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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* STEVEN CHARLES DAVIS

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Appeal 2019-002664  
Application 14/718,930  
Technology Center 3600

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Before MURRIEL E. CRAWFORD, JOSEPH A. FISCHETTI, and  
AMEE A. SHAH, *Administrative Patent Judges*.

CRAWFORD, *Administrative Patent Judge*.

DECISION ON APPEAL  
STATEMENT OF THE CASE

Appellant seeks our review under 35 U.S.C. § 134(a) of the Examiner's final rejection of claims 1–20, which constitute all the claims pending in this application. We have jurisdiction under 35 U.S.C. § 6(b).

SUMMARY OF DECISION

We AFFIRM.

THE INVENTION

Appellant claims a method and system for processing blockchain-based transactions on existing payment networks. Specifically, the invention relates to the use of payment network transaction messages and payment networks to securely store and convey transaction details for a blockchain-

based transaction for use thereof in execution of the blockchain-based transaction. (Spec. ¶ 1, Title).

Claim 1 is representative of the subject matter on appeal.

1. A method for authorizing a blockchain-based transaction, comprising:

receiving, by a receiving device, a transaction request, wherein the transaction request includes at least a network identifier associated with a blockchain network, a transaction amount, and one of: a public key and an address identifier;

generating, by a processing device, an address identifier using at least the public key included in the received transaction request and one or more hashing algorithms, encoding algorithms, or a combination thereof if the received transaction request does not include an address identifier;

generating, by the processing device, a transaction message, wherein the transaction message is formatted based on one or more standards governing the interchange of transaction messages and includes a plurality of data elements, including at least a first data element configured to store a transaction amount and a second data element reserved for private use, and the first data element includes a zero value and the second data element includes at least (i) the network identifier or an encoded value based on the network identifier, (ii) the address identifier, and (iii) the transaction amount; and

transmitting, by a transmitting device, the transaction message to a financial institution via payment rails of a payment network.

#### THE REJECTION

Claims 1–20 are rejected under 35 U.S.C. § 101 as directed to a judicial exception without significantly more.

Claims 1–20 are rejected under 35 U.S.C. § 103(a) as being unpatentable in view of Lingappa (US 2015/0371224 A1, Dec. 24, 2015), in

further view of Feeney (US 2016/098730 A1, Apr. 7, 2016), in further view of Bacastow (US 2015/0154597 A1, June 4, 2015).

## ANALYSIS

### 35 U.S.C. § 101 REJECTION

We will sustain the rejection of claims 1–20 under 35 U.S.C. § 101.

The Supreme Court

set forth a framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts. First, . . . determine whether the claims at issue are directed to one of those patent-ineligible concepts. . . . If so, . . . then ask, “[w]hat else is there in the claims before us?” . . . To answer that question, . . . consider the elements of each claim both individually and “as an ordered combination” to determine whether the additional elements “transform the nature of the claim” into a patent-eligible application. . . . [The Court] described step two of this analysis as a search for an “inventive concept”—*i.e.*, an element or combination of elements that is “sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.”

*Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208, 217-218 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 72–73 (2012)) (citations omitted).

To perform this test, we must first determine whether the claims at issue are directed to a patent-ineligible concept. 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.” *See Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016) (quoting *Internet Patents Corp.*, 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 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 judicial exception is integrated into a practical application. *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 FR 50, pp 50–57 (Jan. 7, 2019) (“Guidance”).

The Examiner determines that the claims are directed toward authorization of a blockchain-based transaction which is analogous to performing a transaction. The Examiner determines that the steps of the claims are directed to (1) using categories to organize, store and transmit information and (2) a fundamental economic practice. (Final Act. 4). The Examiner finds that the use of a generic computer to perform the extra solution activities does not impose any meaningful limitations as an ordered combination and adds nothing that is not already present when looking at the elements taken individually. The Examiner also finds that and there is no indication that the combination of elements improve the functioning of the computer or improve any other technology. (Final Act. 5).

The Specification discloses that the invention relates to the authorization of a blockchain-based transaction, specifically the use of existing payment network transaction messages and payment networks to securely store and convey transaction details for a blockchain-based

transaction. (Spec. ¶1). The method of the invention includes the steps of receiving a transaction request, generating an address identifier, generating a transaction message, and transmitting the transaction message. (Spec. ¶7).

Consistent with this disclosure claim 1 recites “receiving . . . a transaction request,” “generating . . . an address identifier,” “generating . . . a transaction message,” and “transmitting . . . the transaction message to a financial institution.”

We thus agree with the Examiner’s determination that claim 1 is directed to authorization of a blockchain-based transaction which is analogous to performing a transaction. Blockchain-based transactions involve commercial interactions. As such, claim 1 recites a certain method of organizing human activity in the form of a fundamental economic practice. Guidance, 84 Fed. Reg. at 52.

