



UNITED STATES PATENT AND TRADEMARK OFFICE

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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/222,452	03/21/2014	Ahamed Kannanari	AM2-0697USC1	9699
136607	7590	10/01/2019	EXAMINER	
Lee & Hayes P.C. 601 West Riverside Avenue Suite 1400 Spokane, WA 99201			NIGH, JAMES D	
			ART UNIT	PAPER NUMBER
			3685	
			NOTIFICATION DATE	DELIVERY MODE
			10/01/2019	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):

lhpto@leehayes.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte AHAMED KANNANARI

Appeal 2018-003911
Application 14/222,452
Technology Center 3600

Before JUSTIN BUSCH, JASON J. CHUNG, and
MATTHEW J. McNEILL, *Administrative Patent Judges*.

Opinion for the Board filed by *Administrative Patent Judge*
MATTHEW J. McNEILL.

Opinion Dissenting filed by *Administrative Patent Judge* JUSTIN BUSCH.
McNEILL, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant¹ appeals under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 2–21, which are all the claims pending in this application. Claim 1 is canceled. Appeal Br. 23. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies Amazon Technologies, Inc. as the real party in interest. Appeal Br. 3.

STATEMENT OF THE CASE

Introduction

Appellant's application relates to providing a payment using one-time use payment tokens. Spec. ¶ 11. Claim 2 illustrates the appealed subject matter and reads as follows:

2. A computer-implemented method comprising:

receiving, by one or more computing devices, a request for a one-time use payment token that is redeemable with a plurality of recipients, the request specifying at least a user account, an amount, and an expiration of the one-time use payment token, the expiration being specific to the one-time use payment token;

verifying, by at least one of the one or more computing devices, that the user account has an amount of funds available that is at least equal to the amount specified in the request;

generating, by at least one of the one or more computing devices, the one-time use payment token as a number that is associated with the user account and is available for one-time use with any recipient of the plurality of recipients prior to the expiration specified by the request for the one-time use payment token;

transmitting the one-time use payment token to a user device associated with the user account;

receiving, after redemption of the one-time use payment token, a payment request from a particular recipient of the plurality of recipients, wherein the payment request is encrypted and wherein the payment request includes at least the one-time use payment token and a requested amount;

decrypting the payment request to identify at least the one-time use payment token and the requested amount; and

causing the requested amount to be transferred from the user account to an account of the particular recipient based at least in part on determining that the one-time use payment token is valid and has not previously been received as part of a different payment request, that the one-time use payment token has not

expired based on the expiration, and that the requested amount does not exceed the amount of the one-time use payment token.

The Examiner's Rejections

Claims 2–21 stand rejected under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter. Final Act. 8–25.

Claims 2–21 stand rejected under pre-AIA 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Final Act. 26–33.

Claims 17, 18, 20, and 21 stand rejected under 35 U.S.C. § 102(b) as anticipated by Banerjee (US 2010/0276484 A1; Nov. 4, 2010). Final Act. 34–35.

Claims 7–14 and 16 stand rejected under 35 U.S.C. § 103 as unpatentable over Banerjee and Cardina (WO 2010/126509 A2; Nov. 4, 2010). Final Act. 36–39.

Claims 2–6 and 15 stand rejected under 35 U.S.C. § 103 as unpatentable over Banerjee, Cardina, and Carlson (US 2008/0319905 A1; Dec. 25, 2008). Final Act. 39–43.

Claim 19 stands rejected under 35 U.S.C. § 103 as unpatentable over Banerjee and Carlson. Final Act. 44.

ANALYSIS

Patent-Ineligible Subject Matter

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.” *See Alice*, 573 U.S. at 219 (“On their face, the claims before us are drawn to the concept of intermediated settlement, *i.e.*, the use of a third party to mitigate settlement risk.”); *see also Bilski v. Kappos*, 561 U.S. 593, 611 (2010) (“Claims 1 and 4 in petitioners’ application explain the basic concept of hedging, or protecting against risk . . .”).

Concepts determined to be abstract ideas, and thus patent ineligible, include certain methods of organizing human activity, such as fundamental economic practices (*Alice*, 573 U.S. at 219–20; *Bilski*, 561 U.S. at 611); mathematical formulas (*Parker v. Flook*, 437 U.S. 584, 594–95 (1978)); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 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, 192 (1981)); “tanning, dyeing, making waterproof cloth, vulcanizing India rubber, smelting ores” (*id.* at 182 n.7 (quoting *Corning v. Burden*, 56 U.S. 252, 267–68 (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.* (internal citation omitted) (citing *Benson* and *Flook*); *see, e.g., id.* at 187 (“It is now commonplace that an *application* of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.”).

