appellant argues:

> In summary, the instant claims are patent-eligible in view of both *Enfish* and *BASCOM* because, at a minimum, the claimed step of converting a data set defining trade information into data subsets defining plural structured products that are <u>each</u> <u>compatible for processing</u> by different processing facilities both improves the functioning of the computer *(Enfish)* and provides a technical solution to overcome the problem of the inability of <u>more than one</u> processing facility to process multiple and/or different types of structured products derived from a single agreement *(BASCOM)*.

Appeal Br.8.

We are not persuaded by the Appellant's arguments because "these benefits, however, are not improvements to database [/computer] functionality. Instead, they are benefits that flow from performing an abstract idea in conjunction with a well-known database [/computer] structure." *BSG Tech LLC v. Buyseasons, Inc.*, 899 F.3d 1281, 1288 (Fed. Cir. 2018). Even if the advance over the prior art is to eliminate the problem of "of having to structure an entire agreement and its underlying products to comply with pre-defined requirements of a single processing facility" (Appeal Br. 16 *see also* p. 12), that purported advance is an abstract idea itself. That is, it is an improvement to contract formation and not a technological improvement. The alleged improvement lies in the abstract idea itself, not to any technological improvement. *See id. at* 1287–88.

As discussed above, the functions of the software are directed to abstract ideas and not technical improvements, and the functions are

performed using a generic computer. And, as discussed in *BSG Tech LLC v. Buyseasons, Inc.*, "[i]f a claim's only 'inventive concept' is the application of an abstract idea using conventional and well-understood techniques, the claim has not been transformed into a patent-eligible application of an abstract idea." *Id.* at 1290–1291 (citing *Berkheimer v. HP Inc.*, 881 F.3d at 1370 (holding claims lacked an inventive concept because they "amount to no more than performing the abstract idea of parsing and comparing data with conventional computer components").

In *Enfish*, the invention at issue was directed at a wholly new type of logical model for a computer database: a self-referential table that allowed the computer to store many different types of data in a single table and index that data by column and row information. *Enfish*, 822 F.3d at 1330–32. In finding the claims "not directed to an abstract idea," but "to a specific improvement to the way computers operate," the Federal Circuit noted that "the claims are not simply directed to *any* form of storing tabular data, but instead are specifically directed to a *self-referential* table for a computer database." *Id.* at 1336–37 (emphasis in original). We find nothing in the claims before us arising to this level of technical improvement in the claimed "at least one computing device," "non-transitory memory," and " a processor" which arises to the level of technical proficiency as found in *Enfish*. Instead, we find the claims are focused on "economic or other tasks for which a computer is used in its ordinary capacity." *Id.* at 1336. More specifically, the claims here focus on processing a trade transaction of a plurality of structured products defined by an agreement to comply with product specifications of one or more processing facilities.

We also fail to see how the instant claims are similar to those in *Bascom.* There, an intermediary is inserted between two otherwise conventional computer nodes to move the location where a process is otherwise ordinarily executed. In *Bascom,* it was the location of the filtering element which was determinative, whereas in the instant claims there is no such specific location determinative in the ordered combination elements.

Appellant argues that,

> . . ., the structured products derived from a single trade transaction agreement may be processed by <u>any</u> number of processing facilities, even if the processing facilities each require different product specifications. In this manner, the claimed invention provides a novel mechanism that enables processing of a single trade transaction agreement across multiple processing facilities, which is both <u>faster and more efficient</u>.

Appeal Br. 12.

We are unpersuaded because again the alleged improvement lies in the abstract idea itself, not to any technological improvement. *See BSG Tech,* 899 F.3d 1287–88. Although the claims purport to efficiently facilitate both faster and more efficient processing of a single trade transaction agreement across multiple processing facilities, our reviewing court has held that speed and accuracy increases stemming from the ordinary capabilities of a general purpose computer "do[] not materially alter the patent eligibility of the claimed subject matter." *Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Can.* (U.S.), 687 F.3d 1266, 1278 (Fed. Cir. 2012).

Moreover, as described above, the only claim elements beyond the abstract idea are the "at least one computing device," "non-transitory

memory," and " processor." Appellant cannot reasonably deny, nor does Appellant deny, that the operation of these components is well-understood, routine, or conventional, where, as here, there is nothing in the Specification to indicate that the operations recited in claim 1 require any specialized hardware or inventive computer components or that the claimed invention is implemented using other than generic computer components to perform generic computer functions, e.g., receiving, processing, and transmitting information. Here as found above, we find no evidence before us that the claims recite implementation of the abstract idea involving "more than the performance of 'well-understood, routine, [and] conventional activities previously known to the industry." The claim simply recites functional results to be achieved by any means. *See, e.g.*, *Content Extraction and Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n*, 776 F.3d 1343, 1347 (Fed. Cir. 2014).

