UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/537,552	08/07/2009	Jacob Pechenik	YJI-08-1292R	5595

35811 7590 06/03/2019 IP GROUP OF DLA PIPER LLP (US) ONE LIBERTY PLACE 1650 MARKET ST, SUITE 4900 PHILADELPHIA, PA 19103		

EXAMINER
POLLOCK, GREGORY A

ART UNIT	PAPER NUMBER
3695	

NOTIFICATION DATE	DELIVERY MODE
06/03/2019	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):

pto.phil@dlapiper.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JACOB PECHENIK, GREGORY CAMPBELL,
and BLAKE BARNES

Appeal 2018-001675
Application 12/537,552
Technology Center 3600

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

FISCHETTI, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants[1] seek our review under 35 U.S.C. § 134 of the Examiner's
final rejection of claims 1–24 and 46–52. We have jurisdiction under
35 U.S.C. § 6(b).

SUMMARY OF DECISION

We affirm.

---

[1] Appellants identify YellowJacket, Inc. as the real party in interest. App.
Br. 1.

THE INVENTION

Appellants state the present invention "is generally related to converting a trade transaction agreement into one or more structured products for submission to a post-trade processing facility." Spec. ¶ 2.

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

> 1. A method for electronically converting a data set into compatible data, the method comprising:
>
> electronically receiving, by at least one computing device comprising a memory storing instructions and a processor executing said instructions, the data set defining trade information for a trade transaction agreement between a first party and a second party;
>
> converting, by the at least one computing device, the trade information into data that is compatible for processing by multiple post-trade processing facilities by defining a plurality of structured products from the trade information such that each of the plurality of structured products independently complies with specification parameters defined by one or more post-trade processing facilities and at least two of the plurality of structured products are defined according to different specification parameters associated with different post-trade processing facilities;
>
> for each structured product, assigning a price value and assigning a volume, by the at least one computing device, wherein a sum of the price values equals a transaction price of the trade transaction agreement; and
>
> electronically submitting, by the at least one computing device, each structured product with information identifying at least one of the first party or a representative thereof, and the second party or a representative thereof, to the one or more post-trade processing facilities for processing of the same.

THE REJECTION

The Examiner relies upon the following as evidence of unpatentability:

Pinkava   US 2006/0224494 A1   Oct. 5, 2006

The following rejections are before us for review.

Claims 1–24 and 46–52 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

Claims 1 and 46 stand rejected under 35 U.S.C. § 112(b) as being indefinite.

Claims 1–24 and 46–52 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Pinkava.

FINDINGS OF FACT

We adopt the Examiner's findings as set forth on pages 3–7 in the Final Office Action[1] and on pages 8–14 in the Examiner's Answer, concerning only the 35 U.S.C. § 101 rejection.

ANALYSIS

35 U.S.C. § 112(b), (PRE-AIA) SECOND PARAGRAPH, REJECTION

The Examiner rejected claims 1 and 46 under 35 U.S.C. § 112, second paragraph,

> as being indefinite for failing to particularly point out and
> distinctly claim the subject matter which applicant regards as
> the invention. Claim 9 [(*sic*)] recites the claim limits using the

---

[1] All references to the Final Office Action refer to the Final Office Action mailed on December 15, 2016.

term 'specification parameters'. The Specification does provide
proper antecedent basis for the term "specification parameters"
and, therefore, does not provide a definition for ascertaining the
requisite degree or standard, and one of ordinary skill in the art
would not be reasonably apprised of the scope of the invention.

(Final Act. 3).

Appellants however argue, "there is no *in haec verba* requirement for
complying with §112" (*see* MPEP 2161), and the Appellants' Specification
indeed provides proper antecedent basis for the term "specification
parameters" that are "defined by one or more post-trade processing
facilities." (App. Br. 4–5) (emphasis omitted).

Specifically, Appellants argue,

> Support for the term 'specification parameters' may be
> found at least at paras. [0003]–[0004], [0006], [0019], [0025],
> [0061]–[0064] and [0069]–[0070] of the Appellants' originally
> filed Specification and Fig. 2B of the Drawings. The
> Appellants particularly point the Board's attention to paras.
> [0061]–[0064] of the Appellants' Specification, which describe
> that 'each structured product adheres to product specifications
> established by the one or more post-trade processing facilities.'

(App. Br. 4).