Also, we find the steps of receiving, generating, and transmitting data constitute “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.” *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016); *see also buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) (claims directed to certain arrangements involving contractual relations are directed to abstract ideas). Thus, we find that claim 1 recites the judicial exception of a method of organizing human activity and in the alternative, a mental process.

Turning to the second prong of the “directed to test”, claim 1 requires a “processing device” and a “payment network.” The recitation of these computer and network components do not 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 find no indication in the Specification, nor does Appellant direct us to any indication, that the operations recited in claim 1 invokes any inventive programming, requires any specialized computer hardware or other inventive computer components, i.e., a particular machine, or that the claimed invention is implemented using other than generic computer components to perform generic computer functions. *See DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014) (“[A]fter *Alice*, there can remain no doubt: recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible.”).

We also find no indication in the Specification that the claimed invention of claim 1 effects a transformation or reduction of a particular article to a different state or thing. Nor do we find anything of record, short of attorney argument, that attributes any improvement in computer technology and/or functionality to the claimed invention or that otherwise indicates that the claimed invention integrates the abstract idea into a “practical application,” as that phrase is used in the revised Guidance. *See* Guidance, 84 Fed. Reg. at 55.

In this regard, the recitation does not effect an improvement in the functioning of the processing device or the payment network, does not recite a particular machine or manufacture that is integral to the claim, and does not transform or reduce a particular article to a different state or thing. *Id.* Thus, claim 1 is directed to judicial exceptions that are not integrated into a practical application, and thus claim 1 is directed to “abstract ideas.”

Turning to the second step of the *Alice* analysis, because we find that claim 1 is directed to abstract ideas, the claim must include an “inventive

concept” in order to be patent-eligible, i.e., there must be an element or combination of elements that is 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 (alteration in original) (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 72–73 (2012)).

The introduction of computer and network components into the claim does not alter the analysis at *Alice* step two.

[T]he mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention. Stating an abstract idea “while adding the words ‘apply it’” is not enough for patent eligibility. Nor is limiting the use of an abstract idea “to a particular technological environment.” Stating an abstract idea while adding the words “apply it with a computer” simply combines those two steps, with the same deficient result. Thus, if a patent’s recitation of a computer amounts to a mere instruction to “implemen[t]” an abstract idea “on . . . a computer,” that addition cannot impart patent eligibility. This conclusion accords with the preemption concern that undergirds our § 101 jurisprudence. Given the ubiquity of computers, wholly generic computer implementation is not generally the sort of “additional featur[e]” that provides any “practical assurance that the process is more than a drafting effort designed to monopolize the [abstract idea] itself.”

*Alice*, 573 U.S. at 223 (alterations in original) (citations omitted).

Instead, “the relevant question is whether the claim here does more than simply instruct the practitioner to implement the abstract idea . . . on a generic computer.” *Id.* at 225. It does 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 retrieve, select, and apply decision criteria to data and modify the data as a result 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 trading industry. *See Elec. Power Grp.*, 830 F.3d at 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. As to the data operated upon, “even if a process of collecting and analyzing information is ‘limited to particular content’ or a particular ‘source,’ that limitation does not make the collection and analysis other than abstract.” *SAP Am. Inc. v. InvestPic, LLC*, 890 F.3d 1016, 1022 (Fed. Cir. 2018).

Considered as an ordered combination, the computer components of Appellant’s claim 1 add nothing that is not already present when the steps are considered separately. The sequence of data reception-analysis-access/display 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.

Claim 1 does not, for example, purport to improve the functioning of the computer itself. As we stated above, the claim does not effect 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. In this regard, the Specification discloses that the disclosed subject matter can be practiced by a general purpose processor device. (*See, e.g.*, Spec. ¶¶ 138, 141). Thus, claim 1 at issue amounts to nothing significantly more than instructions to apply the abstract ideas 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 226.

We have reviewed all the arguments (Appeal Br. 5–12; Reply Br. 23) Appellant has submitted concerning the patent eligibility of the claims before us that stand rejected under 35 U.S.C. § 101. We find that our analysis above substantially covers the substance of all the arguments, which have been made. But, for purposes of emphasis, we will address various arguments in order to make individual rebuttals of same.

We are not persuaded of error on the part of the Examiner by Appellant's argument that the Examiner over-generalized the claims. (Appeal Br. 5–6). Appellant's argument is not persuasive because the

Examiner's characterization here, as discussed above, is fully consistent with the Specification. That independent claim 1 includes more words than the phrase the Examiner used to articulate the abstract idea to which the claim is directed is an insufficient basis to persuasively argue that the claim language has been mischaracterized or that the Examiner has otherwise failed to consider all of the limitations of the claim. *See Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240 (Fed. Cir. 2016).