If the claim is “directed to” an abstract idea, we turn to the second step of the *Alice* and *Mayo* framework, where “we must examine the elements of the claim to determine whether it contains an “inventive concept”” sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application.” *Alice*, 573 U.S. at 221 (citation 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) (“Revised Guidance”). Under that 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* 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 are 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 Revised Guidance.

Revised Guidance Step 1

Step 1 of the Revised Guidance asks whether the claimed subject matter falls within the four statutory categories of patentable subject matter identified by 35 U.S.C. § 101: process, machine, manufacture, or composition of matter. Claim 2 recites “a computer-implemented method.” Appellant does not argue the Examiner erred in concluding claim 2 falls within the four statutory categories of patentable subject matter. We agree with the Examiner’s conclusion because claim 2 falls within the process category.

Revised Guidance Step 2A, Prong 1

Under Step 2A, Prong 1 of the Revised Guidance, we determine whether the claims recite 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). *See* Revised Guidance.

Claim 2 recites a method comprising a series of steps, including, among others: (1) “receiving . . . a request for a one-time use payment token that is redeemable with a plurality of recipients, the request specifying at least a user account, an amount, and an expiration of the one-time use payment token, the expiration being specific to the one-time use payment token;” (2) “verifying . . . that the user account has an amount of funds available that is at least equal to the amount specified in the request;” (3) “generating . . . the one-time use payment token as a number that is associated with the user account and is available for one-time use with any recipient of the plurality of recipients prior to the expiration specified by the request for the one-time use payment token;” (4) “receiving, after redemption of the one-time use payment token, a payment request from a particular recipient of the plurality of recipients, wherein the payment request is encrypted and wherein the payment request includes at least the one-time use payment token and a requested amount;” (5) “decrypting the payment request to identify at least the one-time use payment token and the requested amount;” and (6) “causing the requested amount to be transferred from the user account to an account of the particular recipient based at least in part on determining that the one-time use payment token is valid and has not previously been received as part of a different payment request, that the

one-time use payment token has not expired based on the expiration, and that the requested amount does not exceed the amount of the one-time use payment token.”

Under the Revised Guidance, abstract ideas include “mathematical concepts,” “certain methods of organizing human activity,” and “mental processes.” Revised Guidance at 52. These “certain methods of human activity” include:

[F]undamental economic principles or practices (including hedging, insurance, mitigating risk); commercial or legal interactions (including agreements in the form of contracts; legal obligations; advertising, marketing or sales activities or behaviors; business relations); managing personal behavior or relationships or interactions between people (including social activities, teaching, and following rules or instructions).

Id.

The Examiner concludes claim 2 is directed to using payment tokens in a transaction and transferring an amount from a user account to a recipient account, which the Examiner concludes is a fundamental economic practice because it is an intermediated settlement. Final Act. 10. We agree with the Examiner that claim 2 recites advertising, marketing or sales activities or behaviors, which are a form of commercial or legal interactions. In particular, the “receiving” step recited in limitation (1) characterizes receiving a request for a payment token. The “verifying” step recited in limitation (2) characterizes verifying that the purchaser has sufficient funds for the payment token. The “generating” step recited in limitation (3) characterizes generating the payment token pursuant to the first two steps. Thus, these steps as claimed collectively create a payment token according

to provided information, which is a form of advertising, marketing, or sales activities or behaviors, which is a commercial or legal interaction.

Thus, we agree with the Examiner that claim 2 recites certain methods of organizing human activity as identified in the Revised Guidance.

Revised Guidance Step 2A, Prong 2

Under Step 2A, Prong 2 of the Revised Guidance, we next determine whether the claims recite additional elements that integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)–(c), (e)–(h)).

To integrate the exception into a practical application, the additional claim elements must, for example, improve the functioning of a computer or any other technology or technical field (*see* MPEP § 2106.05(a)), apply the judicial exception with a particular machine (*see* MPEP § 2106.05(b)), effect a transformation or reduction of a particular article to a different state or thing (*see* MPEP § 2106.05(c)), or apply or use the judicial exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment (*see* MPEP § 2106.05(e)). *See* Revised Guidance.

The Examiner concludes the claims do not recite any technological improvement or utilize any special properties of a network and are directed toward a one-size-fits-all technological implementation. Final Act. 10.

Appellant argues the Examiner erred in concluding claim 2 is directed to an abstract idea. *See* Appeal Br. 7–15; Reply Br. 2–8. In particular, Appellant argues claim 2 does not merely claim the concept of intermediated settlement, but focuses on a specific means of producing a certain result. *Id.* at 8 (citing *McRO Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299 (Fed. Cir. 2018)). Appellant argues the claims are directed to using a one-

time payment token as part of a specific process to accomplish the claimed result. *Id.* at 8. Appellant further argues secure payment data during payment transactions is a technical problem in conventional industry practice that is addressed by the use of one-time payment tokens in the claims. *Id.* at 10–12.

