

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AMERICAN EXPRESS COMPANY AND AMERICAN EXPRESS
TRAVEL RELATED SERVICES COMPANY, INC.,
Petitioner,

v.

SIGNATURE SYSTEMS, LLC,
Patent Owner.

CBM2018-00035
Patent No. 8,423,402 C1

Before JAMES A. TARTAL, FRANCES L. IPPOLITO, and
CHRISTOPHER M. KAISER, *Administrative Patent Judges*.

IPPOLITO, *Administrative Patent Judge*.

JUDGEMENT

Determining Claims 1, 2, 5, 6, 9, 10, 13, and 14 are Unpatentable
35 U.S.C. § 318(a); 37 C.F.R. § 42.73

Denying Patent Owner's Contingent Motion to Amend
35 U.S.C. § 326(d) and 37 C.F.R. § 42.221

I. INTRODUCTION

American Express Company and American Express Travel Related Services Company, Inc. (collectively, “Petitioner”) filed a Petition (Paper 1, “Pet.”) seeking a covered business method (“CBM”) patent review of U.S. Patent No. 8,423,402 C1 (Ex. 1001, “the ’402 patent”), pursuant to § 18 of the Leahy-Smith America Invents Act (“AIA”). In the Petition, Petitioner challenges claims 1, 2, 5, 6, 9, 10, 13, and 14 of the ’402 patent as unpatentable under 35 U.S.C. § 101 for claiming patent-ineligible subject matter. Pet. 1, 43–44. Petitioner also asserts that claims 5 and 13 are unpatentable as indefinite under 35 U.S.C. § 112 ¶ 2. *Id.* Signature Systems LLC (“Patent Owner”), filed a Preliminary Response (Paper 7, “Prelim. Resp.”) opposing institution of a CBM patent review. Additionally, after our authorization (Paper 8), the parties briefed the issues of: (1) Petitioner’s alleged delay in filing the Petition and (2) the discussion of the *Loyalty Conversion*¹ decision in the Patent Owner’s Preliminary Response. Papers 9–10.

On November 1, 2018, we instituted a CBM patent review on the grounds that claims 1, 2, 5, 6, 9, 10, 13, and 14 of the ’402 patent are directed to non-statutory subject matter under 35 U.S.C. § 101, and that claims 5 and 13 are unpatentable as indefinite under 35 U.S.C. § 112 ¶ 2 as set forth in the Petition. Paper 11 (“Dec.”).² After institution of trial, Patent

¹ *Loyalty Conversion Sys. Corp. v. Am. Airlines, Inc.*, No. 2:13-CV-655, 2014 WL 4364848 (E.D. Tex. Sept. 3, 2015).

² A covered business method patent review “shall be regarded as, and shall employ the standards and procedures of, a post grant review.” Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112–29, § 18, 125 Stat. 284, 329–31 (2011). 35 U.S.C. § 324(a) provides the statutory authority for a post-

Owner filed a Patent Owner Response (Paper 20, “PO Resp.”) and Petitioner filed a Reply (Paper 29, “Reply”). Patent Owner filed a Sur-Reply (Paper 31, “Sur.”).

Patent Owner also filed a Motion to Amend (Paper 26, “Mot. Amend”). Petitioner filed an Opposition to Patent Owner’s Motion to Amend (“Opp. Amend”), and Patent Owner filed a Reply to Petitioner’s Opposition (“Reply Amend”). Papers 30, 32. Further, after authorization, Petitioner filed a Sur-Reply to Patent Owner’s Reply (Paper 33, “Sur. Amend”).

An oral hearing was held on August 1, 2019. Paper 39 (“Tr.”).

We have jurisdiction under 35 U.S.C. § 6. This Final Written Decision is issued pursuant to 35 U.S.C. § 328(a) and 37 C.F.R. § 42.73.

In this Final Written Decision, after reviewing all relevant evidence and assertions, we determine that Petitioner has met its burden of showing, by a preponderance of the evidence, that claims 1, 2, 5, 6, 9, 10, 13, and 14 of the ’402 patent are unpatentable under 35 U.S.C. § 101 as patent ineligible subject matter. As further discussed below, given that we have already determined that all of the challenged claims are unpatentable under 35 U.S.C. § 101, we decline to address Petitioner’s indefiniteness challenge on claims 5 and 13.

In addition, we deny Patent Owner’s Contingent Motion to Amend to replace original claims 1, 5, 9, and 13 with substitute claims 17–20.

grant review, which states, “[t]he Director may not authorize a post-grant review to be instituted unless the Director determines that . . . it is more likely than not that at least 1 of the claims challenged in the petition is unpatentable.”

A. *Related Matters*

The parties represent that the '402 patent is the subject of a federal district court proceeding in *Signature Sys., LLC v Am. Express Co., and Am. Express Travel Related Serv. Co., Inc.*, Case No. 1:15-cv-20063, filed January 9, 2015. Prelim. Resp. 1; Pet. 6. The '402 patent was also the subject of a petition in CBM2015-00153. The panel denied institution in CBM2015-00153 because the originally issued claims of the '402 patent that were the subject of that petition had been cancelled or amended in an ex parte reexamination at the time of the institution decision. Ex. 2008.

B. *The '402 Patent*

The '402 patent states that its invention allows a user to purchase goods or services using awards points accumulated and held by a variety of award programs. Ex. 1001, 3:64–66. Specifically, the '402 patent is directed to a computer-implemented system and method for operating a rewards points program where a user earns rewards from various independent entities, each of which tracks the user's earned rewards. *Id.* at [57]. The system and method accumulates all the user's earned rewards and allows them to be converted into a corresponding amount of reward points of a second type at a predetermined reward server conversion rate. *Id.* at 14:5–9. The user can redeem some or all the second type of reward points to purchase a service or an item. *Id.* at [57]. Figure 4 is reproduced below:

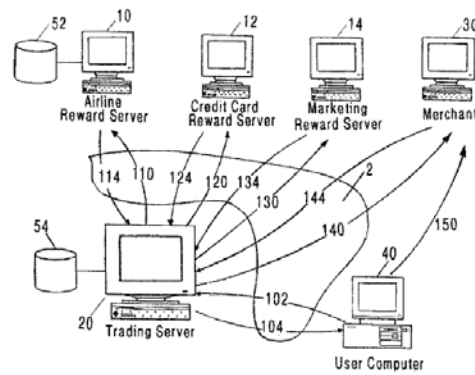


FIG. 4

Figure 4 depicts reward server computers 10, 12, 14, trading server 20, merchant computer 30, and user computer 40 in communication with network 2. Ex. 1001, 5:10–13. According to the '402 patent, the network may comprise any type of communication process where computers may contact each other. *Id.* at 5:13–14. The '402 patent also describes the rewards server computers as any type of accessible server capable of holding data about a user along with a corresponding earned value. *Id.* at 5:44–47.

Referring to Figures 6 and 7, reproduced below, the '402 patent describes how a user redeems accumulated reward points from one or more reward entities as part of a purchase transaction. Ex. 1001, 4:62–65.

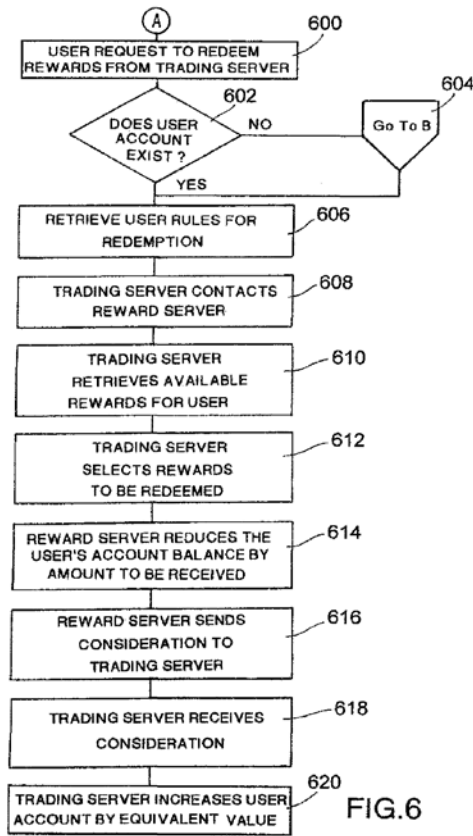


FIG. 6

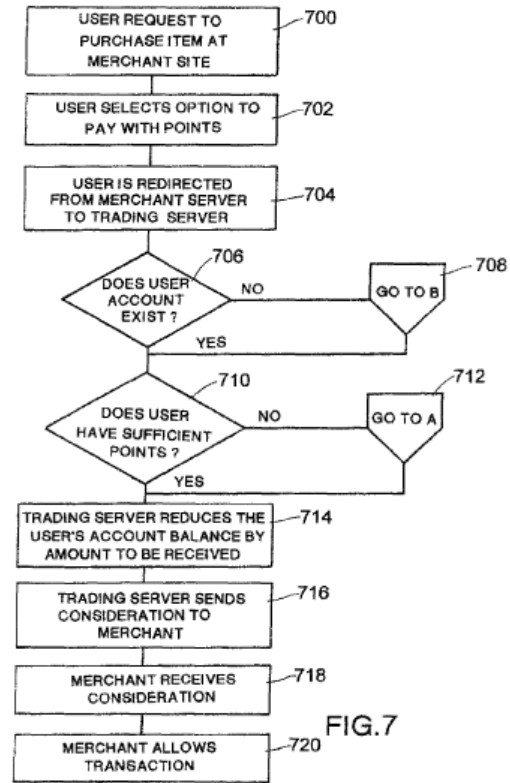


FIG. 7

Figures 6 and 7 provide data flow diagrams that show how users redeem rewards. Ex. 1001, 4:62–65. In Figure 6, the user requests to redeem rewards from a trading server (step 600). *Id.* at 6:17–19. To do so, the trading server obtains reward points from a reward server by contacting the appropriate reward server (step 608). *Id.* at 6:29–34. The reward server decreases the user’s reward point account by the requested number of reward points (step 614). *Id.* at 6:40–43. The reward server conveys consideration to the trading server where the consideration corresponds to the number of reward points decreased in the user’s account on the reward server (step 616). *Id.* at 6:45–49. The trading server increases the user’s reward exchange account by the received number of points (step 620). *Id.* at 6:52–55. According to the ’402 patent, consideration may be in the form of a

monetary credit to an account that exists between the trading server and the reward server that gets paid at the end of a predefined billing cycle. *Id.* at 6:49–52. The '402 patent also refers to “points” as “any earned value that has a cash equivalent or negotiable worth.” *Id.* at 6:43–45.

Figure 7 depicts how a user purchases an item from a merchant computer (step 700). Ex. 1001, 7:5–7. If the user elects to pay for the desired item with points (step 702), then the user is redirected from the merchant server to the trading server at step 704. *Id.* at 7:14–16. The trading server confirms whether the user has sufficient points to purchase the selected item (step 710). *Id.* at 7:18–22. If the user does not, then more reward points are traded into his reward exchange account by branching to the flow diagram at exit point A (step 712) to the process shown in Figure 6. *Id.* at 7:22–28. After enough points are traded, trading server computer conveys consideration to the merchant computer equivalent to the cost of the item by means well known in the art of electronic commerce (e.g., by a preexisting account, credit card, etc.) (steps 716, 718). *Id.* at 7:36–40.

C. Illustrative Claims

Of the challenged claims, claims 1, 5, 9, and 13 are independent. Independent claims 1 and 5, reproduced below, are illustrative of the claimed subject matter:

1. A computer-implemented method for earning, exchanging and redeeming reward points comprising the steps of:

a user executing a plurality of first purchase transactions using a credit card linked to a credit card reward program of a first reward issuing entity, each of the first purchase transactions earning a first set of reward points of a first type from the first reward issuing entity;

a reward server computer, associated with the first reward issuing entity and comprising a plurality of reward accounts, each of said reward accounts associated with a different user, storing each of the first sets of reward points of the first type in one of the plurality of reward accounts on the reward server computer associated with the user;

a reward exchange computer storing in a reward exchange account a second set of reward points of a second type earned by the user as a result of a second transaction executed between the user and a second reward issuing entity which is different from the first reward issuing entity;

the reward server computer providing a web page to a selected one of a plurality of user computers, the selected user computer associated with the user, the web page comprising a control for initiating communication over a computer network between the reward server computer and the reward exchange computer;

the reward server computer receiving from the user operating the user computer a selection of the control from the web page and, in response, initiating communication over the computer network with the reward exchange computer to exchange a quantity of reward points of the first type, designated by the user operating the user computer, from the reward account on the reward server computer into reward points of the second type for adding to the reward exchange account on the reward exchange computer by:

decreasing the quantity of reward points of the first type designated by the user from the reward account on the reward server computer,

causing the reward exchange computer to

convert the quantity of reward points of the first type decreased from the reward account on the reward server computer into a corresponding amount of reward points of the second type at a predetermined reward server conversion rate,

add the corresponding amount of reward points of the second type to the reward exchange account, and

combine the corresponding amount of reward points of the second type added to the reward exchange account with the second set of reward points of the second type previously stored in the reward exchange account, and

conveying consideration to the reward exchange computer, the consideration having a value equivalent to the quantity of reward points of the first type decreased from the reward account on the reward server computer;

the user requesting the reward exchange computer to redeem at least some of the combined reward points of the second type from the reward exchange account for an item selected by the user; and

the reward exchange computer redeeming the requested combined reward points of the second type from the reward exchange account by decreasing the reward exchange account by the combined reward points of the second type requested to be redeemed by the user for the item selected by the user.

5. A reward server computer comprising:

memory means for storing a plurality of reward accounts, each of said reward accounts associated with a different user and comprising a plurality of first sets of reward points of a first type previously earned by a user from a first reward issuing entity as a result of a plurality of first purchase transactions using a credit card linked to a credit card reward program of the first reward issuing entity;

communications means for communicating over a computer network with a plurality of user computers, each

operated by a different user and a reward exchange computer that stores in a reward exchange account a second set of reward points of a second type earned by the user as a result of a second transaction executed between the user and a second reward issuing entity which is different from the first reward issuing entity; and

processing means programmed to:

provide a web page to a selected one of a plurality of user computers, the selected user computer associated with the user, the web page comprising a control for initiating communication over the computer network with the reward exchange computer;

initiate, in response to receiving from the user operating the user computer a selection of the control from the web page, communication over the computer network with the reward exchange computer to exchange a quantity of reward points of the first type, designated by the user operating the user computer, from the reward account on the reward server computer into reward points of the second type for adding to the reward exchange account on the reward exchange computer by:

decreasing the quantity of reward points of the first type designated by the user from the reward account on the reward server computer,

causing the reward exchange computer to

convert the quantity of reward points of the first type decreased from the reward account on the reward server computer into a corresponding amount of reward points of the second type at a predetermined reward server conversion rate,

add the corresponding amount of reward points of the second type to the reward exchange account, and

combine the corresponding amount of reward points of the second type added to the reward exchange account with the second set of reward points of the second type previously stored in the reward exchange account, and

conveying consideration to the reward exchange computer, the consideration having a value equivalent to the quantity of reward points of the first type decreased from the reward account on the reward server computer;

whereby the user is able to request the reward exchange computer to redeem at least some of the combined reward points of the second type from the reward exchange account for an item selected by the user, and the reward exchange computer is able to redeem the requested combined reward points of the second type from the reward exchange account by decreasing the reward exchange account by the combined reward points of the second type requested to be redeemed by the user for the item selected by the user.