Appellant next argue,

> Appellants' invention clearly ***effects a transformation*** of a particular article (a single trade transaction agreement with particular trade information) ***to a completely different state*** *(multiple* individual structured products associated with <u>*multiple*</u> processing facilities and defined according to the <u>*multiple*</u> processing capabilities of the respective processing facilities).

Appeal Br. 15. Appellant also argues,

> the invention goes on to transform the initial information (e.g., the data set) into multiple subsets (e.g., data defining multiple individual structured products, with each individual product <u>separately defined</u> according to (downstream) processing facility compatibility).

Id.

We disagree with Appellant. Appellant seeks eligibility based on a transformation which is only perceivable by the human mind, i.e., contract formation. In *Diehr*, the Court established eligibility under § 101 for claims containing mathematical formulas when the claim "implements or applies that formula in a structure or process which, when considered as a whole," causes or performs "(e.g., transforming or reducing an article to a different state or thing) . . . ." *Diehr*, 450 U.S. at 192–193. In contrast, we fail to see how parsing data into multiple subsets constitutes transforming or reducing an article into a different state or thing. The information of the data remains unchanged. Even if the information could change, any such change of data from initial to a downstream representation of that data is still an abstraction, intelligible only to the human mind. *See In re Ngai*, 367 F.3d 1336, 1339 (Fed. Cir. 2004).

Indeed, the Federal Circuit, in accordance with *Alice*, has "repeatedly recognized the absence of a genuine dispute as to eligibility" where claims have been defended as involving an inventive concept based "merely on the idea of using existing computers or the Internet to carry out conventional processes, with no alteration of computer functionality." *Berkheimer v. HP Inc.*, 890 F.3d 1369, 1373 (Fed. Cir. 2018) (Moore, J., concurring) (citations omitted).

We also disagree with Appellant, that the

> claims are patent-eligible under *McRO* because they explicitly include and execute a novel set of rules that transform a single data set (transaction agreement) into plural individual products that are each individually compatible for submission and processing by multiple processing facilities in parallel.

Appeal Br. 17. Appellant also argues,

> Here, there is similarly no evidence whatsoever (or even an allegation) that the claimed process was some long-existing process that was merely automated. Instead, the Examiner is merely asserting (without any evidence) that the claimed process *could* be performed by a human. Under *McRO,* however, the test is whether the process was actually long-existing, not whether it theoretically *could* be performed by humans.

Appeal Br. 19.

Appellant's attempt to analogize the claims to those involved in *McRO, Inc. v. Bandai Namco Games America Inc.*, 837 F.3d 1299 (Fed. Cir. 2016) is misguided. In *McRO*, "it was the incorporation of the claimed rules, not the use of the computer, that improved the existing technology process," because the prior process performed by humans "was driven by subjective determinations rather than specific, limited mathematical rules." *McRO*, 837 F.3d at 1314 (internal quotation marks, citation, and alterations omitted). In contrast, the claims of the instant application merely implement the legal practice of offering processing agreements to plural processing facilities. Appellant has not argued that this is practiced in a manner technologically different from those which humans used, albeit with less efficiency, before the invention was claimed. Merely offering redundancies for processing products after sale is time practiced, and itself, abstract. By contrast,

> [t]he claims in *McRO* were not directed to an abstract idea, but instead were directed to "a specific asserted improvement in computer animation, i.e., the automatic use of rules of a particular type." We explained that "the claimed improvement [was] allowing computers to produce 'accurate and realistic lip synchronization and facial expressions in animated characters' that previously could only be produced by human animators." The claimed rules in McRO transformed a traditionally

> subjective process performed by human artists into a mathematically automated process executed on computers.

FairWarning, 839 F.3d at 1094 (differentiating the claims at issue from those in *McRO*).

The question is whether the claims as a whole "focus on a specific means or method that improves the relevant technology" or are "directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery." *McRO,* 837 F.3d 1314. In this case, claim 1 as a whole is focused on satisfying certain contingencies for extracting selected data related to a financial transaction and not a particular way of programming or designing the software or a computer circuit. In other words, nothing in claim 1 purports to improve computer functioning or "effect an improvement in any other technology or technical field." *Alice*, 134 S.Ct. at 2359.