As noted by the court in *McRO*, we look to whether claims focus on specific means or methods that improve relevant technology or are instead directed to a result or effect that itself is the abstract idea, merely invoking generic processes and machinery. *McRO*, 837 F.3d at 1314. We agree with Appellant that the claims at issue here focus on the specific means of improving payment technology to permit use of a one-time payment token at a plurality of recipients rather than merely claiming the effect or result of such an improvement. Specifically, claim 2 recites a particular procedure for generating and using a one-time payment token with particular restrictions associated with the token's redemption.

Accordingly, we do not sustain the patent-ineligibility rejection of claim 2. We also do not sustain the patent-ineligibility rejection of independent claims 7 and 17, which recite commensurate limitations, or dependent claims 3–6, 8–16, and 18–21.

Written Description

The Examiner rejects claims 2–21 under 35 U.S.C. § 112(a) or pre-AIA 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Final Act. 26–33. In particular, the Examiner finds the Specification does not provide any algorithm or underlying teachings with regard to the programming used to achieve the claimed functions. *Id.* at 27–28. The Examiner finds no algorithm is present within the four corners of the written disclosure for generating the token or for performing the

encryption and decryption functions. *Id.* at 28. The Examiner also finds the Specification fails to disclose transmitting the one-time use payment token at a time when the user account contains an amount of available funds that at least equals the amount of the one-time use payment token. *Id.* at 31–32.

Appellant argues the Specification describes what a generated token would look like, demonstrating that the inventor possessed knowledge of how to generate one. Reply Br. 10 (citing Spec. ¶¶ 17, 31). Appellant also argues the Specification describes public key encryption, demonstrating that the inventor possessed knowledge of encryption and decryption. *Id.* (citing Spec. ¶¶ 13, 21, 44). Appellant argues the Specification also describes the host servers determine whether requested funds are available, demonstrating that the inventors possessed such knowledge. *Id.* (citing Spec. ¶ 21).

“[The written description] inquiry is a factual one and must be assessed on a case-by-case basis.” *Purdue Pharma L.P. v. Faulding, Inc.*, 230 F.3d 1320, 1323 (Fed. Cir. 2000). The Examiner “bears the initial burden . . . of presenting a *prima facie* case of unpatentability.” *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). Insofar as the written description requirement is concerned, that burden is discharged by:

presenting evidence or reasons why persons skilled in the art would not recognize in the disclosure a description of the invention defined by the claims. . . . If . . . the specification contains a description of the claimed invention, albeit not *in ipsius verbis* (in the identical words), then the examiner . . . , in order to meet the burden of proof, must provide reasons why one of ordinary skill in the art would not consider the description sufficient.

In re Alton, 76 F.3d 1168, 1175 (Fed. Cir. 1996) (citing *In re Wertheim*, 541 F.2d 257, 263 (CCPA 1976)).

Appellant has persuaded us of Examiner error because the Examiner has not sufficiently explained why an ordinarily skilled artisan would not consider the description cited by Appellant to be sufficient. Instead, the Examiner finds the Specification does not disclose the specific algorithms required to practice the claimed subject matter, but such disclosure is not necessary if an ordinarily skilled artisan would understand the disclosure to demonstrate the inventor's possession of the claimed subject matter.

We agree with Appellant that the disputed limitations, including generating payment tokens, encrypting and decrypting requests, and comparing requested amounts to amounts available in an account, are sufficiently disclosed in the cited passages (*see* Spec. ¶¶ 17, 21, 31, 44) that an ordinarily skilled artisan would have understood the inventor to have possession of the claimed subject matter. We, therefore, do not sustain the written description rejection of claim 2. We also do not sustain the written description rejection of independent claims 7 and 17, which recite commensurate limitations, or dependent claims 3–6, 8–16, and 18–21.

Anticipation – Claims 17, 18, 20, and 21

The Examiner rejects claim 17 as anticipated by Banerjee, finding Banerjee discloses, in relevant part, “a one-time use payment token that is redeemable with a plurality of recipients.” Final Act. 34 (citing Banerjee ¶¶ 41, 44, 90–92); Ans. 17–19 (citing Banerjee ¶ 44). In particular, the Examiner concludes the claim limitation “redeemable with a plurality of recipients” claims a property of the token, not an actual operation involving the token. Ans. 17. The Examiner concludes that because the claim only recites a property of the token, the property can be applied at any point in time such as before or after the token is generated. Ans. 17. The Examiner

concludes the claim, therefore, encompasses a token that can be targeted to many different recipients. Ans. 17. The Examiner finds Banerjee discloses a payment token that can include the category of merchant with whom the token can be used to conduct a transaction, which anticipates the “a one-time use payment token that is redeemable with a plurality of recipients” limitation. Ans. 17–18 (citing Banerjee ¶ 44).