Ex. 1001, C1 (Ex Parte Reexamination Certificate).

D. Instituted Ground of Unpatentability

We instituted review on the following grounds:

Basis	Challenged Claims
§ 101	1, 2, 5, 6, 9, 10, 13, and 14
§ 112 ¶¶ 2, 6 ³	5, 13

II. ANALYSIS

A. Claim Construction

For petitions filed before November 13, 2018, we construe claim terms in an unexpired patent according to their broadest reasonable construction in light of the specification of the patent in which they appear.

³ Paragraphs 2 and 6 of 35 U.S.C. § 112 were replaced with newly designated § 112(b) and § 112(f) by § 4(c) of the AIA, and AIA § 4(e) makes those changes applicable “to any patent application that is filed on or after” September 16, 2012. *Alcon Research Ltd. v. Barr Labs., Inc.*, 745 F.3d 1180, 1183 n.1 (Fed. Cir. 2014). Because the application resulting in ’402 patent was filed before that date, we will refer to the pre-AIA version of § 112.

37 C.F.R. § 42.200(b); *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1328 (Fed. Cir. 2015) (affirming use of the broadest reasonable construction standard in a covered business method patent review).⁴

Petitioner proposes constructions for the term “consideration” and various means-plus-function terms recited in claims 5 and 13. Pet. 44–63. Patent Owner responds that no terms other than the means-plus-function terms require express construction. PO Resp. 8.

We address the claim construction of the means-plus-function terms below. Aside from the means-plus-function terms, we determine that no other terms require express construction for this Decision. *See Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (only terms in controversy must be construed and only to the extent necessary to resolve the controversy).

1. Principles of Law

Use of the word “means” in a claim gives rise to a rebuttable presumption that 35 U.S.C. § 112(6) analysis applies to interpret the claim. *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348 (Fed. Cir. 2015). Construing a means-plus-function claim term is a two-step process, wherein we first identify the claimed function and then determine what structure, if any, disclosed in the specification corresponds to the claimed function. *Id.*

⁴ This Petition was filed before the effective date of the amendment to 37 C.F.R. § 42.100 that changed the claim construction standard applied in *inter partes* reviews. *Changes to the Claim Construction Standard for Interpreting Claims in Trial Proceedings Before the Patent Trial and Appeal Board*, 83 FR 51340 (Nov. 13, 2018) (to be codified at 37 C.F.R. pt. 42). Thus, we use the broadest reasonable interpretation claim construction standard for this proceeding.

at 1351; *Med. Instrumentation & Diagnostics Corp. v. Elekta AB*, 344 F.3d 1205, 1210 (Fed. Cir. 2003); *Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 296 F.3d 1106, 1119 (Fed. Cir. 2002).

For computer-implemented inventions, this corresponding structure must be more than a general purpose computer or microprocessor. See *Aristocrat Techs. Australia Pty Ltd. v. Int'l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008). Rather, “[w]hen dealing with a ‘special purpose computer-implemented means-plus-function limitation,’ [the Federal Circuit] require[s] the specification to disclose the algorithm for performing the function.” *Function Media, L.L.C. v. Google, Inc.*, 708 F.3d 1310, 1318 (Fed. Cir. 2013); accord *Blackboard, Inc. v. Desire2Learn, Inc.*, 574 F.3d 1371, 1384 (Fed. Cir. 2009) (“[W]hen a computer is referenced as support for a function in a means-plus-function claim, there must be some explanation of how the computer performs the claimed function.”). “The specification can express the algorithm ‘in any understandable terms including as a mathematical formula, in prose, or as a flow chart, or in any other manner that provides sufficient structure.’” *Noah Sys. Inc. v. Intuit Inc.*, 675 F.3d 1302, 1312 (Fed. Cir. 2012) (internal quotation and citation omitted). But a general purpose computer may be sufficient as the corresponding structure if the claims merely recite a “general computing function,” such as a “means . . . for storing . . . data.” *In re Katz Interactive Call Processing Patent Litigation*, 639 F.3d 1303, 1316 (Fed. Cir. 2011).

2. “memory means” (claim 5) and “means for storing” (claim 13)

Independent claim 5 is directed to a reward server computer that includes:

memory means for storing a plurality of reward accounts, each of said reward accounts associated with a different user and comprising a plurality of first sets of reward points of a first type previously earned by a user from a first reward issuing entity as a result of a plurality of first purchase transactions using a credit card linked to a credit card reward program of the first reward issuing entity[.]

Ex. 1001, C1, 2:24–32.

Similarly, independent claim 13 is directed to a reward exchange computer that includes:

means for storing in a reward exchange account a second set of reward points of a second type earned by the user as a result of a second transaction executed between the user and a second reward issuing entity which is different from the first reward issuing entity[.]

Id. at 4:41–45.

We observe first that the parties do not dispute that a general purpose computer component can perform the function of the “memory means” or “means for storing.” Patent Owner asserts that a “skilled artisan would understand that *the memory unit of any general purpose computer would suffice*, provided it is inclusive of an accessible server capable of holding data about a user.” PO Resp. 39 (citing Ex. 1001, 5:17–18, 44–45; Ex. 2018 ¶ 31) (emphasis added). Patent Owner further argues that a POSITA would understand the ’402 patent as disclosing that performance of the stated function may be achieved by enabling the memory unit to receive, accumulate and separately store transactional data associated with a rewards program of a reward issuing entity. *Id.* at 40 (citing Ex. 1001, 5:18–26, 1:48–55, 3:12–25, 5:50–54, Fig. 3). Petitioner argues that no particular memory device, processor, or networking equipment is disclosed in the ’402 patent’s specification. Pet. 46. “[T]he structure for the means claimed in

claim 5 (*memory means for storing, communication means for communicating, and processing means*) *corresponds to generic components of ‘any type of accessible server computer.’*” *Id.* (citing Ex. 1006 ¶ 50 (“Since the reward server is a generic server, the components within the reward sever are also generic.”)) (emphases added).

The Specification of the ’402 patent supports both Petitioner’s and Patent Owner’s position that a generic computer component, e.g., generic computer memory, performs the claimed functions. Specifically, the ’402 patent teaches that “[t]he trading server computer 20 ‘obtains’ the reward points from a reward server 10, 12, 14 stored in the user’s account 52” (Ex. 1001, 6:29–31) and that the “reward server computers 10,12, 14 may be of *any type of accessible server capable of holding data* about a user along with a corresponding earned value that is negotiable for other goods, services, or points of another system” (*id.* at 5:44–47 (emphasis added)). The ’402 patent does not describe “memory,” the storing of data, or any storage/memory component as having any function that differs from a generic storing function achieved by any general purpose computer without special programming. Ex. 1001, 8:45–47 (“[T]he server has memory means for storing the user account information, user profiles and rules specified by the user, system, or merchant.”). Our reading of the ’402 patent is consistent with the claim language, which also does not ascribe any particular function to the “memory means” or “means for storing” other than the generic storing of data. For example, claim 5 recites that the memory means stores specific data, “a plurality of reward accounts”; however, the claim does not indicate that the storing function performed is anything other than a generic storing function unaffected by the type of data stored.

Based on the above, we determine that “memory means” and “means for storing” falls within the holding of *Katz* that a general purpose computer may be sufficient as the corresponding structure. In *Katz*, claim terms involving basic “processing,” “receiving,” and “storing” functions were not necessarily indefinite because a general purpose computer need not “be specially programmed to perform the recited function.” *Katz*, 639 F.3d at 1316. Likewise, here, “memory means” and “means for storing” may be performed by a general purpose computer that has not been specially programmed to perform the recited functions.

3. “*communication means*” (claim 5) and “*means for storing*” (claim 13)

A similar analysis applies to “communication means,” recited in claims 5 and 13. Claim 5 recites a “communication means”

for communicating over a computer network with a plurality of user computers, each operated by a different user and a reward exchange computer that stores in a reward exchange account a second set of reward points of a second type earned by the user as a result of a second transaction executed between the user and a second reward issuing entity which is different from the first reward issuing entity[.]

Ex. 1001, C1, 2:33–41. Claim 13 recites a “communication means”

for communicating over a computer network with a plurality of user computers, each operated by a user, and a reward server computer comprising a plurality of reward accounts, each of the reward accounts associated with a different user and storing a plurality of first sets of reward points of a first type earned by a user from a first reward issuing entity as a result of the user executing a plurality of first purchase transactions using a credit card linked to a credit card reward program of the first reward issuing entity[.]

Id. at C1, 4:28–40.

Patent Owner asserts that a POSITA

would understand that *the communications unit of any general purpose computer would suffice, provided it is adapted for communication with other computer systems through a network such as the internet* (Ex. 1001 at 5:17-18; 5:44-47; 5:58-63; FIG. 4). Exhibit 2018, ¶ 32. As to the algorithm, the skilled artisan would understand the '402 patent as disclosing that performance of the stated function may be achieved by enabling the communications unit to connect with a network that likewise connects with several other computer systems, including users computers and a reward exchange computer, by a series of data flow connections (Ex. 1001 at 5:10-14; 8:39-45; FIG. 4). *Id.* *Such data flow connections would include well-known internet connections* (Ex. 1001 at 5:26-31; 5:58-63). *Id.* The network connection would include a data flow connection sufficient for the transmission of data flows between the reward server and a reward exchange server that stores rewards point data of a type different from the reward server that would enable interaction between the processors of the reward server and the exchange server (Ex. 1001 at 6:29-40; 9:3-10; FIGS. 4, 5). *Id.*

PO Resp. 40–41 (emphases added).

For this term, Petitioner again argues that “[t]he structure for the means claimed in claim 5 (memory means for storing, *communication means for communicating*, and processing means) *corresponds to generic components of ‘any type of accessible server computer.’*” Pet. 46 (citing Ex. 1006 ¶ 50 (“Since the reward server is a generic server, the components within the reward sever are also generic.”)) (emphases added).

We find that the claim limitation itself (of either claim 5 or 13) and the portions of the '402 patent about “communication means” do not identify any function performed by the communication means that differs from a generic communication function achieved by any general purpose computer without special programming. First, other than specifying that the

“communication means” communicates over a computer network with user computers and a reward server/exchange computer, the remaining limitations for the “communication means” are directed to the reward server/exchange computer, and not the function of communicating. Thus, the claim limitation itself does not indicate any special programming is needed for the communication. The Specification is also consistent with our determination. For example, the ’402 patent teaches, with reference to Figure 4, that the plurality of reward server computers 10, 12, 14, trading server 20, merchant computer 30, and user computer 40 are in communication with network 2. Ex. 1001, 5:10–13. According to the ’402 patent, the “network may comprise any type of communication process where computers may contact each other.” *Id.* at 5:13–14. Further, the ’402 patent teaches that trading server computer 20 is in communication through network 2 with a user on user computer 40 and is additionally able to connect to reward server computers 10, 12, 14 through network 2 “*in accordance with techniques well known in the art for Internet communications.*” *Id.* at 5:26–31 (emphasis added). Additionally, the ’402 patent teaches that “[t]he trading server also has communications means to allow users to access the server and to allow the trading server to contact reward servers[.]” *Id.* at 8:47–51. These passages of the ’402 patent support Patent Owner’s position that for the recited “communication means,” “the communications unit of any general purpose computer would suffice, provided it is adapted for communication with other computer systems through a network such as the internet.” PO Resp. 40.

Based on the above, we determine that “communication means” falls within the holding of *Katz* that a general purpose computer may be sufficient

as the corresponding structure. Here, “communication means” may be performed by a general purpose computer that has not been specially programmed to perform the recited functions. *See Katz*, 639 F.3d at 1316.

4. “*processing means*” (claims 5 and 13)

Claim 5 recites

processing means programmed to:

provide a web page to a selected one of a plurality of user computers, the selected user computer associated with the user, the web page comprising a control for initiating communication over the computer network with the reward exchange computer; initiate, in response to receiving from the user operating the user computer a selection of the control from the web page, communication over the computer network with the reward exchange computer to exchange a quantity of reward points of the first type, designated by the user operating the user computer, from the reward account on the reward server computer into reward points of the second type for adding to the reward exchange account on the reward exchange computer by:

decreasing the quantity of reward points of the first type designated by the user from the reward account on the reward server computer,

causing the reward exchange computer to

convert the quantity of reward points of the first type decreased from the reward account on the reward server computer into a corresponding amount of reward points of the second type at a predetermined reward server conversion rate,

add the corresponding amount of reward points of the second type to the reward exchange account, and

combine the corresponding amount of reward points of the second type added to the reward exchange account with the second set of reward points of the second type previously stored in the reward exchange account, and

conveying consideration to the reward exchange computer, the consideration having a value equivalent to the quantity of reward points of the first type decreased from the reward account on the reward server computer;

whereby the user is able to request the reward exchange computer to redeem at least some of the combined reward points of the second type from the reward exchange account for an item selected by the user, and the reward exchange computer is able to redeem the requested combined reward points of the second type from the reward exchange account by decreasing the reward exchange account by the combined reward points of the second type requested to be redeemed by the user for the item selected by the user.

Ex. 1001, C1, 2:24–3:20.

These limitations essentially concern the functions of: (1) providing a webpage having a control that a user can select to initiate communication with a reward exchange computer for a reward point exchange; (2) converting reward points by decreasing a first type of reward point and adding a corresponding amount of points to second type; (3) conveying consideration to the reward exchange computer; and (4) redeeming some of the second type of points a user selected item. *See id.* Turning to the Specification, we observe that Figure 6 is a flow diagram showing the process for a user to redeem rewards, Figure 7 is a flow diagram of the user request for purchasing of an item at a merchant site, and Figure 10 is flow diagram of the process where a user is redirected from a reward program to the trading server. Ex. 1001, 4:62–65, 5:5:3–5. For example, Figure 6 is provided below.

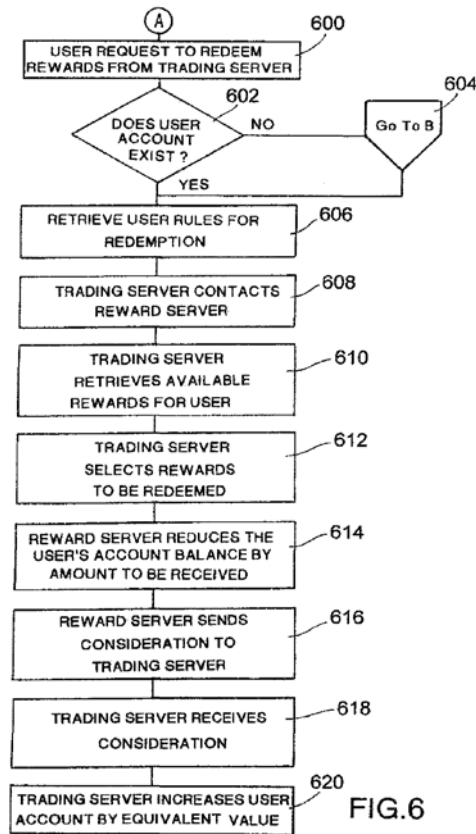


Figure 6, as shown above, shows the “method of allowing the user to redeem the accumulated reward points from one or more of a plurality of reward entities[.]” *Id.* at 6:5–7. The corresponding portion of the ’402 patent explains that:

The trading server system would allow users to “log in” to access the functionality provided where the user may interact with applications, forms or controls. For example, *the user may view his account information by using a web browser to enter the appropriate identification information and then select buttons, links or other selectable objects to navigate to the part of the system desired.* If the user does not yet have an account (step 602), then the user may be enrolled per the flow diagram of FIG. 8 (step 604) as discussed below. *The user, from the user computer, makes a request to the trading server computer 20 via communications flow 102 (step 600), requesting redemption*

through the network 2 for a portion of the pre-accumulated reward points stored for the user in one of the rewarding entities.