We note that an abstract idea can generally be described at different levels of abstraction. As the Examiner has done, the claimed abstract idea could be described as authorization of a blockchain-based transaction which is analogous to performing a transaction. It could be described in other ways as Appellant has done on page 6 of the Appeal Brief. But the abstract nature remains the same.

We are not persuaded of error on the part of the Examiner by Appellant's argument that the method and system of the present claims are completely new and unique. To the extent Appellant maintains that the limitations of claim 1 necessarily amount to "significantly more" than an abstract idea because the claimed apparatus is allegedly patentable over the prior art, Appellant misapprehends the controlling precedent. Although the second step in the *Alice/Mayo* framework is termed a search for an "inventive concept," the analysis is not an evaluation of novelty or non-obviousness, but rather, a search for "an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself." *Alice*, 573 U.S. at 217. A novel and nonobvious claim directed to a purely abstract idea is, nonetheless, patent-ineligible. *See Mayo*, 566 U.S. at 90.

We are not persuaded of error on the part of the Examiner by Appellant's argument that the method and system of the claims result in a technological system that has significant benefits. Appellant argues that by adapting transaction messages to be able to convey the data necessary for blockchain transactions, the more secure and faster communication infrastructure traditionally used in standard payment transactions can be leveraged. (Appeal Br. 7). However, this advantage flows from processing a blockchain transaction using a payment network, which is the abstract idea itself. Appellant does not explain, nor does the Specification discuss, how the adaptation results in a technological advance in any network or computer component; rather, the advance lies in using an existing network for faster, equally secure transactions. *See* Spec. ¶¶3–5. No matter how much of an advance in the field of processing blockchain transactions claim 1 recites, the advance lies entirely in the realm of abstract ideas, with no plausibly alleged innovation in the non-abstract application realm.” *SAP America, Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1163 (Fed. Cir. 2018). In addition, none of the limitations recite implementation details for any of the steps, but instead recite functional results to be achieved by any and all possible means. Data reception, analysis and modification, and display are all generic, conventional data processing operations which are themselves abstract concepts awaiting implementation details.

We do not agree with Appellant that claim 1 recites a technical solution to a technological problem that exists in the realm of blockchain processing networks similar to the technical solution found eligible in *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014). (Appeal Br. 6–7).

In *DDR Holdings*, the Court evaluated the eligibility of claims “address[ing] the problem of retaining website visitors that, if adhering to the routine, conventional functioning of Internet hyperlink protocol, would be instantly transported away from a host’s website after ‘clicking’ on an advertisement and activating a hyperlink.” *DDR*, 773 F.3d at 1257. There, the Court found that the claims were patent eligible because they transformed the manner in which a hyperlink typically functions to resolve a problem that had no “pre-Internet analog.” *Id.* at 1258. The Court cautioned, however, “that not all claims purporting to address Internet-centric challenges are eligible for patent.” *Id.* For example, in *DDR Holdings* the Court distinguished the patent-eligible claims at issue from claims found patent-ineligible in *Ultramercial*. *See DDR*, 773 at 1258–59 (citing *Ultramercial*, 772 F.3d 709, 715–16 (Fed. Cir. 2014)). As noted there, the *Ultramercial* claims were “directed to a specific method of advertising and content distribution that was previously unknown and never employed on the Internet before.” *Id.* at 1258 (quoting *Ultramercial*, 772 F.3d at 715–16). Nevertheless, those claims were patent ineligible because they “merely recite[d] the abstract idea of ‘offering media content in exchange for viewing an advertisement,’ along with ‘routine additional steps such as updating an activity log, requiring a request from the consumer to view the ad, restrictions on public access, and use of the Internet.’” *Id.*

Appellant’s asserted claim 1 is analogous to claims found ineligible in *Ultramercial* and distinct from claims found eligible in *DDR Holdings*. The ineligible claims in *Ultramercial* recited “providing [a] media product for sale at an Internet website;” “restricting general public access to said

media product;” “receiving from the consumer a request to view [a] sponsor message;” and “if the sponsor message is an interactive message, presenting at least one query to the consumer and allowing said consumer access to said media product after receiving a response to said at least one query.” *Ultramarcial*, 772 F.3d at 712. Appellant’s asserted claim 1 recites authorization of blockchain transactions using the routine steps of receiving, analyzing, modifying, and transmitting data. This is the type of Internet activity found ineligible in *Ultramarcial*. (Appeal Br. 7).

In view of the foregoing, we will sustain the Examiner’s rejection of claim 1 under 35 U.S.C. §101. We will also sustain the rejection as it is directed to the remaining claims because Appellant has not argued the separate eligibility of the remaining claims.