We agree with Appellants. The claim 1 recites, "specification
parameters [are] defined by one or more post-trade processing facilities."
The Specification states, "each structured product adheres to product
specifications established by the one or more post-trade processing
facilities." Specification ¶ 62. All these disclosures support the claimed
"specification parameters" as being product specifications defined by "one
or more post-trade processing facilities." Therefore, we will not sustain the
35 U.S.C. § 112, second paragraph rejection.

4

35 U.S.C. § 101 REJECTION

We will affirm the rejection of claims 1–24 and 46–52 under 35 U.S.C. § 101.

The Appellants argue claims 1-24 and 46-52 as a group, we select claim 1 as the representative claim for this group (App. Br. 5–16), and so the remaining claims stand or fall with claim 1. *See* 37 C.F.R. § 41.37(c)(1)(iv) (2015).

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. 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*. *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." *Alice*, 573 U.S. 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, 69 (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 (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

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 176; *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.*, *Diehr*, 450 U.S. 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.*

The PTO recently published revised guidance on the application of § 101. 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) ("Guidance"). Under the Guidance, 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); and

> (2) additional elements that integrate the judicial exception into a practical application (*see* Manual of Patent Examining Procedure ("MPEP") § 2106.05(a)–(c), (e)–(h)).

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then look 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.

See Guidance.

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 specification, 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 id.* 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. 50 at 53; *see also* MPEP § 2106.05(a)–(c), (e)–(h).

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.

Spec. ¶ 3.

Understood in light of the Specification, claim 1, recites, in pertinent part,

> receiving . . . data set defining trade information for a trade

8

transaction agreement between a first party and a second party;

converting . . . the trade information into data that is compatible for processing by multiple post-trade processing facilities by defining a plurality of structured products from the trade information such that each of the plurality of structured products independently complies with specification parameters defined by one or more post-trade processing facilities and at least two of the plurality of structured products are defined according to different specification parameters associated with different post-trade processing facilities;

for each structured product, assigning a price value and assigning a volume, by the at least one computing device, wherein a sum of the price values equals a transaction price of the trade transaction agreement; and

. . . submitting . . . each structured product with information identifying at least one of the first party or a representative thereof, and the second party or a representative thereof, to the one or more post-trade processing facilities for processing of the same.

Accordingly, the Examiner found that the claims are directed to "converting a trade transaction agreement into one or more structured products." (Final Act. 3). We agree with the Examiner that claim 1 is directed to converting a trade transaction agreement, which is a fundamental economic principle or practice and/or a commercial or legal interaction. Such activities constitute certain methods of organizing human activity, which is a judicial exception.

Specifically, claim 1 requires in part, "converting . . . the trade information into data that is compatible for processing by multiple post-trade processing facilities," "each of the plurality of structured products independently complies with specification parameters defined by one or more post-trade processing facilities and at least two of the plurality of structured products are defined according to different specification

parameters associated with different post-trade processing facilities," and
"submitting . . . each structured product with information identifying at least
one of the first party or a representative thereof, and the second party or a
representative thereof, to the one or more post-trade processing facilities for
processing of the same." These are some of the basic elements of a
transaction, in that they cover post-trade processing facilitating settlement of
a transaction; a transaction is superfluous is not settled. Such commercial
and legal interactions are one of certain forms of methods of organizing
human activities, which is a judicial exception that falls within the purview
of the abstract ideas articulated in the recent Guidance. Guidance, 84 Fed.
Reg. at 52.

The claims are also directed to trading, "trade transaction agreement
between a first party and a second party." (Claim 1). Trading, be it equities
or commodities, is an engine of commerce and hence is fundamental
economic principle because it allows companies to be financed through the
issuance of equities/debt by public interests. The patent-ineligible end of the
spectrum includes fundamental economic principles. *See Alice*, 573 U.S. at
219–220; 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," having "a memory."
These components are described in the Specification at a high level of
generality. *See* Spec. ¶ 17 ("One or more computing devices that include a
memory for storing instructions and a processor for executing the
instructions may be utilized to perform the steps of the method 100.") 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. We further do not discern any particular machine or transformation.

Thus, we find that the claims recite the judicial exception of a commercial or legal interaction and fundamental economic practice that is not integrated into a practical application.

That the claims do not preempt all forms of the abstraction or may be limited to trade transaction agreements, 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*, 566 U.S. at 72–73).

Concerning this step the Examiner found the following: "[t]he 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." Final Act. 4. We agree with the Examiner. "[T]he relevant question is whether the claims here do more than simply

11

instruct the practitioner to implement the abstract idea . . . on a generic computer." *Alice*, 573 U.S. at 225. They do not.