Ex. 1001, 6:8–21 (emphases added). The '402 patent further teaches that

[t]he trading server computer 20 “obtains” the reward points from a reward server 10, 12, 14 stored in the user’s account 52 by contacting the appropriate reward server via communication flow 110 (step 608) . . . [and] reward server computer 10 decreases the user’s reward point account 52 by the requested number of reward points (step 614) . . . [and] [t]he reward server computer 10 conveys consideration to the trading server computer 20 where the consideration corresponds to the number of reward points decreased in the user’s account 52 on the reward server 10 (step 616). . . .The trading server computer 20 increases the reward exchange account 54 associated with the user by the received number of points (step 620). The trading server computer 20 in turn, receives the consideration from the reward server computer 10 (step 618).

Id. at 6:29–57. Figure 7, in most relevant part, refers to the process of redeeming points for a user selected item. *See id.* at Fig. 7. In step 704, the user is redirected from a merchant server to the trading server, which determines if the user has sufficient reward points to purchase the selected item. *Id.* at 7:14–15. “If the user does not have enough points in his reward exchange account at the trading server 20, then the process of trading more points from the user’s reward point account 52 into his reward exchange account 54 is executed by branching to the flow diagram at exit point A (step 712) which brings the process to the flow diagram in [Figure 6].” *Id.* at 7:22–28. Similarly, Figure 10 shows the step of redirecting the user from the reward server to the trading server, back to Step A (Figure 6), if the user seeks to redeem reward points. *Id.* at Fig. 10.

On this basis, we find that Figures 6, 7, and 10 concern the same processing functions recited in aforementioned limitations of independent

claim 5. Accordingly, based on all of the above, we construe the corresponding structure in the '402 patent for the aforementioned "processing means" as a special purpose computer implementing the algorithm set forth in Figure 6, 7, and 10. Furthermore, we determine that the same analysis applies to the "processing means" recited in independent claim 13, and the construction is the same.

B. Covered Business Method Patent Review Standing

Section 18(a)(1)(B) of the AIA requires that Petitioner, or its real party in interest or privy, "has been sued for infringement of the patent." *See also* 37 C.F.R. § 42.302(a) ("A petitioner may not file with the Office a petition to institute a covered business method patent review of the patent unless the petitioner, the petitioner's real party-in-interest, or a privy of the petitioner has been sued for infringement of the patent or has been charged with infringement under that patent."). Subsections (b) and (c) of rule 302 also require that

(b) A petitioner may not file a petition to institute a covered business method patent review of the patent where the petitioner, the petitioner's real party-in-interest, or a privy of the petitioner is estopped from challenging the claims on the grounds identified in the petition.

(c) A petitioner may not file a petition to institute a covered business method patent review of the patent where, before the date on which the petition is filed, the petitioner or real party-in-interest filed a civil action challenging the validity of a claim of the patent.

37 C.F.R. § 42.302(b)–(c).

Petitioner asserts that it was sued for infringement of the '402 patent in *Signature Sys., LLC v Am. Express Co., and Am. Express Travel Related Serv. Co., Inc.*, Case No. 1:15-cv-20063, in the District of Southern Florida.

Pet. 6, 23. Petitioner also states that it is not estopped from challenging the claims on the grounds identified in the Petition. Pet. 23. Patent Owner does not dispute that it has sued Petitioner or that Petitioner has standing. *See generally* PO Resp. Accordingly, we agree that Petitioner has standing to file its Petition.

C. Covered Business Method Patent Eligibility

Section 18(d)(1) of the AIA defines a covered business method patent as “a patent that claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service, except that the term does not include patents for technological inventions.” *See also* 37 C.F.R.

§ 42.301(a) (stating the same). To determine whether a patent is a covered business method patent, “§ 18(d)(1) directs us to examine the claims when deciding whether a patent is a [covered business method] patent.” *Blue Calypso, LLC v. Groupon, Inc.*, 815 F.3d 1331, 1340 (Fed. Cir. 2016) (stating that “the claims at issue in the instant case have an express financial component in the form of a subsidy, or financial inducement, that encourages consumers to participate in the distribution of advertisements”); *Unwired Planet, LLC v. Google, Inc.*, 841 F.3d 1376, 1382 (Fed. Cir. 2016) (“CBM patents are limited to those with claims that are directed to methods and apparatuses of particular types and with particular uses ‘in the practice, administration, or management of a financial product or service.’”).

*1. Used in the Practice, Administration, or Management
of a Financial Product or Service*

In the Decision on Institution, we determined that claim 1 is directed to a “method . . . for performing data processing or other operations used in

the practice, administration, or management of a financial product or service.” AIA § 18(d)(1). Dec. 12–14.

Petitioner asserts that the challenged claims are expressly directed at financial transactions because “the ’402 Patent generally and the Challenged Claims in particular relate to using reward points accumulated through credit card purchase transactions, and then used as currency to purchase goods and services, with monetary credits being exchanged between entities to compensate them for the transfer of the reward points.” Pet. 27–28 (citing Ex. 1001, Fig. 7; Ex. 1006 ¶ 23).

After institution, Patent Owner did not address (or dispute) whether the ’402 patent “claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service.” *See generally*, PO Resp.; Sur.

Based on the complete record, we determine that at least claim 1 of the ’402 expressly recites a method for performing data processing or other operations used in the practice, administration, or management of a financial product or service. This is because claim 1 expressly recites a financial purchase transaction using a credit card in the first step:

[A] user *executing a plurality of first purchase transactions using a credit card* linked to a credit card reward program of a first reward issuing entity, each of the first purchase transactions earning a first set of reward points of a first type from the first reward issuing entity

Ex. 1001, C1 (emphasis added). The remaining limitations of claim 1 recite steps for the exchange and redemption of “reward points,” which were earned by the credit card purchase transactions explicitly recited as step in claim 1. Additionally, we maintain, as discussed in the Decision on

Institution, that the '402 patent teaches that “[t]he term point is used to reference any earned value that has a *cash equivalent or negotiable worth*.” Ex. 1001, 6:43–44 (emphasis added). Thus, the '402 patent also attributes some value to “points,” e.g., reward points, which have a cash equivalent or worth. In our view, the claimed method is not “incidental to” or “complementary to” a financial activity because the claims are expressly directed to the use of a credit card for purchase transactions and the redemption of “reward points,” earned from the credit card purchases, for selected items. *See Unwired Planet, LLC v. Google Inc.*, 841 F.3d 1376, 1382 (Fed. Cir. 2016).

Accordingly, we determine that the '402 patent recites a claim for a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service.

2. *Technological Invention*

Under AIA § 18(d)(1), “the term ‘covered business method patent’ . . . does not include patents for technological inventions.” Per 37 C.F.R. § 42.301(b), “[i]n determining whether a patent is for a technological invention,” we consider “whether [1] the claimed subject matter as a whole recites a technological feature that is novel and unobvious over the prior art, and [2] solves a technical problem using a technical solution,” respectively, the first and second prongs of the technical invention exception.

In general, the Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756 (Aug. 14, 2012) (“TPG”), provides the following guidance with respect to claim content that typically does not exclude a patent from the category of a technological invention:

(a) Mere recitation of known technologies, such as computer hardware, communication or computer networks, software, memory, computer-readable storage medium, scanners, display devices or databases, or specialized machines, such as an ATM or point of sale device.

(b) Reciting the use of known prior art technology to accomplish a process or method, even if that process or method is novel and non-obvious.

(c) Combining prior art structures to achieve the normal, expected, or predictable result of that combination.

Id. at 48,763–64.

Petitioner argues that the “general purpose computing features recited by the Challenged Claims amount to non-innovative, commonplace computer components,” and that the claimed “non-computing features . . . were already known before the claimed priority date of the ’402 Patent.” Pet. 29. Using claim 1 as an example, Petitioner asserts that the only computer-related components recited are “a reward server,” “a reward exchange computer,” and “a web page.” *Id.* at 31. Petitioner argues that the ’402 patent describes the “reward server,” as “[a]ny type of reward server may also be used in this system” and does not distinguish the “reward server” from known components in the admitted “PRIOR ART.” Pet. 31–32 (citing Ex. 1001, 5:17–18, 5:44–47, Figs. 1, 4; Ex. 1006 ¶¶ 69–70). Petitioner argues also that “reward exchange computer” is described by the ’402 patent as a trading server computer that “may be *any type of computer* system that allows users to access the system in order to perform the processes involved in this invention.” Pet. 32 (citing Ex. 1001, 5:58–61). Petitioner adds that the use of a “web page” was known because the ’402 patent states that “the merchant computer 30 is representative of *any site* that can communicate with the network that has goods or services for sale or

trade” and “all of the systems described are accessible through the Internet and the user may freely navigate to *any site by means well known in the art.*” *Id.* at 32 (citing Ex. 1001, 1:56–2:22, 5:31–34, 5:61–64).

Petitioner also argues that the non-computing components recited in claim 1 were known and described in the prior art. Pet. 34–35. First, Petitioner asserts that Patent Owner concedes that several of the claimed features are in the admitted prior art. *Id.* (citing Ex. 1001, Figs. 1–3, 1:39–3:25; Ex. 1006 ¶¶ 93–96). Second, Petitioner relies on “Welcome to The Membership RewardsSM Program From American Express,” dated October 1995 (Ex. 1004, “Rewards”), U.S. Patent No. 5,774,870 to Storey (Ex. 1005, “Storey”), Patent Owner’s purportedly admitted prior art, and the testimony of Dr. Chatterjee to argue that it would have been obvious to perform the steps in claim 1 over the Internet instead of via a telephone as taught by Rewards. Pet. 34–39; *see* Ex. 1006 ¶¶ 120–121.

After institution, Patent Owner did not address or dispute this issue. *See generally*, PO Resp.; Sur.

Based on the complete record, Petitioner’s position is persuasive. We find that the ’402 patent teaches that “reward server computers 10, 12, 14 may be of *any type of accessible server* capable of holding data about a user along with a corresponding earned value that is negotiable for other goods, services, or points of another system.” Ex. 1001, 5:44–47 (emphasis added); *see also id.* at 5:17–18 (“Any type of reward server may also be used in this system.”). Referring to Figure 4, the ’402 patent indicates that a user of this system may acquire and accumulate rewards through any prior art means such as shown on Figure 1. Ex. 1001, 5:24–26. Figure 1, labeled “Prior Art,” is “representative of the prior art marketing arrangements used in

reward programs” in which a traveler can generate rewards in the form of frequent flyer miles. *Id.* at 2:53–62, 4:52–53. Thus, in this regard, the ’402 patent supports Petitioner’s position that reward servers and reward server computers were well-known *prior art* technology, which the Patent Owner had admitted was known previously.

For the recited “reward exchange computer” and “web page” in claim 1, the ’402 patent teaches similarly that “trading server computer 20 is in communication through the network 2 with a user on a user computer 40” and connects to reward server computers 10, 12, 14 “*in accordance with techniques well known in the art for Internet communications.*” Ex. 1001, 5:26–31 (emphasis added). The “trading server computer may be *any type of computer system* that allows users to access the system in order to perform the processes involved in this invention.” *Id.* at 5:58–61 (emphasis added). The ’402 patent also teaches that “all of the systems described are accessible through the Internet and *the user may freely navigate to any site by means well known in the art.*” *Id.* at 5:61–64 (emphasis added); *see also id.* 5:31–34 (“The merchant computer 30 is representative of any site that can communicate with the network that has goods or services for sale or trade.”). Thus, we observe that the cited portions of the ’402 patent and language of claim 1 are consistent with Petitioner’s arguments. Further, Petitioner’s arguments regarding the “non-computing components” recited in claim 1 are persuasive as these are consistent with the disclosure in the relied upon references (e.g., Rewards and Storey) and supported by the testimony of Dr. Chatterjee. *See* Ex. 1006 ¶¶ 120–121.

Accordingly, we determine that Petitioner has shown sufficiently that at least claim 1 of the ’402 patent does not recite a technological feature that

is novel and unobvious over the prior art. Given that determination, we need not reach the second prong of whether the claim solves a technical problem using a technical solution. Based on the foregoing, Petitioner has shown persuasively that the '402 patent is not exempt from CBM patent review based on a "technological invention" exception under 37 C.F.R. § 42.301(b).

3. Conclusion for CBM Eligibility

Petitioner persuasively shows that the '402 patent is not exempt from covered business method patent review based on the "technological invention" exception under 37 C.F.R. § 42.301(b). We find that at least one claim of the '402 patent is directed to a financial activity and does not recite a technological invention. Accordingly, we find that the '402 patent is eligible for CBM patent review.

D. Timeliness of the Petition

In our institution decision we found that the Petition was timely filed, notwithstanding Patent Owner's allegation of undue delay. *See* Dec. 18–20. After institution, the parties have not provided any additional arguments or evidence on this issue. Based on the complete record, we maintain that denial of institution was not warranted in this proceeding. *See id.* In particular, Patent Owner directs us to no statute, regulation, case law, or portion of §18 of the AIA that bars the institution of CBM patent review because of undue delay in filing a petition. As discussed in detail above, Petitioner has established sufficiently for the purposes of this Decision that it has standing to seek CBM patent review and that the '402 patent is eligible for this review.

E. Estoppel

Petitioner contends that Patent Owner is collaterally estopped from arguing that the challenged claims in the '402 patent are patent eligible because this same issue was addressed in a reexamination of U.S. Patent No. 8,600,807 (“the '807 patent”). Pet. 63–65; Reply 63–65. According to Petitioner, Patent Owner conceded that the scope of the claims in the '807 patent and the '402 patent are essentially the same. Petitioner asserts Patent Owner cannot now argue that the challenged claims here are patent-eligible. *Id.* at 64.

We are mindful that the reexamination of the related '807 patent may be instructive on similar issues that may arise here (e.g., claim construction). Even so, we are not persuaded that collateral estoppel applies. For one, none of the four factors Petitioner sets forth for applying estoppel (*see* Pet. 63), weigh in Petitioner’s favor because the '807 patent is a separate patent with different claims. Thus, we are not persuaded that identical issues have been previously presented and litigated in the reexamination of the '807 patent, nor do we agree that Patent Owner previously had an opportunity to fully defend the eligibility of the '402 patent during the reexamination of a different patent.⁵

⁵ Petitioner also argues that abandonment of U.S. Patent Application No. 14/068,243 (a continuation application of the '402 patent) demonstrates that the challenged claims of the '402 patent are patent-ineligible. Pet. 3–4. We are not persuaded that the abandonment of that patent application controls our analysis here, especially because Patent Owner has explained that its express abandonment was not based on the section 101 rejection. *See* Prelim. Resp. 15.

F. Level of Skill in the Art

Petitioner asserts that a person of ordinary skill in the art (“POSITA”) for the ’402 patent would have been a person with a Bachelor’s Degree in Electrical Engineering, Computer Engineering, or Computer Science, or equivalent work experience, and at least one to two years of experience designing or working with web interfaces and basic Internet communication protocols, or a person with a Master’s Degree in Electrical Engineering, Computer Engineering, or Computer Science (or related subjects). Pet. 21–22 (citing Ex. 1006 ¶ 19).