Appellant argues the Examiner erred in finding Banerjee anticipates claim 17. *See* Appeal Br. 18–20; Reply Br. 12–14. In particular, Appellant argues Banerjee discloses its payment token is tied to “a single ‘predetermined merchant’ or ‘selected merchant’ such that the payment token is redeemable only at one specific predetermined or selected merchant.” Appeal Br. 18 (citing Banerjee ¶¶ 8, 21, 34, 36, 37, 41, 42, 62, 69, 70, 74, 94, 101, 101, and 107–110). Appellant argues that the Examiner reads the cited portion of paragraph 44 out of context. *Id.* at 19–20. According to Appellant, Banerjee discloses a user selecting a category of merchant as a threshold, but the user follows up that selection by selecting a particular merchant within the threshold category. *Id.* at 19–20 (citing Banerjee ¶¶ 41, 44, 46).

Appellant has persuaded us of Examiner error. Banerjee discloses an interface menu that allows a consumer to select thresholds as to the types of parameters or limits that can be set on a transaction. Banerjee ¶ 44. These thresholds may include, for example, a date and time at which the token expires, a maximum amount for a transaction, and the category of merchant with whom the token can be used to conduct a transaction. *Id.* Banerjee further discloses that this interface is used by a consumer to request “a token to be used for a transaction to be conducted at a particular merchant.” *Id.*

¶ 46. We agree with Appellant that Banerjee’s disclosure, as a whole, indicates that the threshold selection in the interface menu is merely one step in the selection of a particular merchant with whom the token will be used for a transaction.

Accordingly, on this record, we agree with Appellant that the Examiner erred in finding Banerjee discloses the disputed limitation. We, therefore, do not sustain the anticipation rejection of claim 17. We also do not sustain the anticipation rejections of claims 18, 20, and 21, which depend from claim 17.

Obviousness – Claims 2–16 and 19

The Examiner rejects independent claim 2 as unpatentable over Banerjee, Cardina, and Carlson. Final Act. 39–42. The Examiner rejects independent claim 7 as unpatentable over Banerjee and Cardina. Final Act. 36–37. In both of these rejections, the Examiner relies on Banerjee as teaching a “one–time use payment token that is redeemable with a plurality of recipients.” *See* Final Act. 36 (claim 7), 39–40 (claim 2). The Examiner does not find Cardina or Carlson teaches this limitation. *See* Final Act. 36–37, 39–42. Accordingly, we do not sustain the obviousness rejections of independent claims 2 and 7 for the same reasons as claim 17. We also do not sustain the obviousness rejections of dependent claims 3–6, 8–16, and 19 for the same reasons.

CONCLUSION

In summary:

Claims Rejected	Basis	Affirmed	Reversed
2–21	§ 101		2–21
2–21	§ 112, first		2–21

Appeal 2018-003911
Application 14/222,452

Claims Rejected	Basis	Affirmed	Reversed
	paragraph		
17, 18, 20, 21	§ 102(b)		17, 18, 20, 21
2-16, 19	§ 103		2-16, 19
Overall Outcome			2-21

REVERSED

BUSCH, *Administrative Patent Judge*, dissenting.

I agree with and join the Majority's decision reversing the Examiner's rejections of (1) claims 2–21 under 35 U.S.C. § 112, first paragraph for failing to comply with the written description, (2) claims 17, 18, 20, and 21 under 35 U.S.C. § 102 as anticipated by Banerjee, (3) claims 7–14 and 16 under 35 U.S.C. § 103 as obvious in view of Banerjee and Cardina, (4) claims 2–6 and 15 under 35 U.S.C. § 103 as obvious in view of Banerjee, Cardina, and Carlson, and (5) claim 19 under 35 U.S.C. § 103 as obvious in view of Banerjee and Carlson. However, I respectfully dissent with respect to the overall disposition of the case. Specifically, I disagree with and write separately regarding the portions of the Majority's decision reversing the Examiner's rejection of claims 2–21 under 35 U.S.C. § 101 as being directed to an abstract idea without significantly more.

As the Majority notes, the Supreme Court's two-step framework guides patent eligibility analysis under 35 U.S.C. § 101. *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208, 217 (2014). As also set forth by the Majority, after the Briefs were filed, the Office published revised guidance for evaluating subject matter eligibility under 35 U.S.C. § 101, specifically with respect to applying the *Alice* framework. USPTO, 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) ("Guidance").

As part of our inquiry, we "look at the 'focus of the claimed advance over the prior art' to determine if the claim's 'character as a whole' is directed to excluded subject matter." *Affinity Labs of Tex., LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016). The Guidance directs us to address this inquiry using two prongs of analysis: (i) does the

claim recite a judicial exception (e.g., an abstract idea), and (ii) if so, is the judicial exception integrated into a practical application. 84 Fed. Reg. at 54. If the judicial exception is integrated into a practical application, the claim is patent eligible under § 101. 84 Fed. Reg. at 54–55. If the claim is directed to a judicial exception (i.e., the claim both recites a judicial exception and fails to integrate the exception into a practical application), we next determine whether the claim provides an inventive concept, which includes determining whether any element, or combination of elements, amounts to significantly more than the judicial exception. *Alice*, 573 U.S. at 217; 84 Fed. Reg. at 56.