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, assign, submit and apply decision criteria to data to generate a result, are some 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., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016); *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.

Considered as an ordered combination, the computer components of Appellants' claims add nothing that is not already present when the steps are considered separately. The sequence of data reception-analysis (receive, convert, assign, submit and apply decision criteria to data to generate a result) 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.

Thus, the claims at issue amount to nothing significantly more than instructions to apply the abstract ideas of a fundamental economic practice and a commercial or legal interaction 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 225–26.

We have reviewed all the arguments Appellants have submitted concerning the patent eligibility of the claims before us that stand rejected under 35 U.S.C. § 101. (App. Br. 5–16). 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.

Appellants argue:

> even if the claimed invention is carried out on a general purpose computer, the claims are not automatically ineligible. Rather, claims that are directed to hardware, software, or both are patent-eligible so long as they result or culminate in a computer improvement. Id. at 1339. Said another way, *Enfish* holds that software and/or hardware that improves the functioning of a computer is necessarily patent-eligible.

App. Br. 7 (emphasis omitted).

We disagree with Appellants. Appellants offer insufficient evidence as to why reference to a generically recited computer, and its memory, is meaningful beyond the face of the language itself, other than being the way that data are carried within the network. There is no further discussion in the Specification of the particular technology for performing the claimed steps.

See Affinity Labs of Texas, LLC v. DIRECTV, LLC, 838 F.3d 1253, 1263 (Fed. Cir. 2016); *see also Enfish*, 822 F.3d at 1336 (focusing on whether the claim is "an improvement to computer functionality itself, not on economic or other tasks for which a computer is used in its ordinary capacity.") It is true that specific asserted improvements in computer capabilities, when claimed, can render claimed subject matter not directed to an abstract idea. *Cf. McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1316 (Fed. Cir. 2016) ("When looked at as a whole, claim 1 is directed to a patentable, technological improvement over the existing, manual 3–D animation techniques."). But, again, there is insufficient evidence in the record before us that the claimed subject matter reflects any such improvement. 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 at 1314. In this case, claim 1 as a whole as found *supra* is focused on satisfying certain contingencies for "converting a trade transaction agreement into one or more structured products" (Final Act. 3), and does not recite specific technology means[2] such as found in *McRO*.

---

[2] Claim 1 of the *McRO*, U.S. Patent No. 6,307,576 sets forth the specific technological items such as "a timed data file of phonemes having a plurality of sub–sequences":

> 1. A method for automatically animating lip synchronization and facial expression of three-dimensional characters comprising:
>
> obtaining a first set of rules that define output morph weight set stream as a function of phoneme sequence and time of said phoneme sequence;

To the extent Appellants are arguing that the additional elements constitute an inventive concept, such features cannot constitute the "inventive concept." *Berkheimer v. HP, Inc.*, 890 F.3d 1369, 1374 (Fed. Cir. 2018) (Moore, J., concurring) ("It is clear from *Mayo* that the 'inventive concept' cannot be the abstract idea itself, and *Berkheimer* . . . leave[s] untouched the numerous cases from this court which have held claims ineligible because the only alleged 'inventive concept' is the abstract idea."); *see also BSG Tech. LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1290 (Fed. Cir. 2018) ("It has been clear since *Alice* that a claimed invention's use of the ineligible concept to which it is directed cannot supply the inventive concept that renders the invention 'significantly more' than that ineligible concept.").

Appellants next argue,

> Indeed, the Appellants' claimed invention includes a 'converting' feature that involves defining a plurality of structured products such that each of the plurality of structured products independently complies with the specification

---

> obtaining a timed data file of phonemes having a plurality of sub-sequences;
>
> generating an intermediate stream of output morph weight sets and a plurality of transition parameters between two adjacent morph weight sets by evaluating said plurality of sub-sequences against said first set of rules;
>
> generating a final stream of output morph weight sets at a desired frame rate from said intermediate stream of output morph weight sets and said plurality of transition parameters; and
>
> applying said final stream of output morph weight sets to a sequence of animated characters to produce lip synchronization and facial expression control of said animated characters.