Patent Owner does not disagree with Petitioner, but adds that a POSITA at the time of the invention would have had sufficient knowledge in distributed computing, databases and e-commerce. PO Resp. 8–9.

Based on the complete record, we adopt the Petitioner’s proposed level of ordinary skill in the art. We do note, however, that no issue before us turns on the precise definition of the skill level.

G. Subject Matter Eligibility of Challenged Claims Under § 101

Petitioner asserts claims 1, 2, 5, 6, 9, 10, 13, and 14 of the ’402 patent recite patent ineligible subject matter under § 101. Pet. 1, 22. Patent Owner disagrees that the challenged claims are patent ineligible, and relies on the Declaration of Dr. Michael D. Siegel PhD. Exhibit 2018.

1. Principles of Law of Patent-Eligible Subject Matter Under 35 U.S.C. § 101

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, 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., id.* at 187 (“It is now commonplace that an *application* of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.”).

If the claim is “directed to” an abstract idea, we turn to the second step of the *Alice* and *Mayo* framework, where “we must examine the elements of the claim to determine whether it contains an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application.” *Alice*, 573 U.S. at 221 (quotation marks omitted). “A claim that recites an abstract idea must include ‘additional features’ to ensure ‘that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].’” *Id.* (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.*

Additionally, the PTO published revised guidance on the application of § 101. *See* 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) (“*Guidance*”).⁶ Under the *Guidance*, we first

⁶ We also have considered the October 2019 Patent Eligibility Guidance Update at https://www.uspto.gov/sites/default/files/documents/peg_oct_2019_update.pdf.

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)).

See Guidance, 84 Fed. Reg. at 51–55. Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then look 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 id. at 56.

2. Step 1: Statutory Category

Under the *Guidance*, we first must determine “whether the claim is to a statutory category (Step 1).” *Guidance*, 84 Fed. Reg. at 53. The first step of the eligibility determination asks if the claim is to a process, machine, manufacture, or composition of matter. The parties present no substantive dispute for consideration in this step.

Independent claim 1 is directed to “[a] computer-implemented method for earning, exchanging and redeeming reward points.” Independent claim 9 similarly recites, a “computer-implemented method of earning, exchanging and redeeming reward points.” Independent claims 5 and 13 are directed to a “reward server computer” and a “reward exchange computer,” respectively. Thus, all the challenged independent claims are directed to

either a process or a machine. We determine that these claims are directed to at least one statutory category.

Claims 2, 6, 10, and 14, which depend directly or indirectly from these independent claims, similarly recite an exchange, a network, or a system, and are directed to at least one statutory category.

3. Step 2A, Prong 1: Whether the Challenged Claims Recite an Abstract Idea

Under the next step in the *Guidance* (Step 2A, Prong 1), we must determine whether the claims recite limitations that fall within any of the recognized categories of abstract ideas. The *Guidance* identifies certain groupings of abstract ideas that have been recognized under the case law: mathematical concepts, certain methods of organizing human activity, such as fundamental economic principles or practices, and mental processes. *Guidance*, 84 Fed. Reg. at 52. As part of this inquiry, we must examine the relevant limitations in the context of the claim language as a whole. *Alice*, 573 U.S. at 218 n.3. “The § 101 inquiry must focus on the language of the [a]sserted [c]laims themselves.” *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1149 (Fed. Cir. 2016); *Accenture Global Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1345 (Fed. Cir. 2013) (admonishing that “the important inquiry for a § 101 analysis is to look to the claim”); *see also Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343, 1346 (Fed. Cir. 2014) (“We focus here on whether the claims of the asserted patents fall within the excluded category of abstract ideas.”). “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). Yet our reviewing court has cautioned that

characterizing claims at a “high level of abstraction and untethered from the language of the claims all but ensures that the exceptions to § 101 swallow the rule.” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1337 (Fed. Cir. 2016).

a. Petitioner’s Contentions

The Petition analyzes each limitation of independent claim 1 and the limitations of independent claims 5, 9, and 13, as well as the limitations of dependent claims 2, 6, 10, and 14, in a similar manner as, and relative to, the limitations of independent claim 1. Pet. 65–77; *see id.* at 75 (“Claims 2, 6, 10, and 14 merely add the limitation that the ‘control’ for initiating the communication over the computer to exchange the reward points ‘comprises a hyperlink or a button.’ Ex. 1001 at 13:32–39, 14:33–40, 15:40–47, 16:50–57; Ex. 1006, ¶ 160. Conventional internet tools such as a hyperlink or button to execute a command in a web page constitute commonplace graphical user interface features that do not redeem the abstractness of the claims.”). To the extent that any of the challenged claims require a different treatment, it is provided below.

Petitioner asserts that claim 1 covers a process performed by a computer that essentially stores, transfers, converts, adds, combines, and conveys data in the form of reward accounts, reward points, and consideration. Pet. 68. Considering these limitations as a whole, Petitioner contends that the goal of this data manipulation is to “convert the data from one type of currency (a first type of reward points) into another type of currency (a second type of reward points).” *Id.* Thus, according to Petitioner, claim 1 merely recites a generic computer for performing the *abstract idea of currency exchange through transferring and exchanging*

“*reward points*” data. *Id.* (emphasis added). Petitioner adds that currency conversion is a *fundamental economic practice* and that claim 1’s “adding” reward points, “decreasing” reward points, combining converted points to existing reward points, and/or “conveying consideration” cover the steps of addition and subtraction that “can simply be performed by a human and *have been* performed by humans for hundreds of years.” Pet. 72 (citing Ex. 1006 ¶ 158).

b. Patent Owner’s Contentions

Patent Owner argues that the claimed process is not currency exchange because reward points are not currency. PO Resp. 15. According to Patent Owner, “[r]eward points are not legal tender and have value to the customer only at the whim of the issuing entity.” *Id.* Patent Owner contends that

[c]urrency is a ubiquitous instrument that has a physical manifestation, e.g. paper or coins. This makes currency easily transferable and useable for transactions between parties. Reward points, however, exist only in an electronic format, stored in the memory of a computer that is controlled by the issuing entity such as American Express.”

Id. at 15. Patent Owner adds that the claims require the reward server computer to transfer consideration to the exchange server computer as part of the exchange transaction and that, in turn, compensates the reward exchange computer for taking on liability to the user. *Id.* at 16. In its Sur-Reply, Patent Owner adds that “[r]eward points are a conditional benefit provided by an issuing entity (*e.g.*, a retailer) to an individual (*e.g.*, a customer) in return for an established behavior (*e.g.*, repeat purchases between customer and retailer).” Sur. 7. Patent Owner contends also that reward points are “akin to personalized coupons that serve only to

incentivize further commercial transactions between one specific individual and an issuing entity[,]” which Patent Owner contends is “different from currency, as represented by a system of money that is in circulation as a medium of exchange in a country.” *Id.*

c. Discussion

For the reasons discussed below, we determine that the challenged claims recite a judicial exception recognized under the *Guidance* and in prior cases as an abstract idea.

We agree with Petitioner that claim 1 recites the fundamental economic practice of “currency exchange through transferring and exchanging reward points data.” Specifically, claim 1 recites a method for “exchanging and redeeming reward points” that includes the steps of:

decreasing the quantity of reward points of the first type designated by the user from the reward account on the reward server computer,

causing the reward exchange computer to

convert the quantity of reward points of the first type decreased from the reward account on the reward server computer into a corresponding amount of reward points of the second type at a predetermined reward server conversion rate,

add the corresponding amount of reward points of the second type to the reward exchange account, and

combine the corresponding amount of reward points of the second type added to the reward exchange account with the second set of reward points of the second type previously stored in the reward exchange account; and

conveying consideration to the reward exchange computer, the consideration having a value equivalent to

the quantity of reward points of the first type decreased
from the reward account on the reward server computer[.]

Ex. 1001, C1, 1:59–2:12. As Petitioner notes, these steps recite the steps for currency exchange through transferring and exchanging reward points data by “decreasing the quantity of reward points of the first type,” “convert[ing] the quantity of reward points of the first type decreased . . . into a corresponding amount of reward points of the second type at a predetermined reward server conversion rate,” “add[ing] the corresponding amount of reward points of the second type to the reward exchange account,” combin[ing] the corresponding amount of reward points of the second type added to the reward exchange account with the second set of reward points of the second type previously stored in the reward exchange account,” and “conveying consideration to the reward exchange computer.”

Further, we agree with Petitioner that “currency exchange through transferring and exchanging reward points data” is a fundamental economic practice. As shown in “Welcome to The Membership RewardsSM Program From American Express,” dated October 1995 (Ex. 1004, “Rewards”), members can “[t]ransfer points into a choice of major airline and hotel programs.” Ex. 1004, 10. More specifically, Rewards indicates that members

[can] get free airline tickets and hotel stays, you can transfer *Membership Rewards* points into any participating frequent flyer or frequent guest program. Before you call to request a transfer, be sure to confirm the availability of your reward with the airline or hotel. *You can transfer points in increments of 1,000 to top off your existing airline or hotel account balances. Or you can transfer the entire amount of points needed for the desired reward.* Point transfers can be completed in as little as three to five days. Please allow two weeks for transfers into international airline programs.

Id. (emphasis added). Thus, at least in this regard, the record supports Petitioner’s position.

Additionally, our determination is not changed by Patent Owner’s arguments that the reward points are not currency. *See* PO Resp. 15 (“Reward points are not legal tender and have value to the customer only at the whim of the issuing entity.”). To start, Patent Owner’s argument that currency requires a physical form does not alter our determination. PO Resp. 15. Specifically, Patent Owner states that

[c]urrency is a ubiquitous instrument that has a physical manifestation, e.g. paper or coins. This makes currency easily transferable and useable for transactions between parties. Reward points, however, exist only in an electronic format, stored in the memory of a computer that is controlled by the issuing entity such as American Express. This electronic-only format limits its usefulness as legal tender and results in the deficiencies recognized by the inventor of the ‘402 patent that led him to develop the claimed reward points exchange system and methodology to overcome such deficiencies.

Id. We observe first that Patent Owner does not cite to any persuasive evidence (e.g., the disclosure of the ‘402 patent or any testimonial evidence) for these conclusory statements. Thus, at best, Patent Owner’s arguments amount to unpersuasive attorney argument that cannot take the place of evidence. *See In re Pearson*, 494 F.2d 1399, 1405 (CCPA 1974).

Patent Owner relies also on dictionary definitions of “currency” to argue that currency must be in general use in a particular country. *See* PO Resp. 15 (citing Ex. 2019). Nonetheless, we are not persuaded that this extrinsic evidence requires us to ignore the explicit teachings of the ‘402 patent. Specifically, the ‘402 patent describes “points” as having a “cash equivalent” and “negotiable worth,” which is consistent with Petitioner’s

position that the reward points can be used as currency for purchase transactions. *See* Ex. 1001, 6:43–45. Further, in describing how a user redeems points for selected items, the ’402 patent teaches that the user “purchases” the selected item using reward points. For example, the ’402 patent describes Figure 7 as a “data flow diagram of the user request for *purchase of an item* at a merchant site,” and, in describing Figure 7, the ’402 patent teaches that “[t]he trading server computer 20 would confirm that the user has sufficient points to *purchase* the selected item.” Ex. 1001, 4:64–65; 7:18–20 (emphases added); *see id.* at 7:34–36 (“The trading server computer 20 would decrease the user exchange account 54 by the number of points corresponding to the *purchased item* (step 714).”) (emphasis added). In this way, the ’402 patent teaches that the reward points have a worth or “cash equivalent” value that functions as currency for the purchase of selected items. *See* Tr. 25: 21–26 (Patent Owner’s counsel stating that the ’402 patent allows a “consumer to make the *purchase* by converting rewards points of the first type – in this case, the credit card rewards points – into rewards points of the second type – the department store rewards – and adds those points to the other department store rewards points associated with the customer, and then allowing customer to redeem those combined rewards points for the blender.”) (emphasis added).

Moreover, as we stated in the Decision on Institution, “even assuming that reward points are not currency, we are not persuaded that the type of information makes a difference. Generally, ‘collecting information, including when limited to *particular content (which does not change its character as information)*, [*i*]s within the realm of abstract ideas.’ (citing *Electric Power*, 830 F.3d at 1353.” Dec. 24.

Additionally, Patent Owner argues that the claimed process is not currency exchange because the reward server computer transfers consideration to the exchange server computer as part of the exchange transaction. PO Resp. 16–17. Patent Owner contends that this additional limitation transfers liability from the reward server computer to the reward exchange computer that is not part of a currency exchange. *Id.*

Patent Owner’s arguments miss the point. Petitioner has not asserted that the fundamental economic practice at issue is currency exchange only. Instead, Petitioner asserts that the abstract idea recited by the challenged claims is the specific currency exchange of reward points data, i.e., “currency exchange through transferring and exchanging *reward points data.*” *See* Pet. 68 (“The ultimate goal of this data manipulation is to convert the data from one type of currency (a first type of reward points) into another type of currency (a second type of reward points). In other words, the claims merely recite a generic computer for performing the abstract idea of currency exchange through transferring and exchanging “reward points” data.”). Thus, Petitioner argues that the step of “conveying consideration to the reward exchange computer, the consideration having a value equivalent to the quantity of reward points of the first type decreased from the reward account on the reward server computer” (claim 1) also recites the same abstract idea because currency exchange of reward points includes the conveyance of consideration. *See id.* (referring to the “‘conveying’ data (i.e., consideration)” step as part of the process for converting data from one type of currency into another).

In this context, we note that Petitioner’s expert, Dr. Chatterjee, testifies that “any transaction of transferring points between AMEX and the

participating partners would require a *conveyance of consideration* based on the number of points that are transferred.” Ex. 1006 ¶ 113 (emphasis added). More specifically, Dr. Chatterjee testifies that

Rewards is disclosing the conveyance of consideration from AMEX to its partners in addition to the points transferred by disclosing the exchange of Membership Rewards to frequent flyer miles or hotel points to its partners (e.g., Continental). Ex. 1004 at 10. This is because I understand that AMEX’s partners would consider the transferred points as an acquired liability and would only agree to take on this additional liability if AMEX would convey consideration to them that compensates them for this additional liability. Further evidence of such conveyance of consideration can be found in the Securities and Exchange Commission (SEC) Annual 10-K Reports that were filed by Continental prior to the priority date of the ’402 Patent. Exs. 1013, 1014 (describing AMEX’s disclosed partners in Rewards (Continental Air Lines) receiving consideration by selling frequent flier miles to credit card companies).

Id. ¶ 114. Dr. Chatterjee further explains that the 10-K report filed by Continental on February 24, 1997 (Ex. 1013) states “Continental sponsors a frequent flyer program (‘OnePass’) and records an estimated **liability** for the incremental cost associated with providing the related free transportation at the time a free travel award is earned.” *Id.* ¶ 115. Dr. Chatterjee also testifies that the 10-K Report Continental filed on March 20, 1998 shows Continental “also **sells mileage credits to participating partners** in the OnePass program, such as hotels, car rental agencies and **credit card companies**. The resulting revenue, net of the estimated incremental cost of the credits sold, is recorded as other operating revenue.” *Id.* ¶ 118 (citing Ex. 1013, 54; Ex. 1014, 58).