Appellant also argues, the "claims provide a novel system architecture that follows a novel and very specific set of rules that addresses the inability of existing systems to break down and process a transaction agreement data into 'units' that are compatible for processing by multiple processing facilities." Appeal Br. 18.

We disagree with Appellant because the question in step two of the *Alice* framework is not whether an additional feature is novel, but whether the implementation of the abstract idea involves "more than the performance of 'well-understood, routine, [and] conventional activities previously known to the industry.'" *Content Extraction and Transmission LLC*, 776 F.3d at 1347–48.

Appellant argues that the Examiner "grossly overgeneralizing the claims and jumping directly to conclusions (with no analysis or explanation as to how such conclusions were reached)." Appeal Br. 21.

We disagree with Appellants because "[a]n abstract idea can generally be described at different levels of abstraction." *See Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240 (Fed. Cir. 2016). We further disagree that the Examiner provided "no analysis or explanation" for his findings. The record below proves otherwise as shown by the Examiner's element by element analysis of claim language on pages 5–8 of the Non–final action.

Appellants' argument is not persuasive as to error in the rejection because Appellant's other arguments, including those directed to now-superseded USPTO guidance, have been considered but are not persuasive of error. (*See* 2019 Revised Guidance, 84 Fed. Reg. at 51 ("Eligibility-related guidance issued prior to the Ninth Edition, R–08.2017, of the MPEP (published Jan. 2018) should not be relied upon.")).

For the reasons identified above, we determine there are no deficiencies in the Examiner's prima facie case of patent ineligibility of the rejected claims.

35 U.S.C. § 103(a) REJECTION

Each of independent claims 1 and 22 require in one form or another,

> converting the data set into a plurality of data subsets that define a plurality of structured products based on the trade information, each of the plurality of structured products being defined to comply with product specifications of one or more processing facilities such that at least two of the defined structured products are defined according to different product specifications associated with different processing facilities,

Appellant argues the following:

> Wyatt does not teach *converting or transforming* data into a plurality of data sub-sets, at least two of which are defined according to different specifications associated with different processing facilities (as recited by Appellants' claims). Glinberg, which is a system for risk analysis, does not make up for the deficiencies of Pinkava and Wyatt because it merely discloses sending information (*see, e.g.*, Glinberg Fig. 3). Furthermore, whether Glinberg in fact teaches "the terms of the specified product is designated by the Exchange" is irrelevant. There is nothing in [¶10-15], [¶35-36], [¶171] and [¶102] , or the remainder of Glinberg, that makes up for the deficiencies of Pinkava and Wyatt. Further, there is nothing in the above-identified paragraphs of Glinberg that teaches "terms of the specified product is designated by the Exchanges" (plural).

Appeal Br. 24).

The Examiner found, concerning these limitations that Glinberg disclose them at paragraphs, 10, 35, 36, 71 and 102. (Non-Final Act. 11).

We have reviewed the paragraphs cited by the Examiner above concerning Glinberg, and on balance, agree with Appellant. Glinberg at best in paragraph 35 states the following:

> combining the positions of joint or affiliated clearing members in certain broad-based equity index futures and options into a single portfolio, and utilizing the sophisticated risk based systems of each clearing organization, a single performance bond requirement across both markets is determined.

While Glingberg discloses the use of a single performance bond across plural markets, it is not apparent, and the Examiner does not explain adequately, how the disclosure of a common performance bond equates to the claimed structured products which must be based on the trade information and each of the plurality of structured products is defined to comply with product specifications of one or more processing facilities. That a performance bond may exist across plural markets does not mean that

it has attached to it trade information because the bond is a security against "sophisticated risk" and is not a product, such as described as readily traded OTC. *See* Specification ¶ 3. Thus, we will not sustain the obvious rejection of independent claims 1 and 22.

Since claims 2–21 and 23–26 depend from claims 1 and 22, respectively, and since we cannot sustain the rejection of claims 1 and 22, the rejection of the dependent claims likewise cannot be sustained.

CONCLUSIONS OF LAW

We conclude the Examiner did not err in rejecting claims 1–27 under 35 U.S.C. § 101.

We conclude the Examiner erred in rejecting claims 1–27 under 35 U.S.C. § 103.

DECISION

In summary:

Because we have affirmed at least one ground of rejection with respect to each claim on appeal, the Examiner's decision is affirmed. *See* 37 C.F.R. § 41.50(a)(1)(2016).

Claims Rejected	**35 U.S.C. §**	**Reference(s)/Basis**	**Affirmed**	**Reversed**
1–27	101	Eligibility	1–27	
1–27	103	Glinberg, Pinkava, Wyatt		1–27
Overall Outcome			1–27	

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