McRO, 837 F.3d at 1307–08.

parameters defined by one or more post-trade processing facilities. As a result, the structured products derived from a single trade transaction agreement may be processed by any number of post-trade processing facilities, even if the post-trade processing facilities each require different product specification parameters. Thus, in the Appellants' claims, at least two of the structured products are defined according to different specification parameters associated with different post-trading processing facilities. In this manner, the claimed invention provides a novel mechanism that enables processing of a single trade transaction agreement across multiple post-trade processing facilities in accordance with specification parameters associated with each individual processing facility.

App. Br. 8–9 (emphasis omitted). We disagree with Appellants. Processing of a single trade transaction agreement across multiple post-trade processing facilities still remains an abstraction, even if novel. "[A] claim for a new abstract idea is still an abstract idea." *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151 (Fed. Cir. 2016) (citing *Mayo*, 566 U.S. at 90) (emphasis omitted). "An abstract idea can generally be described at different levels of abstraction." *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240 (Fed. Cir. 2016).

The claim language only includes a general reference to the use of a "computing device" having "a memory," which does not make the corresponding generic recitations of the claimed basic computer components and/or of a system so effective as to integrate the judicial exception in a way 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. 50 at 53. Absent evidence to the contrary, we view the claimed "multiple post-trade processing facilities" to

be only an indication of the environment in which the abstract idea is practiced.

> MPEP 2106.05(h) concern[s] generally linking use of a judicial exception to a particular technological environment or field of use, including a discussion of the exemplars provided herein, which are based on *Bilski*, 561 U.S. at 612, and *Flook*, 437 U.S. at 588-90. Thus, the mere application of an abstract method of organizing human activity in a particular field is not sufficient to integrate the judicial exception into a practical application.

Guidance, 84 Fed. Reg. 53, n.32, *see also Alice*, 573 U.S.at 223.

We disagree with Appellants' assertion that its claims are similar to those found patent eligible in *Bascom Global Internet v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016), where the claims described an inventive concept in the non-conventional and non-generic arrangement of known, conventional pieces. (Appeal Br. 9–10). Specifically, the Federal Circuit determined that the claimed installation of a filtering tool at a specific location, remote from the end-users, with customizable filtering features specific to each end user provided an inventive concept in that it gave the filtering tool both the benefits of a filter on a local computer and the benefits of a filter on the ISP server. *Bascom*, 827 F.3d at 1350. Again, Appellants do not identify any comparable non-conventional and non-generic arrangement of elements that is recited in the present claims.

Appellants argument that its claims "enable[] the data sets to be processed by one or more post-trade processing facilities *in parallel*" (App. Br. 10) is unpersuasive for two reasons. First, the claims fail to recite a technical structure of a computer network reflective of a parallel data processing system. Second, the argument is directed to "a result or effect

17

that itself is the abstract idea and merely invoke generic processes and machinery." *See McRO*, 837 F.3d at 1314.

Appellants argue,

> Because the claims provide faster and more accurate submissions via the claimed data conversion and submission elements (as discussed in detail above), the claims indeed provide a technical improvement to the functioning of the computer itself. And, it is the entire set of claimed components and functions, as a whole, that are different from prior art systems and that provide these technical improvements.

App. Br. 11 (emphasis omitted).

Although we agree with Appellants that the claims must be read, as a whole, we nevertheless find, on balance, that claim 1 is directed to the "abstract idea(s) of converting a trade transaction agreement into one or more structured products" (Final Act. 3) for the reasons specified above with respect to our "directed to" findings. As found *supra*, claim 1 only includes the following generically recited device limitations: "at least one computing device" and a "memory." What remains in the claim, after disregarding these device limitations, are abstractions, i.e., "for each structured product, assigning a price value and assigning a volume, by the at least one computing device, wherein a sum of the price values equals a transaction price of the trade transaction agreement." "[A] claim for a new abstract idea is still an abstract idea." *Synopsys*, 839 F.3d at 1151 (emphasis omitted).

Appellants also argue, "[t]he Examiner has not met the burden of establishing a rejection under 35 U.S.C. § 101." App. Br. 15.

We disagree with Appellants. To the extent Appellants argue that the Examiner erred in adequately supporting this determination by not providing evidence, we are unpersuaded. In this regard, there is no requirement that

18

Examiners must provide evidentiary support in every case before a conclusion can be made that a claim is directed to an abstract idea. *See, e.g.,* Manual of Patent Examining Procedure § 2106.07(a)(III) (2018) ("The courts consider the determination of whether a claim is eligible (which involves identifying whether an exception such as an abstract idea is being claimed) to be a question of law. Thus, the court does not require 'evidence' that a claimed concept is a judicial exception, and generally decides the legal conclusion of eligibility without resolving any factual issues." (Citations omitted.))