We find Dr. Chatterjee’s testimony, discussed above, credible and persuasive because it is consistent with the disclosure of the supporting

evidence he relies upon. Rewards expressly states that Continental is an airline partner for the AMEX rewards program. Ex. 1004, 15–16 (“With 10 major domestic and international airlines to choose from, you can travel free almost anywhere in the world with *Membership Rewards*.”). According to Rewards, 1,000 Membership Rewards points equals 1,000 miles in the Continental OnePass program. *Id.* at 15. Further, the 10-K Reports filed by Continental, shown in Exhibits 1013 and 1014, also support Dr. Chatterjee’s testimony that the conversion and redemption of reward points (as described by Rewards) includes liability for redeeming reward points and consideration paid for selling mileage reward points to other reward point providers such as hotels, car rental agencies, and credit card programs. For example, Exhibit 1013 provides:

Continental sponsors a frequent flyer program (“OnePass”) and records an estimated liability for the incremental cost associated with providing the related free transportation at the time a free travel award is earned. The liability is adjusted periodically based on awards earned, awards redeemed and changes in the OnePass program.

The Company also sells mileage credits to participating partners in the OnePass program, such as hotels, car rental agencies and credit card companies. The resulting revenue, net of the estimated incremental cost of the credits sold, is recorded as other operating revenue in the accompanying Consolidated Statements of Operations during the period in which the credits are sold.

Ex. 1013, 54 (emphases added). We note, further, that Dr. Chatterjee was not deposed by Patent Owner for cross-examination and Patent Owner’s expert, Dr. Michael Siegel does not opine on whether the challenged claims recite a judicial exception. Dr. Siegel’s testimony is directed to whether the challenged claims impose a meaningful limit on the abstract idea. *See Ex.*

2018 ¶¶ 45–53 (portions of Dr. Siegel’s Declaration that pertain to patent-eligibility). Based on the complete record, Dr. Chatterjee’s testimony, as discussed above, is unrebutted testimonial evidence that is further supported by Exhibits 1013 and 1014. Thus, we determine that the evidence of record comports with Petitioner’s position that the step of conveying consideration is also included in the fundamental economic practice of “currency exchange through transferring and exchanging ‘reward points’ data.” *See* Pet. 68 (“The claims encompass a process performed by a computer, the process comprising ‘storing’ data (i.e., ‘reward accounts’) on a computer, ‘transferring’ data (i.e., a quantity of ‘reward points’), ‘converting’ data (i.e., a quantity of ‘reward points’), ‘adding’ data (i.e., an amount of ‘reward points’), ‘combining’ data (i.e., amounts of ‘reward points’), and ‘conveying’ data (i.e., ‘consideration’). The ultimate goal of this data manipulation is to convert the data from one type of currency (a first type of reward points) into another type of currency (a second type of reward points).”).

For the reasons discussed, we are persuaded that Petitioner has met its burden of showing, by a preponderance of the evidence, that independent claim 1, which concerns “currency exchange through transferring and exchanging reward points data,” recites a fundamental economic practice.

The Petition also analyzes the limitations of independent claims 5, 9, and 13 together with independent claim 1. *See* Pet. 68–75; *see e.g.*, Pet. 74 (“The amendments made to the independent claims during reexamination do not change this conclusion, because references to a plurality (i.e. two or more) of accounts and credit card transactions in the claims as amended do not render them less abstract. Limitations involving multiple accounts and

credit card transactions are commonplace in claims found unpatentable or invalid by the Federal Circuit in its Section 101 jurisprudence.”). The Petition asserts further that “the limitation repeated in each dependent claim does not cure this fundamental abstractness. Claims 2, 6, 10, and 14 merely add the limitation that the ‘control’ for initiating the communication over the computer to exchange the reward points ‘comprises a hyperlink or a button.’” Pet. 75 (citing Ex. 1001, 13:32–39, 14:33–40, 15:40–47, 16:50–57; Ex. 1006 ¶ 160). Thus, we are persuaded that Petitioner has met its burden of showing, by a preponderance of the evidence, that claims 2, 5, 6, 9, 10, 13, and 14 also concern “currency exchange through transferring and exchanging reward points data.”

4. Step 2A, Prong 2: Whether the Judicial Exception is Integrated into a Practical Application

The Supreme Court has long distinguished between abstract ideas themselves (which are not patent eligible) and the integration of those abstract ideas into practical applications (which are patent eligible). *See, e.g., Alice*, 573 U.S. at 217 (explaining that “in applying the § 101 exception, we must distinguish between patents that claim the ‘buildin[g] block[s]’ of human ingenuity and those that integrate the building blocks into something more” (quoting *Mayo*, 566 U.S. at 89), and stating that *Mayo* “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”); *Mayo*, 566 U.S. at 80, 84 (noting that the Court in *Diehr* found “the overall process patent eligible because of the way the additional steps of the process integrated the equation into the process as a whole,” but the Court in *Benson* “held that simply implementing a

mathematical principle on a physical machine, namely a computer, was not a patentable application of that principle”); *Bilski*, 561 U.S. at 611 (“*Diehr* explained that while an abstract idea, law of nature, or mathematical formula could not be patented, ‘an *application* of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.’” (quoting *Diehr*, 450 U.S. at 187) (emphasis in original)); *Diehr*, 450 U.S. at 187, 192 n.14 (explaining that the process in *Flook* was ineligible not because it contained a mathematical formula, but because it did not provide an application of the formula). The Federal Circuit likewise has distinguished between claims that are “directed to” a judicial exception (which require further analysis to determine their eligibility) and those that are not (which are therefore patent eligible). *See, e.g.*, MPEP § 2106.06(b) (summarizing *Enfish, McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299 (Fed. Cir. 2016), and other cases that found claims eligible as improvements to technology or computer functionality instead of abstract ideas).

In agreement with Supreme Court and Federal Circuit precedent, the *Guidance* provides that if a claim recites an abstract idea, it must be further analyzed to determine whether the recited judicial exception is integrated into a practical application. *Guidance*, 84 Fed. Reg. at 53. Specifically, under USPTO *Guidance* Step 2A, Prong 2, a claim reciting an abstract idea is not “directed to” the abstract idea if the “claim as a whole integrates the recited judicial exception into a practical application of that exception.” *Id.* Step 2A, Prong 2 is evaluated by “(a) [i]dentifying whether there are any additional elements recited in the claim beyond the judicial exception(s); and (b) evaluating those additional elements individually and in combination to

determine whether they integrate the exception into a practical application.” *Id.* at 54–55. “A claim that integrates a judicial exception into a practical application will apply, rely on, or use 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.” *Id.* at 53.

a. Petitioner’s Contentions

Petitioner asserts that “[e]ach of the steps disclosed in the Challenged Claims can be performed by humans and the disclosed means are merely automating steps humans can, and have, easily performed on their own for some time.” *Pet.* 73; *see id.* at 74 (“Instead of a human performing the conversion of currency and a user using the exchanged currency to buy goods, the Challenged Claims recite a generic computer for performing these functions.”). Petitioner adds that for dependent claims 2, 6, 19, and 14, “[c]onventional internet tools such as a hyperlink or button to execute a command in a web page constitute commonplace graphical user interface features that do not redeem the abstractness of the claims.” *Id.* at 75. In its Reply, Petitioner adds “to the extent the Challenged Claims recite technology at all, it is in the context of generic computer tools used to carry out the abstract idea of currency exchange through transferring and exchanging ‘reward points’ data.” Reply 8.

b. Patent Owner’s Contentions

Patent Owner asserts that the

system and methodologies described and claimed in the ‘402 patent impose a meaningful limit on the abstract idea of a currency exchange *by providing an improvement to the operation of, for example the prior art American Express Membership Rewards Program, because this program contained*

excessive and unacceptable delays and lacked user interface control such that any attempt to use points from more than one account was deficient.”

PO Resp. 19–20 (citing Ex. 2013; Ex. 2018) (emphasis added). Patent Owner adds that the specific process set forth in the claims of converting, adding, and combining the reward points has not been expressly disclosed in the cited prior art, and that the challenged claims do not monopolize and preempt the judicial exception. *Id.* at 20–21; *see id.* at 22 (“[T]he present claims recite exactly how the user-controlled computer-based process operates in specific detail such that there is no monopolization or pre-emption of the field.”).

Patent Owner further argues that the limitation, “the reward server computer receiving from the user operating the user computer a selection of the control from the web page and, in response, initiating communication over the computer network with the reward exchange computer to exchange a quantity of reward points of the first type, designated by the user operating the user computer . . .,” recited in claim 1, limits the claimed invention to a specific embodiment for which prior art systems provide alternatives. PO Resp. 22–23 (“[A]ny system in which the user is not given the ability to select a control from a web page that initiates communication with the other reward exchange computer to exchange a quantity of reward points that has been so designated by the user on the user computer is not covered by the present claims, and provides an alternative mechanism for exchanging points, thus not monopolizing or pre-empting the field as would be found in an ineligible claim.”). Patent Owner also provides examples of prior art systems that Patent Owner argues are alternatives to the claimed invention. *See* PO Resp. at 23–28.

Additionally, Patent Owner asserts that hypothetical Example 42 in the “Subject Matter Eligibility Examples: Abstract Ideas,” (Exhibit 2017, “USPTO Eligibility Examples”), available on the Office website at <https://www.uspto.gov/patent/laws-and-regulations/examination-policy/subject-matter-eligibility>, demonstrates that the challenged claims integrate the judicial exception into a practical application. PO Resp. 28. Specifically, Patent Owner argues that

[t]he present claims of the ‘402 patent are analogous to and have similar steps involved as this eligible claim. That is, the eligible claim 1 above recites the fundamental computer steps of *storing*, *providing* remote access, *converting*, automatically *generating* a message, and transmitting the message. The claims of the ‘402 patent have likewise been generalized to have computer-based steps of *storing*, *providing* a web page with user controls, receiving the control, *decreasing* reward points, *converting*, *adding*, *combining*, *conveying*, and *redeeming*. Exemplary claim 1 above is deemed to be eligible because of the improvement over prior art systems by allowing remote users to share information in real time in a standardized format regardless of the format in which the information was input by the user. *Likewise, the ‘402 claims provide improvements over prior art systems by allowing users to exchange disparate reward points, under user control, in real-time regardless of the format in which the reward points were earned and stored.*

PO Resp. 30 (last emphasis added). Relatedly, Patent Owner argues that Petitioner has conflated the issues of novelty and non-obviousness with subject-matter eligibility. PO Resp. 32–35.

c. Discussion

We determine that the challenged claims do not integrate the recited judicial exception (i.e., fundamental economic practice) into a practical application. Here, contrary to Patent Owner’s arguments, we are not persuaded that “excessive and unacceptable delays” of reward point

exchanges and redemption, and the absence of a user interface control were *technical* problems improved upon by the challenged claims. Importantly, we first observe that the challenged claims do not recite expressly any time or interface limitations. Thus, we are not persuaded that these unclaimed features can integrate the recited judicial exception into a practical application.

Additionally, we observe that the '402 patent does not teach that traditional reward point programs or systems suffered “excessive and unacceptable delays” or lacked a user interface due to technical problems. Indeed, the '402 patent does not describe any excessive delay issues, and, further, does not discuss how any of the claimed features would have provided a “real-time” technical improvement for this delay. *See generally* Ex. 1001. Instead, the '402 patent teaches that “[t]he process may be performed in *real time or as a background process* where the user may select how the transaction should proceed.” Ex. 1001, 7:58–60 (emphasis added). In describing the “real time” process, the '402 patent does not teach the real time process is a technical improvement for excessive and unacceptable delays. *See id.*

Further, at the oral hearing, Patent Owner’s counsel confirmed that the '402 patent and the express language of the challenged claims do not address any delays or timing issues. Specifically, Patent Owner’s counsel asserted at the oral hearing that

if you have one entity – namely, the rewards exchange computer – that has full information; it has the information on what the value of the rewards points that it converted from the first type to the second type; and it has information on what the customer’s current balance of rewards points of the second type are; and it also implements the redemption, then that is, inherently, going

to be a times savings. Otherwise, if you just merely made this conversion, then you would have to go to another system to determine what the balance of the second rewards points would be.

Tr. 30:7–15 (emphases added). However, when asked by the panel for the evidence to support these arguments. Patent Owner’s counsel conceded that the express claim language and the ’402 patent do not provide an evidentiary basis for these arguments. The exchange between the panel and Patent Owner’s counsel is provided below:

JUDGE TARTAL: What is the evidence that you’re relying on that it’s an inherently faster system?

MR. MOY: It’s not expressly recited in the claim language about real time, but if you have the same computer that does the conversion and then does the redemption, that’s an improvement.

JUDGE TARTAL: But your statement was that it will, inherently, be faster, and I’m just curious; is there an evidentiary basis that you’re relying upon for that?

MR. MOY: Not specifically in the patent, no.

Id. at 30:23–31:7.

With regard to the “interface,” the ’402 patent teaches that

[t]he trading server system would allow users to ‘log in’ to access the functionality provided where the user may interact with applications, forms or controls. For example, the user may view his account information by using a web browser to enter the appropriate identification information and then select buttons, links or other selectable objects to navigate to the part of the system desired.”)

Ex. 1001, 6:8–14; *see id.* at 8:40–45 (“The system is comprised of a trading server computer connected to a network of computers where a user interface is established whereby a user from a user computer may access the server to request the transaction to contact a reward server computer system.”).

However, the '402 patent does not indicate a web-based user interface improved any computer technology, other technology, or technical field.

Rather, the '402 patent teaches that “[i]n the preferred embodiment all of the systems described are accessible through the Internet and the user may freely navigate to any site by means well known in the art.” Ex. 1001, 5:61–64. We note here that Patent Owner’s expert, Dr. Siegel, has testified that a “computer web-based interface that allows the consumer to select a control that initiates the reward point exchange process between the various reward point server computers” and that this provides “an improvement over the prior art American Express Membership Rewards Program since it eliminates the requirement that the consumer first place a telephone call with the airline or hotel to determine if the rewards are available (Ex. 1004, page 10), then place another telephone call to request the transfer of American Express points (Ex. 1004, page 10), then wait multiple days for the transfer to made be useable by the consumer.” Ex. 2018 ¶ 53. However, the Specification does not teach that a web-based user interface, or web page with a control provides a technical improvement over conventional systems. Instead, as discussed above, the '402 patent teaches the opposite because it acknowledges that “all of the systems described are accessible through the Internet and *the user may freely navigate to any site by means well known in the art.*” Ex. 1001, 5:61–64 (emphasis added). This aspect of the '402 patent comports with Dr. Siegel’s testimony in paragraph 40, which provides (in contrast to his testimony in paragraph 53) that

[t]he webpage and control may be provided in accord with well-known practices of providing a webpage in a browser for navigating the internet with a button, hyperlink or other selectable object, so as to establish an interactive communication

between the processors of the reward server and the exchange server. Ex. 1001 at 6:5-24; 5:58-63; 9:3-10.

Ex. 2018 ¶ 40.