The Examiner concludes claim 2 is directed to using payment tokens in a transaction and transferring an amount from a user account to a recipient account, which is a fundamental economic practice. Final Act. 10. Generally, Appellant argues the claims are not directed to an abstract idea and include an inventive concept because the claims recite specific processes for generating and using a one-time payment token. Appeal Br. 7–9; Reply Br. 2–5. Appellant asserts the claimed one-time use payment tokens address the known technical problem of “properly securing payment data during payment transactions” because the claimed methods avoid exchanging sensitive information. Appeal Br. 10; Reply Br. 5–7. Appellant also contends claim 2 is necessarily a “technological endeavor” because it is a computer-implemented method that generates a token using computing devices. Appeal Br. 10–11.

Here, I conclude Appellant’s claims are directed to mental processes (i.e., a concept performed in the human mind, such as, an observation, evaluation, judgment, and opinion) or, alternatively, commercial and legal

interactions, which are abstract ideas.² *See* 84 Fed. Reg. at 52. Appellant’s claims generally are directed to creating and redeeming a one-time use token. This is consistent with how Appellants describe the claimed embodiments of the invention. Appeal Br. 9 (“[C]laims 2-21 are directed to specific processes of providing and using a one-time use payment token.”); *see* Spec. ¶¶ 11 (“This disclosure is directed to, in part, providing a payment using payment tokens.”), 35 (“FIGS. 3-5 show various processes related to creating, spending, and/or modifying payment tokens.”).

I agree with the Majority that claim 2’s receiving a request for a token, verifying, and generating steps recite abstract ideas. However, I believe most of claim 2’s remaining elements also are part of the abstract idea to which claim 2 is directed. More specifically, I would find the receiving a payment request step, the portion of the decrypting step relating to identifying the token and amount, and the causing step, in combination with the receiving a request for a token, verifying, and generating steps, are directed to the abstract idea of creating and redeeming a one-time use token. In other words, the majority of claim 2 is directed to creating and redeeming a one-time use token, which is a commercial or legal interaction. Moreover, the majority of claim 2 simply requires performing a series of steps that, but for the generic computer implementation, could be performed mentally.

Each of claim 2’s limitations is *part of* the abstract idea of the commercial or legal interaction of creating and redeeming a one-time use

² Although the Examiner did not identify the abstract idea as a set of mental processes, I note patent eligibility under 35 U.S.C. § 101 is a question of law that is reviewable *de novo*. *See Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333 (Fed. Cir. 2012).

token. More particularly, creating and redeeming a one-time use token comprises (1) receiving a request to create a token with certain parameters (i.e., account from which the token is funded, value, expiration date, recipient(s)); (2) verifying the account has sufficient funds to purchase/fund the token; (3) generating the token with the identified parameters; (4) transmitting/providing the token to the user from whose account the token was purchased/funded; (5) receiving an encrypted payment request (including the token and an amount) from the recipient to whom the user provided the token; (6) decrypting the encrypted request to identify the token and the amount; and (7) transferring an amount from the user account to the recipient if the token is valid. Each of these steps is necessary to create a one-time use token and complete a transaction using the token (i.e., redeem the token) and, therefore, part of the legal or commercial interaction of creating and redeeming a one-time use token. *Cf. Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 716 (Fed. Cir. 2014) (finding computer-implemented system for “using advertising as a currency [on] the Internet” to be ineligible); *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1352, 1355 (Fed. Cir. 2014) (finding computer-implemented system for guaranteeing performance of an online transaction to be ineligible), and *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1370 (Fed. Cir. 2011) (finding computer-implemented system for “verifying the validity of a credit card transaction over the Internet” to be ineligible). Accordingly, I would find Appellant’s claims recite an abstract idea because the Appellant’s claims as a whole, and in fact all of the limitations, recite abstract ideas that fall within the certain methods of organizing human activity category of abstract ideas identified by our Guidance. *See* 84 Fed. Reg. 52.

Moreover, but for the computer implementation, each of the steps recited in claim 2 could be performed mentally. If a claim, under its broadest reasonable interpretation, covers performance in the mind but for the recitation of generic computer components, then it is still in the mental processes category unless the claim cannot practically be performed in the mind. *See Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1318 (Fed. Cir. 2016) (“[W]ith the exception of generic computer-implemented steps, there is nothing in the claims themselves that foreclose them from being performed by a human, mentally or with pen and paper.”); *see also CyberSource*, 654 F.3d at 1375, 1372 (holding that the incidental use of “computer” or “computer readable medium” does not make a claim otherwise directed to process that “can be performed in the human mind, or by a human using a pen and paper” patent eligible); *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 71 (2012) (explaining mental processes are not patentable); 84 Fed. Reg. at 52–53 nn.14–15.