Moreover, the Federal Circuit made clear in *Berkheimer* that "not every § 101 determination contains genuine disputes over the underlying facts material to the § 101 inquiry." *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018). In fact, the Federal Circuit in *Berkheimer* did not require evidentiary support for independent claim 1, because "[t]he limitations [of claim 1] amount to no more than performing the abstract idea of parsing and comparing data with conventional computer components." *Id.* at 1370.

All that is required of the USPTO to meet its initial burden is that the Examiner set forth the statutory basis of the rejection and the reference or references relied upon in a sufficiently articulate and informative manner as to meet the notice requirement of 35 U.S.C. § 132. As the statute itself instructs, the Examiner must "notify the applicant," "stating the reasons for such rejection," "together with such information and references as may be useful in judging the propriety of continuing the prosecution of his application." 35 U.S.C. § 132; *see also In re Jung*, 637 F.3d 1356, 1363 (Fed. Cir. 2011) (declining "to impose a heightened burden on examiners

19

beyond the notice requirement of § 132"). Here, as we found above, the Examiner has made these findings, as required by the statute. *See* Final Act. 3–7.

Specifically, in rejecting the pending claims under § 101, the Examiner notified Appellants that "[c]laim[s] 1-24 and 46-52 are directed to the abstract idea(s) of converting a trade transaction agreement into one or more structured products," (Final Act. 3) and that "[t]he 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." *Id.* at 4.

Thus, we find that Appellants were placed on sufficient notice of the basis of the rejection by the Examiner.

35 U.S.C. § 103(a) REJECTION

Each of independent claims 1 and 46 requires, in one form or another:

> converting, by the at least one computing device, the trade information into data that is compatible for processing by multiple post-trade processing facilities by defining a plurality of structured products from the trade information such that each of the plurality of structured products independently complies with specification parameters defined by one or more post-trade processing facilities and at least two of the plurality of structured products are defined according to different specification parameters associated with different post-trade processing facilities;

The Examiner found, "Pinkava teaches the use of mapping of financial products (specification parameters) [¶272-282] [examples as found on pages 23-25] when converting products for use by each dealer. As such,

the examiner maintains the prior art rejection." Answer 15–16.

Appellants argue the following:

> Appellants respectfully point out that the instant claims have been revised and now recite breaking down trade information into a plurality of structured products that each independently complies with specification parameters of post-trade processing facilities, where at least two of the structured products are defined according to different specification parameters associated with different post-trade processing facilities.
>
> At a minimum, Pinkava fails to disclose or suggest the claimed features of converting incompatible data defining trade information into compatible data defining a plurality of structured products, such that each of the plurality of structured products independently complies with specification parameters defined by post-trade processing facilities and that at least two of the plurality of structured products are defined according to different specification parameters associated with different post-trade processing facilities.

(App. Br. 17) (emphasis omitted).

We agree with Appellants. Our review of Pinkava at paragraphs 272–282 reveals that Pinkava discloses a mapping procedure which, at best, "is a two way mapping that converts the dealer's front office quotation orders into the internal matching representation, and the [dealer] fills back from this representation into the front office product." Pinkava ¶ 277. But, it is not apparent, and the Examiner does not explain adequately, how this mapping procedure results in the claimed "at least two of the plurality of structured products are defined according to different specification parameters associated with different post-trade processing facilities." In fact, Pinkava discloses that this mapping is "two–way," which suggests that the plurality of structured products in Pinkava are not defined according to different

specification parameters associated with different post-trade processing facilities, but rather are defined in accordance with definitions allowing either side to configure an otherwise defined product.

Therefore, we will not sustain the Examiner's obviousness rejection of independent claims 1 and 46.

Because claims 2–24 and 47–52 depend from claims 1 and 46 respectively, and because we cannot sustain the Examiner's obviousness rejection of claims 1 and 46, the Examiner's obviousness rejection of claims 2–24 and 47–52 likewise cannot be sustained.

CONCLUSIONS OF LAW

We conclude the Examiner did not err in rejecting claims 1–24 and 46–52 under 35 U.S.C. § 101.

We conclude the Examiner did err in rejecting claims 1–24 and 46–52 under 35 U.S.C. § 103.

We conclude the Examiner erred in rejecting claims 1 and 46 under 35 U.S.C. § 112(b).

DECISION

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).

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

22