The '402 patent further teaches that reward point exchange and redemption systems mainly faced business concerns involving user experience and customer retention. The “Background of the Invention” section teaches, generally, that incentive schemes such as “frequent flyer miles” and other reward point programs have been implemented by companies and business “[i]n order to attract and retain business customers.” Ex. 1001, 1:39–44 (emphasis added). Further, the '402 patent teaches that

[t]he prior art does not provide for a consumer to utilize relatively small amounts of reward points in any manner. In addition, a consumer often can only redeem points in an airline-related manner (i.e. to obtain a free ticket or upgrade from coach to first class). This prior art does not recognize the need for a consumer to exchange reward points for non-travel related goods, and in particular renders relatively small numbers of points useless. For example, a consumer that does not travel often may have 500 points in United Airlines, 700 points in USAir, and 1000 points in TWA, each of which is relatively useless in the prior art.

Ex. 1001, 3:26–36 (emphases added). Notably, the '402 patent states that “[c]ompetition has forced airlines to modify the manner in which mileage was acquired to include travel related purchases by consumers.” *Id.* at 1:44–46 (emphasis added). Thus, we understand the '402 patent to identify consumer needs, customer experience, business concerns, and competition as problems addressed by the claimed inventions, which the '402 patent does not indicate are *technical* problems that are solved by an improvement to computer technology.

In addition, Patent Owner has not otherwise explained persuasively how the specific arrangement of the generic computer components and steps recited in the challenged claims provide a technical improvement in computer technology, other technology, or technical field. Instead, we discern that claim 1, for example, recites generic computer components such as a “reward server computer,” “reward exchange computer,” web page with control for initiating communication over a computer network, and “computer network” that perform the generic computer functions of “storing,” “providing a web page,” and the conversion and redemption of reward points (e.g., decreasing and adding points), and the “conveying” of consideration (e.g., conveying data).

The '402 patent also does not describe these computer components and steps as being anything more than generic in nature. First, the '402 patent teaches that “[a]ny type of reward server may also be used in this system” such as the reward server for the American Express credit card reward program, and the “network may comprise any type of communication process where computers may contact each other.” Ex. 1001, 5:10–22 (emphases added); *see id.* at 5:44–47 (“The reward server computers 10,12, 14 may be of any type of accessible server capable of holding data about a user along with a corresponding earned value that is negotiable for other goods, services, or points of another system.”) (emphasis added). Second, with respect to the reward exchange computer, the '402 patent describes a “trading server” performs the functions of exchanging and redeeming reward points. *See* Ex. 1001, 6:25–58. The Specification teaches the “trading server computer may be any type of computer system that allows users to access the system in order to perform the processes involved in this

invention.” *Id.* at 5:58–61 (emphasis added). Thus, we determine that ’402 patent does not suggest that the computer components (hardware or software) are improved from a technical perspective, or that it would operate differently than it otherwise could. *See ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759, 768 (Fed. Cir. Mar. 28, 2019) (“Notably, however, the specification never suggests that the charging station itself is improved from a technical perspective, or that it would operate differently than it otherwise could.”).

Further, to the extent that Patent Owner contends that the use of a computerized system (e.g., web-based interactive interface) made the manual process of reward points exchange and redemption faster, we are not persuaded that this is enough to integrate the judicial exception into a practical application. *See* PO Resp. 19–20 (“[The] system and methodologies described and claimed in the ’402 patent impose a meaningful limit on the abstract idea of a currency exchange by providing an improvement to the operation of, for example the prior art American Express Membership Rewards Program, because this program contained excessive and unacceptable delays and lacked user interface control such that any attempt to use points from more than one account was deficient.”). As explained in *Bancorp Servs., L.L.C. v. Sun Life Assur. Co. of Canada (U.S.)*, 687 F.3d 1266 (Fed. Cir. 2012), a computer “employed only for its most basic function . . . does not impose meaningful limits on the scope of those claims.”) *Id.* at 1278. Here, claimed computer components are recited at a high level of generality and are merely invoked as tools to perform an existing rewards points exchange and redemption process. However, “mere automation of manual processes using generic computers does not constitute

a patentable improvement in computer technology.” *Credit Acceptance Corp. v. Westlake Servs.*, 859 F.3d 1044, 1055 (Fed. Cir. 2017).

Our determination is also not altered by Patent Owner’s contention that the challenged claims do not monopolize or pre-empt the field because “the claims do not cover all ways of reward points exchange – just the very specific process invented by Mr. Postrel. And, they certainly do not cover all ways of operating a currency exchange (the alleged abstract idea).” PO Resp. 22. First, even assuming that there may be alternatives to the claimed invention, “the absence of complete preemption does not demonstrate patent eligibility.” *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015). Rather, for the reasons discussed above, we determine the additional elements are directed to generic computer components and functions that do not apply or use the fundamental economic practice in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment. Thus, the claim as a whole is little more than a drafting effort designed to monopolize the exception. Second, merely limiting the field of use of the abstract idea to a particular existing environment (i.e., limiting to computer systems with a web-based user interface) does not render the claims patent eligible. The Supreme Court and the Federal Circuit have repeatedly made clear that merely limiting the field of use of the abstract idea to a particular existing environment does not render the claims any less abstract. *See Alice*, 573 U.S. at 222–23; *Mayo*, 566 U.S. at 71–72; *Bilski*, 561 U.S. at 610–11; *Content Extraction*, 776 F.3d at 1348; *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014).

In addition, we note that, in its Sur-Reply, Patent Owner argues that

the claimed invention provides other improvements that include (1) increasing the utility of the disparate reward points stored in each of the several different reward accounts; (2) decreasing the likelihood a user will be unable to obtain certain goods/services due to a lack of reward points; (3) benefiting each issuing entity associated with the distributed system by providing a stronger rewards program that provides greater incentives to customer membership and repeat customer transactions. Sur. 10–11. These arguments are not persuasive because these are all improvements directed to the customer experience and the rewards program itself, not to a technical improvement necessary for integration under USPTO *Guidance* Step 2A, Prong 2.

Patent Owner also argues that prior art systems do not expressly disclose the specific process set forth in the claims of converting, adding, and combining the reward points. PO Resp. 20. But, Patent Owner’s argument misses the point. “Eligibility and novelty are separate inquiries.” *Two-Way Media Ltd. v. Comcast Cable Commc’ns, LLC*, 874 F.3d 1329, 1340 (Fed. Cir. 2017) (citing *Affinity Labs of Tex., LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1263 (Fed. Cir. 2016) for the holding that even assuming that a particular claimed feature was novel does not “avoid the problem of abstractness.”); *see also buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1352 (Fed. Cir. 2014) (“[L]aws of nature, natural phenomena, and abstract ideas, no matter how ‘groundbreaking, innovative, or even brilliant’ . . . are outside what the statute means by ‘new and useful process, machine, manufacture, or composition of matter.’”) (citing 35 U.S.C. § 101; *Alice*, 573 U.S. at 221–22; *Association for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2116–17 (2013)). Patent Owner also analogizes the challenged claims

to Example 42, claim 1 of the Office’s “Subject Matter Eligibility Examples: Abstract Ideas” (“USPTO Eligibility Examples”), which Patent Owner describes as integrating a method of organizing human activity into a practice application. PO Resp. 28–29.

Example 42, claim 1 recites as follows:

A method comprising:

a) storing information in a standardized format about a patient’s condition in a plurality of network-based non-transitory storage devices having a collection of medical records stored thereon;

b) providing remote access to users over a network so any one of the users can update the information about the patient’s condition in the collection of medical records in real time through a graphical user interface, wherein the one of the users provides the updated information in a non-standardized format dependent on the hardware and software platform used by the one of the users;

c) converting, by a content server, the non-standardized updated information into the standardized format,

d) storing the standardized updated information about the patient’s condition in the collection of medical records in the standardized format;

e) automatically generating a message containing the updated information about the patient’s condition by the content server whenever updated information has been stored; and

f) transmitting the message to all of the users over the computer network in real time, so that each user has immediate access to up-to-date patient information.

USPTO Eligibility Examples, 18. “Background” information for the example provides that “[c]urrently, medical providers must continually monitor a patient’s medical records for updated information, which is often-times incomplete since records in separate locations are not timely or

readily-shared or cannot be consolidated due to format inconsistencies as well as physicians who are unaware that other physicians are also seeing the patient for varying reasons.” *Id.* at 17. Example 42, claim 1 solves this problem by providing a “method that collects, converts and consolidates patient information from various physicians and health-care providers into a standardized format, stores it in network-based storage devices, and generates messages notifying health care providers or patients whenever that information is updated.” *Id.* The Background information adds that “[w]henver the patient information is updated, it will first be converted into the standardized format and then stored in the collection of medical records on one or more of the network-based storage devices.” *Id.*

Patent Owner’s reliance on Example 42, claim 1, is misplaced because that claim, unlike the challenged claims, is directed to improving the functioning of computer technology. Specifically, the example determines at the “Step 2A – Prong 2” analysis that the example claim covers a judicial exception because “a method that allows for users to access patients’ medical records and receive updated patient information in real time from other users” is a method of managing interactions between people. *Id.* at 18. The example determines that additional limitations integrate the judicial exception into a practical application because

[t]he claim recites a combination of additional elements including storing information, providing remote access over a network, converting updated information that was input by a user in a *non-standardized form to a standardized format*, automatically generating a message whenever updated information is stored, and transmitting the message to all of the users. . . . Specifically, the additional elements recite a *specific improvement over prior art systems by allowing remote users to share information in real time in a standardized format*

regardless of the format in which the information was input by the user.

Id. at 18 (emphasis added).

Here, the challenged claims are not directed to a technical improvement over the prior art systems by, for example, converting rewards point data into a standardized format. The challenged claims and the '402 patent do not teach a standardized format or *format* conversion for the reward points exchange. Further, we are not persuaded that the challenged claims “provide improvements over prior art systems by allowing users to exchange disparate reward points, under user control, in real-time regardless of the format in which the reward points were earned and stored.” *See* PO Resp. 30. As discussed, the challenged claims do not recite any time or formatting features. Moreover, although the web page control recited in the challenged claims is used to initiate communication between the reward server computer and the reward exchange computer, the '402 patent does not teach that this “control” would be anything other than existing generic buttons, hyperlinks, or other selectable objects in a webpage. Ex. 1001, 5:61–64. Patent Owner’s own expert concedes that this technology existed in the prior art, and therefore, could not also be an improvement over the same. Ex. 2018 ¶ 40.

For the above reasons, we are persuaded that Petitioner has met its burden of showing that independent claims 1, 5, 9, and 13 concern “currency exchange through transferring and exchanging ‘reward points’ data,” which is a fundamental economic practice, and that claim 1 further does not integrate that fundamental economic practice into a practical application.

With regard to the dependent claims, Petitioner asserts that “[c]laims 2, 6, 10, and 14 merely add the limitation that the ‘control’ for initiating the

communication over the computer to exchange the reward points ‘comprises a hyperlink or a button.’” Pet. 75 (citing Ex. 1001, 13:32–39, 14:33–40, 15:40–47, 16:50–57; Ex. 1006 ¶ 160). Based on the complete record, we determine that Petitioner has shown sufficiently that the additional limitations recited in dependent claims 2, 6, 10, and 14 do not integrate the fundamental economic practice into a practical application. These limitations all recite a generic computer component, “hyperlink or a button” for the “control,” which does not integrate the judicial exception into a practical application.

5. Whether Any Additional Elements Recited are “Well-Understood, Routine, Conventional”

Under the second step of the *Alice* inquiry, we must “scrutinize the claim elements more microscopically” for additional elements that might be understood to “transform the nature of the claim” into a patent-eligible application of an abstract idea. *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353–54 (Fed. Cir. 2016); *RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017) (“To save a patent at [*Alice*] step two, an inventive concept must be evident in the claims.”). That is, we determine whether the claims include an “inventive concept,” i.e., an element or combination of elements sufficient to ensure that the patent in practice amounts to significantly more than a patent on the abstract idea itself. *Alice*, 573 U.S. at 221. “Abstract ideas, including a set of rules for a game, may be patent-eligible if they contain an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application.” *In re Smith*, 815 F.3d at 819 (citing *Alice*, 134 S. Ct. at 2357). But appending purely conventional steps to an abstract idea does not supply a sufficiently

inventive concept. *Alice*, 134 S. Ct. at 2357–58.

Consistent with the foregoing, under the *Guidance*, if a claim has been determined to recite a judicial exception under the *Guidance*, Step 2A, we must evaluate the additional elements individually and in combination under the *Guidance*, Step 2B, to determine whether they provide an inventive concept (i.e., whether the additional elements amount to significantly more than the exception itself).⁷ Per the *Guidance*, we must consider in Step 2B whether an additional element or combination of elements: (1) “[a]dds a specific limitation or combination of limitations that are not well-understood, routine, conventional activity in the field, which is indicative that an inventive concept may be present”; or (2) “simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception, which is indicative that an inventive concept may not be present.” *Guidance*, 84 Fed. Reg. at 56.

Petitioner argues that the challenged claims merely recite generic and conventional computer functionality for carrying out the abstract idea of currency exchange through transferring and exchanging “reward points” data. Pet. 78; *see id.* at 80 (“Communicating over a network and providing a web page involve only generic computing . . . [and] these steps were well-known in the prior art.”) (citing Ex. 1001, Figs. 1–2; Ex. 1005, Figs. 1–2;

⁷ The patent eligibility inquiry may contain underlying issues of fact. *Mortg. Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1325 (Fed. Cir. 2016). In particular, “[t]he question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field is a question of fact.” *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018).

Ex. 1006 ¶ 157). Petitioner adds that the means limitations recited in claims 5 and 13 should not be treated any differently because “memory means,” “communication means,” and “processing means” only require generic component components depicted as “PRIOR ART” in the Figure 1 of the ’402 patent. *Id.*

Patent Owner argues that the challenged claims recite more than the abstract idea because the claims require

- (1) the use of a credit card to obtain one type of points,
- (2) two different databases containing reward information from separate vendors;
- (3) three separate computer systems;
- (4) a communications network;
- (5) a communication method, namely, a web application;
- (6) and using combined reward data to facilitate the purchase of an actual product.

PO Resp. 36.

We determine that the claimed elements, viewed individually and as an ordered combination, merely use well-understood, routine, and conventional computer components and functions to implement operations previously performed in existing rewards points programs. As discussed in detail above, the ’402 patent teaches that the recited “rewards server computer,” may be any conventional reward server computer such as those in use by existing and conventional reward server programs. *See* Ex. 1001, 5:18–22 (“The reward server computer may be a credit card reward program such as offered by American Express where the user earns rewards based on purchases or an advertising based award program where the user earns rewards by selecting advertising content.”), 5:44–47 (“The reward server computers 10,12, 14 may be of any type of accessible server capable of holding data about a user along with a corresponding earned value that is negotiable for other goods, services, or points of another system.”). Further,

the functions and steps performed by the “reward server computer,” required by claim 1, for example, are also nothing more than generic and basic functions of a computer. Claim 1 requires that the “reward server computer” (1) store a first set of reward points in the accounts on the reward server computer; and (2) provide a web page comprising a “control” for initiating communication over the computer network with the reward exchange computer. *See* Ex. 1001, C1, 1:30–36, 1:43–45. The Supreme Court and Federal Circuit have held repeatedly that “storing” data is “well-understood, routine, conventional” activity. *Alice Corp.*, 134 S. Ct. at 2359, (creating and maintaining “shadow accounts”); *Ultramercial, Inc. v. HULU, Inc.*, 772 F.3d 709, 716 (Fed. Cir. 2014) (updating an activity log); *see also Versata Dev. Group, Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1334 (Fed. Cir. 2015) (storing and retrieving information in memory). Further, providing a web page with a hyperlink or button to navigate the internet was also well-understood as evidenced by Dr. Siegel’s testimony and the ’402 patent. Ex. 1001, 1:26–31 (“The trading server computer 20 is in communication through the network 2 with a user on a user computer 40 and *is additionally able to connect to the reward server computers 10,12,14 through the network 2 in accordance with techniques well known in the art for Internet communications.*”) (emphasis added); Ex. 2018 ¶ 40 (“*The webpage and control may be provided in accord with well-known practices of providing a webpage in a browser for navigating the internet with a button, hyperlink or other selectable object, so as to establish an interactive communication between the processors of the reward server and the exchange server. Ex. 1001 at 6:5-24; 5:58-63; 9:3-10.*”) (emphasis added).