More specifically, the receiving steps are simply observations of information. Because “the payment token may be a unique one-time use identifier (string of numbers, characters, and/or symbols, etc.) linked to one or more payment accounts associated with the user” (e.g, the recited token could simply be the user’s account number with “-1” appended), Spec. ¶ 11, the generating a token step is simply a judgment, which also is a mental process. Similarly, the verifying and decrypting steps simply require mentally evaluating the relevant information to either confirm the user account has sufficient funds or decrypt the information in a request. Notably, the claims do not require any particular type of encryption, such that a message using a simple encryption in which each of the letters A–J represent

the numbers 0–9 could be decrypted mentally. The portion of the transferring step that involves determining whether the token is valid also is merely an evaluation of various parameters. Thus, the only remaining elements that arguably do not constitute mental processes are the computing and user devices, the transmitting step, and causing a transfer from the user account to a recipient’s account. Therefore, I find Appellant’s claims also recite an abstract idea because the majority of the limitations recite mental processes. *See* 84 Fed. Reg. at 52.

Because the claims recite a judicial exception, I next analyze whether the claims integrate the judicial exception into a practical application. 84 Fed. Reg. at 54. To determine whether the judicial exception is integrated into a practical application, we identify whether there are “*any additional elements recited in the claim beyond the judicial exception(s)*” and evaluate those *additional* elements to determine whether they integrate the judicial exception into a recognized practical application. 84 Fed. Reg. at 54–55 (emphasis added); *see also* Manual of Patent Examining Procedure (“MPEP”) §§ 2106.05(a)–(c), (e)–(h) (9th ed. Rev. 08.2017, Jan. 2018).

Here, I find claim 2 does not recite any *additional* limitations. To the extent the computer devices, the transmitting step, and causing the requested amount to be transferred from the user account to an account associated with a recipient are limitations beyond the abstract idea, they do not integrate the judicial exception into a practical application. More particularly, the claims do not recite additional limitations that: (i) improve the functionality of a computer or other technology or technical field, *see* MPEP § 2106.05(a); (ii) use a “particular machine” to apply or use the judicial exception, *see* MPEP § 2106.05(b); (iii) transform an article to a different thing or state, *see* MPEP

§ 2106.05(c); or (iv) provide any other meaningful limitation, *see* MPEP § 2106.05(e). *See also* 84 Fed. Reg. at 55.

Rather, the additional elements simply (1) use computers as tools to implement the abstract idea requiring no more than generic computer elements to perform generic computer functions or (2) add insignificant extra-solution activity. For purposes of this Dissent, although I determine every limitation is part of the abstract legal and commercial interaction of creating and using a one-time use payment token, I alternatively consider the computing and user devices, the transmitting step, and causing the requested amount to be transferred from the user account to an account associated with a recipient to be additional elements.

The recited computing and user devices are generic computer elements recited at a high level of generality. The Specification provides only general, vague, and high level descriptions of these elements. *See, e.g.*, Spec. ¶¶ 11 (describing user devices as “a mobile telephone, personal computer, or other electronic device”), 16 (“The user device 108 may be a mobile telephone, a smart phone, a tablet computer, a laptop computer, a netbook, a personal digital assistance (PDA), a gaming device, a media player, or any other mobile computing device.”), 25 (describing features of a user device at a high level, including processors, a memory, modules, and applications), 30 (similarly describing features of a host computing device at a high level). Additionally, the transmitting step merely involves sending data (the token) to another device, which is a fundamental, generic, and basic purpose of computers. Moreover, the claims recite these devices and the transmitting step only as elements that perform routine and generic computing functions like receiving, generating, and transmitting data, and

Appellant’s disclosure fails to provide a level of detail indicating these elements include any improvement to existing computers or technology. *Cf. Berkheimer Memo*³ § III.A.1; *buySAFE*, 765 F.3d at 1355 (“That a computer receives and sends the information over a network—with no further specification—is not even arguably inventive.”); *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1096 (Fed. Cir. 2016) (“[T]he use of generic computer elements like a microprocessor or user interface do not alone transform an otherwise abstract idea into patent-eligible subject matter.”).