#### DOUBLE PATENTING REJECTION

Claims 1–20 are rejected under the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1–20 of copending Application No. 14/719,047, now U.S. Patent No. 9,870,562. (Final Act. 6–7). The Examiner’s statement of this rejection in total is: “Although the conflicting claims are not identical, they are not patentable distinct from each other.” (Final Act. 7).

In evaluating obviousness-type double patenting, the Federal Circuit has “endorsed an obviousness determination similar to, but not necessarily the same as, that undertaken under 35 U.S.C. § 103 in determining the propriety of a rejection for double patenting.” *In re Braat*, 937 F.2d 589, 592–93 (Fed. Cir. 1991). In making an obviousness-type double patenting

rejection, the Examiner must show that a claimed invention is “a mere variation of [the patented invention] . . . which would have been obvious to those of ordinary skill in the relevant art . . . [and] there must be some clear evidence to establish why the variation would have been obvious which can properly qualify as ‘prior art.’” *In re Kaplan*, 789 F.2d 1574, 157–80 (Fed. Cir. 1986). Accordingly, in *Kaplan*, the Federal Circuit reversed an obviousness-type double patenting rejection “because there [was] no proper evidence to show that the claim [was] for a mere obvious variation of what is claimed in the Kaplan patent relied on to support the rejection.” *Id.* at 1581. We will not sustain this rejection because the Examiner has failed to provide evidence that the claim differences between the instant claims are mere obvious variations of what is claimed in the ’562 patent.

#### REJECTION UNDER 35 U.S.C. §103(A)

The Examiner rejects claims 1–20 under 35 U.S.C. §103(a) as being unpatentable over Lingappa, Feeney, and Bacastow. (Final Act. 9-10). We agree with the Examiner’s findings of fact in regard to the teachings of the prior art and adopt same as our own. (Final Act. 9).

We are not persuaded of error on the part of the Examiner in making this rejection by Appellant’s argument that there is no disclosure in the prior art of the generation of a transaction messages, let alone the use of payment rails or payment networks for blockchain transaction. (Appeal Br. 13–14). Specifically, Appellant argues that Lingappa makes no reference to traditional payment transaction processing systems, Bacastow fails to disclose a transaction message, and Feeney fails to disclose a traditional payment transaction processing system. These arguments relate to what

each reference teaches on an individual basis. Nonobviousness cannot be established by attacking the references individually when the rejection is predicated upon a combination of prior art disclosures. *See In re Merck & Co. Inc.*, 800 F.2d 1091, 1097, 231 USPQ 375, 380 (Fed. Cir. 1986). In this regard, we note that the Examiner relies on Lingappa for disclosing a transaction message, Feeney for disclosing a transaction message with the network identifier or an encoded value based on the network identifier, and Bacastow for disclosing using a traditional payment transaction for blockchain or crypto currency transactions. (Final Act. 9–10).

We are not persuaded of error on the part of the Examiner by Appellant’s argument that one would not combine Bacastow with Lingappa because “Bacastow appears to equate a Bitcoin account number with a traditional transaction number, despite the non-existence of such a value and inability for a blockchain transaction to be conducted with a single number. Thus a person having ordinary skill in the art would not find it obvious to combine Bacastow with Lingappa and Feeney. . . .” (Appeal Br. 15). This argument is not persuasive because it is based on Attorney argument rather than evidence of record. It is well established that “[a]ttorney’s argument in a brief cannot take the place of evidence.” *In re Pearson*, 494 F.2d 1399, 1405 (CCPA 1974) (“The fatal defect in this argument is that there is no competent evidence which would negate the board’s conclusion . . . Attorney’s argument in a brief cannot take the place of evidence.”); *see also Meitzner v. Mindick*, 549 F.2d 775, 782 (CCPA 1977) (“[T]he argument that... is unsupported by evidence. Argument of counsel cannot take the place of evidence lacking in the record.”).

In view of the foregoing, we will sustain the Examiner’s rejection of

claim 1 under 35 U.S.C. §103(a). We will sustain the rejection as it is directed to the remaining claims because Appellant does not argue the separate patentability of the remaining claims.

#### CONCLUSIONS OF LAW

We conclude the Examiner did not err in rejecting claims 1–20 under 35 U.S.C. § 101.

We conclude that the Examiner did err in rejecting claims 1–20 on the ground of nonstatutory obviousness-type double patenting.

We conclude that the Examiner did not err in rejecting claims 1–20 under 35 U.S.C. §103(a).

#### CONCLUSION

<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>References</b>	<b>Affirmed</b>	<b>Reversed</b>
1-20	101		1-20	
1-20	Nonstatutory obvious-type double patenting			1-20
1–20	103	Lingappa, Feeney, and Bacastow	1–20	

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**