Additionally, the ’402 patent teaches that the “reward exchange

computer” also may be “any type of computer system that allows users to access the system in order to perform the processes involved in this invention.” Ex. 1001, 5:58–61. With respect to claim 1, we discern that the “reward exchange computer” performs the process of exchanging the reward points, which require:

decreasing the quantity of reward points of the first type designated by the user from the reward account on the reward server computer,

causing the reward exchange computer to

convert the quantity of reward points of the first type decreased from the reward account on the reward server computer into a corresponding amount of reward points of the second type at a predetermined reward server conversion rate,

add the corresponding amount of reward points of the second type to the reward exchange account, and

combine the corresponding amount of reward points of the second type added to the reward exchange account with the second set of reward points of the second type previously stored in the reward exchange account

conveying consideration to the reward exchange computer, the consideration having a value equivalent to the quantity of reward points of the first type decreased from the reward account on the reward server computer;

the user requesting the reward exchange computer to redeem at least some of the combined reward points of the second type from the reward exchange account for an item selected by the user; and

the reward exchange computer redeeming the requested combined reward points of the second type from the reward exchange account by

decreasing the reward exchange account by the combined reward points of the second type requested to be redeemed by the user for the item selected by the user.

Ex. 1001, C1, 1:59–2:22. Essentially, we view these steps to describe basic electronic recordkeeping performed by the reward exchange server to decrease, add, convert, combine, store, and redeem reward points, and to convey consideration (i.e., value equivalent to the quantity of reward points decreased) for the exchange of reward points. In other words, the reward exchange server maintains an electronic record of user reward points and adjusts the amount of rewards points stored based on the conversion or redemption of reward points. As *Alice* explains, using a computer to create and maintain electronic recordkeeping and “to obtain data [and] adjust account balances” are the most basic functions of a computer. *Alice*, 134 S. Ct. at 2359. Further, there is no indication in the record that these steps are anything more than conventional practices. As evidenced by the ’402 patent, the storage, maintenance, and redemption of user reward points by servers was well-understood and routine. *See* Ex. 1001, Figs. 1–3 (describing conventional reward point programs). Moreover, as discussed above, we find persuasive Dr. Chatterjee’s un rebutted testimony that conventional reward point exchange programs included the conveyance of consideration. *See* Ex. 1006 ¶¶ 114–119 (discussing Continental’s OnePass program (Ex. 1013–1014) and AMEX Rewards Program (Ex. 1004)).

Patent Owner’s allegations that the challenged claims recite a user interface and user “control” do not render the claims patent eligible under Step Two of *Alice*. The ’402 patent teaches that the trading server system allows “users to ‘log in’ to access the functionality provided where the user

may interact with applications, forms or controls. For example, the user may view his account information by using a web browser to enter the appropriate identification information and then select buttons, links or other selectable objects to navigate to the part of the system desired.” Ex. 1001, 6:8–14. However, neither the ’402 patent nor challenged claims indicate that the interface or control are anything other than generic computer components that perform generic functions. Thus, based on the complete record, we determine that these features are not enough to render the claims patent-eligible. *See, e.g., Mortgage Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d at 1324–25 (generic computer components such as an “interface,” “network,” and “database” “do not satisfy the inventive concept requirement”).

We are also not persuaded that any of the remaining limitations, individually or in combination with the others, amount to more than well-understood, routine, and conventional practices and computer components. Claim 1 also recites the well-understood practice of earning reward points through credit card purchase transactions (*see* Ex. 1001, C1, 1:23–29) and the use of a “computer network.” Both of these features were conventional. *See* Ex. 1001, 1:48–55 (“Within the past several years, credit card companies or other retailers have co-branded credit cards in the name of the airlines and the credit card company where each dollar spent using the card is recorded as a mile of travel or point in the award program. These cards may additionally award bonus miles in coordination with user purchases of preferred products or flights during preferred times), *id.* at 5:10–22 (“network may comprise any type of communication process where computers may contact each other.”).

Further, to the extent that Patent Owner argues that the claims are directed to an improvement to software, this is also unpersuasive. *See* PO Resp. 30 (“Likewise, the ‘402 claims provide improvements over prior art systems by allowing users to exchange disparate reward points, under user control, in real-time regardless of the format in which the reward points were earned and stored.”). This is because performing steps with a generic computer processor or on a website over the Internet does not add an inventive concept. *Mayo*, 566 U.S. at 82 (“[S]imply appending conventional steps, specified at a high level of generality, to laws of nature, natural phenomena, and abstract ideas cannot make those laws, phenomena, and ideas patentable.”); *see Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1341 (Fed. Cir. 2017) (claims reciting a generic computer element—a processor—do not contain an inventive concept); *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 716 (Fed. Cir. 2014) (“The claims’ invocation of the Internet also adds no inventive concept.”).

Additionally, in the Sur-Reply, Patent Owner contends that

the Challenged Claims also provide entirely new market opportunities that would not otherwise be possible with conventional systems. For example, with conventional reward redemption systems, users routinely have insufficient reward points in an individual reward account for the redemption of desired goods/services – and, even when reward points can be changed between separate accounts, the lack of user control results in delays that preclude the redemption of reward points for goods/services that are available for only a limited time or in limited quantities (*e.g.*, short notice sales on retail goods; limited ticket quantities for events or travel). However, by enabling users to independently transfer reward points between separate reward accounts in real time, with the ability to immediately redeem the transferred reward points, the Challenged Claims make it possible for users to redeem reward points originating from a first

reward account for goods/services associated with a second reward account for acquiring desired goods/services with minimal delay. In this way, the Challenged Claims create the possibility for an entirely new market of transactions that would otherwise not be possible with conventional rewards systems.

Sur. 16. These arguments are also not persuasive. First, Patent Owner's statements are generally conclusory attorney argument that are unsupported by any citation to evidence in the record. Second, as discussed in detail above, the challenged claims do not expressly recite real time implementation. Third, as discussed above, we are not persuaded that the lack of user control or alleged delays in rewards point exchange or redemption was a technical problem that was solved by any challenged claim of the '402 patent. The '402 patent teaches that competition to retain and attract customers led businesses to change the way their reward programs operated. *See* Ex. 1001, 1:44–46. Thus, the use of user controls and real time processing may have been a business solution to improve the user experience, rather than improve a technology. Thus, having considered the claimed limitations individually and in combination, we determine that claim 1 recites generic computer components and conventional functions to implement the abstract idea of “currency exchange through transferring and exchanging ‘reward points’ data.”

For these reasons, we are persuaded that Petitioner has met its burden of showing, by a preponderance of the evidence, that claim 1 of the '402 patent is unpatentable under 35 U.S.C. § 101 as directed to patent ineligible subject matter. For the same reasons, we determine that Petitioner has met its burden of showing, by a preponderance of the evidence, that claim 9 of the '402 patent is unpatentable under 35 U.S.C. § 101 as directed to patent ineligible subject matter. Claim 9 recites similar limitations as claim 1 and

the parties have argued these claims together. Our analysis of claim 1 also applies equally to claims 5 and 13. The “memory means” and “communication means” recite generic computer functions that are performed by generic computer components. *See Claim Construction, Supra*. The functions performed by the “processing means” in challenged claims 5 and 13 are essentially the same basic computer functions recited in claim 1. *See PO Resp.* 41 (“skilled artisan would understand that the processor of any general purpose computer would suffice, provided it is adapted for communication over a network through a webpage having a control, such as an internet browser that presents a link or other selectable object.”). Thus, based on the complete record, we are persuaded that Petitioner has met its burden of showing, by a preponderance of the evidence, that claims 5, 9, and 13 of the ’402 patent are unpatentable under 35 U.S.C. § 101 as directed to patent ineligible subject matter.

We are also persuaded that Petitioner has met its burden of showing, by a preponderance of the evidence, that dependent claims 2, 6, 10, and 14 of the ’402 patent are unpatentable under 35 U.S.C. § 101 as directed to patent in-eligible subject matter. All of these dependent claims recite well-understood, routine, and conventional hyperlinks and buttons for the “control.” *See Ex.* 1001, 13:32–33.

H. 35 U.S.C. § 112 ¶ 2, Indefiniteness

Petitioner contends that the challenged patent fails to disclose adequate structure under 35 U.S.C. § 112 ¶ 6 for the means-plus-function limitations in claims 5 and 13 and, therefore, these claims are unpatentable as indefinite under 35 U.S.C. § 112 ¶ 2. *Pet.* 45–61, 82. Petitioner supports

its contentions with citations to the Declaration of Dr. Chatterjee (Ex. 1006).
Id.

In a final decision, the Board is required to address the patentability of all claims challenged in a petition. *See* 35 U.S.C. § 328(a) (providing that the Board “shall issue a final written decision with respect to the patentability of any patent claim challenged by the petitioner and any new claim added” by amendment during the proceeding). In *SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1354 (2018), the Court determined that “when § 318(a) says the Board’s final written decision ‘shall’ resolve the patentability of ‘any patent claim challenged by the petitioner,’ it means the Board *must* address *every* claim the petitioner has challenged.” Section 318, which pertains to final decisions in *inter partes* reviews, shares the same language as section 328. Following *SAS*, the Office has instructed that “[i]f a post-grant review is instituted and not dismissed under this chapter, the Patent Trial and Appeal Board shall issue a final written decision with respect to the patentability of any patent claim challenged by the petitioner and any new claim added under section 326(d).” *Guidance on the Impact of SAS on AIA Trial Proceedings* (Apr. 26, 2018) at 1⁸. However, we are not aware of any requirement that once all challenged claims have been determined unpatentable, the Board must go on to analyze additional grounds challenging the same claims.

⁸ *Available at* www.uspto.gov/patents-application-process/patent-trial-and-appeal-board/trials/guidance-impact-sas-aia-trial.

In some cases, doing so is an inefficient use of the Board’s resources, in that it may detract from the time and attention that is available to analyze and explain our reasoning for the dispositive issues. In this regard, an early Federal Circuit decision concerning the International Trade Commission explained that an administrative agency “is at perfect liberty” to reach a decision based on a single dispositive issue because doing so “can not only save the parties, the [agency], and [the reviewing] court unnecessary cost and effort, it can greatly ease the burden on [the agency] faced with a . . . proceeding involving numerous complex issues and required by statute to reach its conclusion within rigid time limits.” *Beloit Corp. v. Valmet Oy*, 742 F.2d 1421, 1423 (Fed. Cir. 1984).

Returning to the context of the Board’s decisions, in final written decisions both before and after *SAS*, the Board has declined to reach grounds challenging claims that were already held unpatentable. *See, e.g., Sure-Fire Elec. Corp. v. Yongjiang Yin*, Case IPR2014-01448, slip op. at 25 (PTAB Feb. 22, 2016) (Paper 56), *aff’d*, 702 F. App’x 981 (Fed. Cir. 2017); *SK Hynix Inc. v. Netlist, Inc.*, Case IPR2017-00692, slip op. at 40 (PTAB July 5, 2018) (Paper 25). Similarly, the Federal Circuit generally declines to reach additional grounds of unpatentability when it affirms determinations of unpatentability for the same claims. *See, e.g., Trading Technologies Int’l, Inc. v. IBG LLC*, 921 F.3d 1378, 1385–1386 (Fed. Cir. Apr. 30, 2019) (“In light of this conclusion [that claims 1–22 are ineligible], we need not address Petitioners’ separate ground that claims 12–22 are directed to non-statutory subject matter.”); *Victaulic Co. v. Iancu*, 753 F. App’x 895, 901–02 (Fed. Cir. 2018) (“We discern no error in the Board’s analysis and affirm its conclusion that claims 2 and 10 would have been obvious in view of Lewis

and Lane. We thus do not reach the question of whether claims 2 and 10 would have been obvious in view of Vieregge and Lane.”); *Cole Kepro Int’l, LLC v. VSR Indus., Inc.*, 695 F. App’x 566, 570 n.2 (Fed. Cir. 2017) (“Because we determine that the Board did not err in concluding that claims 1–14 of the ’814 [patent] are unpatentable as obvious in view of Runte, we do not address the other instituted grounds analyzed by the Board.”).

Here, Petitioner contends that the challenged patent fails to disclose adequate structure under 35 U.S.C. § 112 ¶ 6 for the means-plus-function limitations in claims 5 and 13. In doing so, Petitioner asserts the “*Board need only reach Ground 2 of this Petition in the event the Board is unable to construe certain limitations of claims 5 and 13 of the ’402 Patent.*” Pet. 82 (emphasis added). Although we are not bound by Petitioner’s request to reach the indefiniteness issue in the alternative, we do observe that the Petition itself does not request that the Board reach both the §§ 101 and 112 grounds.

We have already determined that these claims are unpatentable under 35 U.S.C. § 101. Accordingly, in the circumstances of this case, we decline to address Petitioner’s indefiniteness challenge.

I. CONSTITUTIONALITY ARGUMENTS

Patent Owner asserts that retroactive application of covered business method patent review to pre-AIA issued patents is unconstitutional. PO Resp. 3–7. Although the Federal Circuit has not directly addressed the constitutionality issue raised by Patent Owner in the context of a CBM proceeding, the Federal Circuit has held, in the context of an *inter partes* review proceeding, that retroactive application of the AIA was not unconstitutional, explaining as follows:

the retroactive application of IPR proceedings to pre-AIA patents is not an unconstitutional taking under the Fifth Amendment. Patent owners have always had the expectation that the validity of patents could be challenged in district court. For forty years, patent owners have also had the expectation that the PTO could reconsider the validity of issued patents on particular grounds, applying a preponderance of the evidence standard. Although differences exist between IPRs and their reexamination predecessors, those differences do not outweigh the similarities of purpose and substance and, at least for that reason, do not effectuate a taking of . . . patents.

Celgene Corp. v. Peter, 931 F.3d 1342, 1362–63 (Fed. Cir. 2019)

We decline to consider Patent Owner’s constitutional arguments. Our reviewing court has not determined that retroactive application of the AIA is unconstitutional. “It is by now well established that legislative Acts adjusting the burdens and benefits of economic life come to the Court with a presumption of constitutionality.” *Usery v. Turner Elkhorn Mining Co.*, 428 U.S. 1, 15 (1976). Patent Owner challenges the constitutionality of congressional enactments, particularly the constitutionality of covered business method patent reviews as set forth in the AIA. It is, however, our statutory duty to “conduct *inter partes* reviews and post-grant reviews pursuant to chapters 31 and 32” (35 U.S.C. § 6(b)(4)). Thus, Patent Owner’s arguments would have us question our statutory authority and our ability to conduct those reviews—something we decline to do.