Finally, causing the transfer is merely post-solution activity in response to the mental steps to complete the legal and commercial interaction of redeeming the one-time use payment token. “[C]ausing the requested amount to be transferred” does not require any particular technological result and could involve simply communicating to another party or system that the transfer is approved and may be completed. This is the type of insignificant extra-solution activity the courts have determined insufficient to transform judicially excepted subject matter into a patent-eligible application. *See* 84 Fed. Reg. at 55, 55 n.31; MPEP § 2106.05(g); *Bancorp Servs., L.L.C. v. Sun Life Assur. Co. of Can.*, 771 F.Supp.2d 1054, 1065 (E.D. Mo. 2011) *aff’d*, 687 F.3d 1266 (Fed. Cir. 2012) (explaining that

³ “Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (*Berkheimer v. HP, Inc.*)” at 3 (Apr. 19, 2018), available at <https://www.uspto.gov/sites/default/files/documents/memo-berkheimer-20180419.PDF> (explaining that a specification that describes additional elements “in a manner that indicates that the additional elements are sufficiently well-known that the specification does not need to describe the particulars of such additional elements to satisfy 35 U.S.C. § 112(a)” can show that the elements are well-understood, routine, and conventional).

“providing data . . . [is] insignificant post solution activity”); *see also Parker v. Flook*, 437 U.S. 584, 590 (1978) (explaining “[t]he notion that post-solution activity, no matter how conventional or obvious in itself, can transform an unpatentable principle into a patentable process exalts form over substance”).

The claims are not directed to “an improvement in computers as tools,” like those claims found patent-eligible. *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016). Rather, the claims invoke computers merely as a tool to implement an abstract idea for creating and redeeming a one-time use token. *See BSG Tech LLC v. Buyseasons, Inc.*, 899 F.3d 1281, 1287–88 (Fed. Cir. 2018) (disagreeing with BSG “that its claims focus on a non-abstract improvement in database functionality” by improving the quality and organization of information in the database because the recited benefits “are not improvements to database functionality” but instead are “benefits that flow from performing an abstract idea in conjunction with a well-known database structure”).

Notably, Appellant’s argument that the claims solve a technical problem focus on the alleged solution of “securing payment data during payment transactions” by using one-time use payment tokens “in transactions instead of exchanging such sensitive information.” Appeal Br. 10–11. However, as discussed above, I would find the creation and redemption of a one-time use payment token is part of the abstract idea and not an additional element. We look to the elements recited *in addition to* the abstract idea to determine whether the claims integrate the abstract idea into a practical application. 84 Fed. Reg. at 54. I disagree that the claims recite an improvement to the functionality of a computer, other technology, or a

technical field because, other than the mental steps or the basic legal and commercial interaction, the claims recite only generic computer components and insignificant post-solution activity, as explained above. “[R]elying on a computer to perform routine tasks more quickly or more accurately is insufficient to render a claim patent eligible.” *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed. Cir. 2015); *see Alice*, 573 U.S. at 224 (“use of a computer to create electronic records, track multiple transactions, and issue simultaneous instructions” is not an inventive concept). Moreover, I agree with the Examiner that the *claims* do not recite a technical improvement to secure payment data at least because the claim does not preclude the one-time use payment token from being a user account number (e.g., “123”) with another number appended (e.g., “-1”) resulting in the token “123-1.” *See* Ans. 9.

Appellant asserts that, because claim 2 is a computer-implemented method that uses computer devices to generate a token, claim 2 necessarily is a “technological endeavor.” *See* Appeal Br. 10–11. However, Appellant merely describes and claims the result or goal of creating and redeeming a one-time use token in a manner that indicates a person of ordinary skill in the art would know how to implement the steps on generic computers such that the Specification does not need to describe the particulars of these elements to satisfy 35 U.S.C. § 112(a). Thus, similar to the claims in *BSG*, claim 2 does not relate to how to perform the technical aspects of the claim, but instead uses conventional computers to create and redeem a one-time use token. *See BSG*, 899 F.3d at 1287. In other words, Appellant neither claims nor describes any *technological improvement* to implement the abstract idea.

By contrast, in *DDR Holdings*, the Federal Circuit determined “the

claimed solution amount[ed] to an inventive concept for resolving [a] particular Internet-centric problem,” i.e., a challenge unique to the Internet. *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257–59 (Fed. Cir. 2014); see *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151 (Fed. Cir. 2016) (noting that “[i]n *DDR Holdings*, we held that claims ‘directed to systems and methods of generating a composite web page that combines certain visual elements of a “host” website with content of a third-party merchant’ contained the requisite inventive concept”). The Federal Circuit explained that the patent-eligible claims specified “how interactions with the Internet are manipulated to yield a desired result . . . that overrides the routine and conventional sequence of events ordinarily triggered by the click of a hyperlink.” *DDR Holdings*, 773 F.3d at 1258. The court reasoned that those claims recited a technological solution “necessarily rooted in computer technology” that addressed a “problem specifically arising in the realm of computer networks.” *DDR Holdings*, 773 F.3d at 1257. Here, unlike the claims at issue in *DDR Holdings*, Appellant’s claims use computers merely to perform the steps that comprise the abstract concept of creating and redeeming a one-time use token.

Similarly, in *BASCOM*, the court found “the patent describes how its particular arrangement of elements is a technical improvement,” and, when construed in favor of *BASCOM*,⁴ the claims may be read to improve an existing technological process. *BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016). As discussed above, the claims do not improve an existing technological process, but rather use

⁴ In *BASCOM*, *BASCOM* appealed the district court’s granting of a motion to dismiss under Fed. R. Civ. P. 12(b)(6). *BASCOM*, 827 F.3d at 1341.

existing technology to perform the abstract idea. Additionally, unlike the arrangement of elements (i.e., installation of a filtering tool at a specific location) in *BASCOM*, 827 F.3d at 1349–50, Appellant’s claims do not recite a non-conventional and non-routine arrangement of known elements.

Nor are Appellant’s claims similar to the claims found eligible in *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299 (Fed. Cir. 2016). The concept of conducting transactions using a one-time payment token does not require technology and, therefore, is not a similar technological process. The idea of creating and generating a one-time use token is similar to a cashier’s or certified check or, perhaps even more comparable, a physical token or ticket (e.g., a videogame, bridge, or public transit token, or a ticket for a fair or carnival that can be exchanged at various booths for a ride, game, or food).

The claims in *McRO* were held eligible because the solution focused upon improvements over existing, manual 3-D animation techniques. *See McRO*, 837 F.3d at 1314 (“The computer here is employed to perform a distinct process to automate a task previously performed by humans.”). The claims in *McRO* did not automate the mental steps animators previously used, but instead claimed an improved animation method that allowed a computer to perform a task it could not previously perform. The court determined this technological solution to a technological problem was sufficient for eligibility. *See McRO*, 837 F.3d at 1314 (“It is the incorporation of the claimed rules, not the use of the computer, that ‘improved [the] existing technological process’ by allowing the automation of further tasks.” (alteration in original)), 1316 (“When looked at as a whole, claim 1 is directed to a patentable, technological improvement over the

existing, manual 3–D animation techniques. The claim uses the limited rules in a process specifically designed to achieve an improved technological result in conventional industry practice.”). On the other hand, Appellant’s claims merely implement a data-based solution to a business problem using generic computers as tools instead.

For at least the foregoing reasons, the claims do not integrate the judicial exception into a practical application and I agree with the Examiner that the claims are directed to an abstract idea. Because I would determine the claims are directed to an abstract idea, I analyze the claims under step two of *Alice* to determine if there are additional limitations that individually, or as an ordered combination, ensure the claims amount to “significantly more” than the abstract idea. *Alice*, 573 U.S. at 217–18 (citing *Mayo*, 566 U.S. at 72–73, 77–79). As stated in the Guidance, many of the considerations to determine whether the claims amount to “significantly more” under step two of the *Alice* framework are already considered as part of determining whether the judicial exception has been integrated into a practical application. 84 Fed. Reg. at 56. Thus, at this point of the analysis, I determine if the claims add a specific limitation, or combination of limitations, that is not well-understood, routine, conventional activity in the field, or simply append well-understood, routine, conventional activities at a high level of generality. 84 Fed. Reg. at 56.

An inventive concept “cannot be furnished by the unpatentable law of nature (or natural phenomenon or abstract idea) itself.” *Genetic Techs. Ltd. v. Merial L.L.C.*, 818 F.3d 1369, 1376 (Fed. Cir. 2016); *see also* 84 Fed. Reg. at 56; *Alice*, 573 U.S. at 217 (explaining that, after determining a claim is directed to a judicial exception, “we then ask, ‘[w]hat else is there in the

claims before us?” (emphasis added, brackets in original) (quoting *Mayo*, 566 U.S. at 78)). Instead, an “inventive concept” is furnished by an element or combination of elements that is recited in the claim *in addition to* the judicial exception and sufficient to ensure the claim as a whole amounts to significantly more than the judicial exception itself. *Alice*, 573 U.S. at 218–19 (citing *Mayo*, 566 U.S. at 72–73); *see BSG*, 899 F.3d at 1290 (explaining that the Supreme Court in *Alice* “only assessed whether the claim limitations *other than the invention’s use of the ineligible concept* to which it was directed were well-understood, routine and conventional” (emphasis added)).

As discussed above, the only additional elements claim 2 recites are the computing and user devices, the transmitting step, and causing the requested amount to be transferred from the user account to an account associated with a recipient. As discussed above, Appellant’s Specification supports the conclusion that the additional elements are generic devices and steps recited at a high level of generality, and Appellant does not argue these elements were beyond what was well-understood, routine, and conventional in the art. *See Berkheimer Memo* § III.A.1.

For the reasons discussed above, I am not persuaded the Examiner erred, and I would sustain the Examiner’s rejection of claims 2–21 under 35 U.S.C. § 101.