J. CONCLUSION

Petitioner has met its burden of demonstrating by a preponderance of the evidence that claims 1, 2, 5, 6, 9, 10, 13, and 14 of the ’402 patent are unpatentable under 35 U.S.C. § 101.

III. CONTINGENT MOTION TO AMEND

In its Motion to Amend, Patent Owner requests that “[i]f any of the independent claims 1, 5, 9, or 13 . . . are found to be unpatentable, then . . . [Patent Owner] moves to replace them with corresponding claims 17–20, respectively.” Mot. Amend 1. This Motion is contingent on our determination that claims 1, 5, 9, and 13 are unpatentable under § 101. *Id.* at 3.

In reviewing a motion to amend, we consider whether the motion meets the statutory and regulatory requirements set forth in 35 U.S.C. § 326(d) and 37 C.F.R. § 42.221. *See Lectrosonics, Inc. v. Zaxcom, Inc.*, Case IPR2018-01129 (PTAB Feb. 25, 2019) (Paper 15) (precedential). That is, the patent owner must demonstrate the following: (1) the amendment responds to a ground of unpatentability involved in the trial; (2) the amendment does not seek to enlarge the scope of the claims of the patent or introduce new subject matter; (3) the amendment proposes a reasonable number of substitute claims; and (4) the proposed claims are supported in the original disclosure of the patent. *See* 35 U.S.C. § 326(d); 37 C.F.R. § 42.221; *see also Lectrosonics, Inc.*, slip op. at 4–8. The patent owner, however, “does not bear the burden of persuasion to demonstrate the patentability of [the proposed] substitute claims.” *Lectrosonics, Inc.*, slip op. at 4 (citing *Aqua Prods., Inc. v. Matal*, 872 F.3d 1290 (Fed. Cir. 2017); *Bosch Auto. Serv. Sols. LLC v. Iancu*, 878 F.3d 1027 (Fed. Cir. 2017)). “Rather, as a result of the current state of the law and [U.S. Patent and Trademark Office] rules and guidance, the burden of persuasion will ordinarily lie with the petitioner to show that any proposed substitute claims

are unpatentable by a preponderance of the evidence.” *Lectrosonics, Inc.*, slip op. at 4.

For the reasons explained below, considering the record before us, we determine that Petitioner has shown by a preponderance of the evidence that proposed, substitute claims 17–20 are unpatentable under § 101.

A. *Proposed Substitute Claims 17–20*

Initially, we determine that Patent Owner proposes a single substitute claim for challenged claim 1, 5, 9, and 13. Mot. Amend App’x A. A table showing the proposed substitute claims and replaced original claims is as follows:

Original Claim	Substitute Claim
1	17
5	18
9	19
13	20

Proposed Claim 17, reproduced below with annotations showing amendments, is illustrative:

17. (Proposed substitute for claim 1) A computer-implemented method for earning, ~~exchanging~~ aggregating, and redeeming reward points comprising the steps of:

a user executing a plurality of first purchase transactions using a first credit card linked to a first credit card reward program of a first reward issuing entity, each of the first purchase transactions earning a first set of reward points of a first type from the first reward issuing entity;

the user executing a plurality of second purchase transactions using a second credit card linked to a second credit card reward program of a second reward issuing entity, each of

the second purchase transactions earning a second set of reward points of a second type from the second reward issuing entity, the second reward issuing entity being different from the first reward issuing entity;

a first reward server computer, associated with the first reward issuing entity and comprising a plurality of first reward accounts, each of said first reward accounts associated with a different user, the first reward server computer storing each of the first sets of reward points of the first type in one of the plurality of reward accounts on the first reward server computer associated with the user;

a second reward server computer, associated with the second reward issuing entity and comprising a plurality of second reward accounts, each of said second reward accounts associated with a different user, the second reward server computer storing each of the second sets of reward points of the second type in one of the plurality of reward accounts on the second reward server computer associated with the user;

a reward exchange aggregating trading server computer storing in a reward exchange account associated with the user a ~~second~~ third set of reward points of a ~~second~~ third type, the third set of reward points being an aggregated set of reward points comprising a first quantity of converted reward points and a second quantity of converted reward points, the first quantity of converted reward points having been converted from reward points of the first type that were previously earned by the user as a result of first transactions executed between the user and the first reward issuing entity, and the second quantity of converted reward points having been converted from reward points of the second type that were previously earned by the user as a result of ~~[[a]] second transaction~~ transactions executed between the user and ~~[[a]] the second reward issuing entity which is different from the first reward issuing entity;~~

wherein the third set of reward points of the third type is aggregated in the reward exchange account associated with the user on the trading server computer by steps comprising, for each of the first and second reward server computers:

the reward server computer providing a web page to a selected one of a plurality of user computers, the selected user computer being associated with the user, the web page comprising a control for initiating communication over a computer network between the reward server computer and the ~~reward exchange~~ trading server computer;

the reward server computer receiving from the user operating the user computer a selection of the control from the web page and, in response, initiating communication over the computer network with the ~~reward exchange~~ trading server computer to ~~exchange~~ convert a quantity of reward points ~~of the first type~~, designated by the user operating the user computer, from the respective type stored in the corresponding reward account on the reward server computer into reward points of the ~~second~~ third type for ~~adding to~~ storing in the reward exchange account associated with the user on the ~~reward exchange~~ trading server computer by:

decreasing the quantity of reward points ~~of the first type~~ designated by the user from the corresponding reward account on the reward server computer,

causing the ~~reward exchange~~ trading server computer to:

convert the quantity of reward points ~~of the first type~~ decreased from the corresponding reward account on the reward server computer from the respective type stored in the corresponding reward account into a corresponding amount of reward points of the ~~second~~ third type at a predetermined reward server conversion rate,

add the corresponding amount of converted reward points of the ~~second~~ third type to the reward exchange account, and

combine the corresponding amount of converted reward points of the ~~second~~ third type added to the reward exchange account with ~~the second set of~~ reward points of the ~~second~~ third type previously stored in the reward exchange account, and

conveying consideration to the ~~reward-exchange trading server~~ computer, the consideration having a value equivalent to the quantity of reward points of the ~~first type~~ decreased from the corresponding reward account on the reward server computer;

the user requesting the ~~reward-exchange trading server~~ computer to redeem at least some of the ~~combined aggregated~~ reward points of the ~~second~~ third type from the reward exchange account for an item selected by the user; and

the ~~reward-exchange trading server~~ computer redeeming the requested ~~combined aggregated~~ reward points of the ~~second~~ third type from the reward exchange account by decreasing the reward exchange account by the ~~combined aggregated~~ reward points of the ~~second~~ third type requested to be redeemed by the user for the item selected by the user.

Mot. Amend App'x A, 2–7. Proposed substitute claims 18–20 recite the same or similar amendments.

B. Procedural Requirements

“Before considering the patentability of any substitute claims, however, the Board first must determine whether the motion to amend meets the statutory and regulatory requirements set forth in 35 U.S.C. § 316(d) and 37 C.F.R. § 42.121.” *Lectrosonics, Inc.*, slip op. at 4.

First, the Motion to Amend proposes four (4) claims to replace challenged claims 1, 5, 9, and 13. We determine that the number of proposed claims is reasonable.

Second, Patent Owner states “the foregoing substitute claims are responsive to the grounds of unpatentability involved in this covered business method patent review” and, further, discusses the section 101 and section 112 challenges on pages 4–20 of the Motion. Mot. Amend 2, 4–20. On this basis, we determine that the proposed amendments sufficiently

respond to the grounds of unpatentability involved in this trial. *See Lectrosonics, Inc.*, slip op. at 5.

Third, Patent Owner further asserts that “the foregoing substitute claims do not seek to enlarge the scope of the claims of the ’402 patent or introduce new subject matter.” Mot. Amend 3. Petitioner argues that Patent Owner has not sufficiently explained how the amendments narrow claim scope. *See* Opp. Amend 6. “A substitute claim will meet the requirements of § 42.221(a)(2)(i) and (ii) if it narrows the scope of at least one claim of the patent, for example, the challenged claim it replaces, in a way that is responsive to a ground of unpatentability involved in the trial.” *Lectrosonics Inc.*, slip op. at 6–7. We determine that this requirement has been satisfied because substitute claim 17 narrows the scope of original claim 1 by reciting the additional step of:

the user executing a plurality of second purchase transactions using a second credit card linked to a second credit card reward program of a second reward issuing entity, each of the second purchase transactions earning a second set of reward points of a second type from the second reward issuing entity, the second reward issuing entity being different from the first reward issuing entity[.]

Mot. Amend App’x A, 2–3.

Fourth, Patent Owner asserts that proposed substitute claims 17–20 are supported by the original disclosure in U.S. Patent Application No. 13/553,437 (Ex. 1007, “the ’437 Application”) and U.S. Provisional Application No. 60/140,603 (Ex. 2012, “the ’603 Application”). Mot. Amend App’x A, 3–4, 23–40, (providing claim charts with citations to Exhibits 1007 and 2012).

Petitioner argues that Patent Owner has not explained how the ’437

Application or the '603 Application provide support for the “plurality of second purchase transactions” or a “third set of reward points” introduced in the proposed amendments. Opp. Amend 7–10. We disagree with Petitioner. Patent Owner has identified the specific sections in the '437 Application and the '603 Application that provide support for the features added to the substitute claims. Mot. Amend App'x A, 23–40. Further, in its Reply to Petitioner's Opposition to the Motion to Amend, Patent Owner explains that

the specification explains “[t]he credit card reward server computer 12 may refer to any type and number of credit card server systems.” *See* Exhibit 1001, p. 13; Paper 30, p. 9. It logically follows the invention may operate with two credit card reward systems to exchange reward points from each credit card reward system into the trading server. . . [and]

the trading server 20 may obtain reward points from reward accounts 52 at each of separate reward servers 10, 12, 14, and store the several reward points in a reward exchange account 54 (FIG. 4). Exhibit 1001, pp. 6, 13. It is implicit the reward points exchanged into and stored at the reward exchange account 54 are a third set of reward points, apart from first and second reward points at the reward accounts 52 of separate reward servers 10, 12, 14.

Reply Amend 4–5. Based on these arguments and the citations provided by Patent Owner on pages 23–40 of its Motion, we are persuaded that Patent Owner has shown that the amendments do not introduce new subject matter.

In view of the above, we determine that Patent Owner's Motion to Amend meets the statutory and regulatory requirements of 35 U.S.C. § 326(d) and 37 C.F.R. § 42.221.

C. § 101 Eligibility of Proposed Substitute Claims 17–20

1. Step 1: Statutory Category

Patent Owner acknowledges that the “parties and the Board are in agreement that the claims of the ‘402 patent are all directed to a statutory class of a process and/or machine. Likewise, the proposed substitute claims are all directed to a process and/or machine.” Mot. Amend 5. We determine that the proposed substitute claims 17–20 are directed to at least one statutory category.

2. Step 2A, Prong 1: Whether the Challenged Claims Recite an Abstract Idea

Initially, we note that Patent Owner treats substitute claim 17 as “exemplary of in scope of all proposed substitute claims.” Mot. Amend. 6. As such, we discuss substitute claim 17 below as representative of all proposed claims 17–20.

Patent Owner asserts that substitute claim 17 does not recite the abstract idea of “currency exchange through transferring and exchanging reward points data” because it recites a computer-implemented method for “aggregating reward points from a first reward server computer into a reward exchange account on a reward aggregating trading server computer, and from a second (different) reward server computer into the same reward exchange account on the reward aggregating trading server computer.” *Id.* Patent Owner adds that

[t]his specific process of earning reward points by a user from two different entities, based on transactions by the user with each of those entities, then trading those reward points to a trading server computer as separate transactions in exchange for consideration that are then aggregated into a reward exchange account on a trading server computer, and then redeemed at the user’s

direction for an item he or she has selected, would not constitute simple currency exchange.

Id. at 9–10. Patent Owner further reiterates its argument that reward points are not currency. *Id.* at 10–11; *see* Reply Amend 7 (“Reward points lack many defining characteristics of currency – reward points are not a system of money in general use in a country, are not in circulation as a medium of exchange, have no recognized value to any individual other than the initial recipient, are of arbitrary and unpredictable value, and are simply not a fungible asset in the manner as a currency.”).

Petitioner responds that adding a plurality of second purchase transactions, a second credit card, and a third type of reward points, does not make the abstract idea any less of a fundamental economic concept. Opp. Amend 13–14. Petitioner argues that “no matter how many words the claims add regarding earning, aggregating, and redeeming reward points,” the claims “fall squarely into group (b): organizing human activity – fundamental economic principles or practice,” and the process of decreasing and converting reward points is an abstract mathematical concept, as well being an economic principle. *Id.* at 12–14; *see* Sur. Amend 4 (“aggregating, converting, and exchanging reward points can be done in one’s head or with pencil and paper.”). Petitioner further adds that Patent Owner has not explained any distinction between “aggregating” and “exchanging.” *Id.* at 10.

As explained above in Part II.G.3.c, the original claims are directed to a judicial exception (namely a certain method of organizing human activity), which is patent ineligible. The proposed substitute claims do not remedy this deficiency in the original claims for several reasons. First, we are not persuaded that the substitution of “aggregating” for “exchanging” in

the proposed claims alters the abstract idea of “currency exchange through transferring and exchanging reward points data” recited in the original claims. Patent Owner asserts that the transfer, addition, and combination of reward points constitutes “aggregating reward points.” *See* Reply Amend 4 (“It is clear from the disclosure of the ‘402 Patent that there is a transfer of reward points from a first reward account into a second reward account, with the transferred reward points then added and combined with other reward points in that second reward account, thus *aggregating* reward points.”). Yet, we do not observe there to be a material difference between the exchange of reward points from one type into another type (i.e., decreasing an amount of rewards from one type and adding that decreased amount to another type) and “aggregating” reward points, which also require essentially the same mathematical steps of “decreasing,” converting, adding, and combining that are recited in original claim 1. For example, annotated amendments for substitute claim 17 are shown below:

decreasing the quantity of reward points ~~of the first type~~ designated by the user from the corresponding reward account on the reward server computer,

causing the ~~reward exchange~~ trading server computer to:

convert the quantity of reward points ~~of the first type~~ decreased from the corresponding reward account on the reward server computer from the respective type stored in the corresponding reward account into a corresponding amount of reward points of the ~~second~~ third type at a predetermined reward server conversion rate,

add the corresponding amount of converted reward points of the ~~second~~ third type to the reward exchange account, and

combine the corresponding amount of converted reward points of the ~~second~~ third type added to the reward exchange account

with ~~the second set of~~ reward points of the ~~second~~ third type previously stored in the reward exchange account.

Mot. Amend App'x A 5–6. As Petitioner notes, these limitations recite the steps for transferring, decreasing, and converting reward points, which is a fundamental economic principle. *See id.* at 14.

Further, similar to original claim 1, substitute claim 17 also recites the steps of conveying consideration and redeeming reward points:

conveying consideration to the ~~reward exchange~~ trading server computer, the consideration having a value equivalent to the quantity of reward points ~~of the first type~~ decreased from the corresponding reward account on the reward server computer;

the user requesting the ~~reward exchange~~ trading server computer to redeem at least some of the ~~combined~~ aggregated reward points of the ~~second~~ third type from the reward exchange account for an item selected by the user; and

the ~~reward exchange~~ trading server computer redeeming the requested ~~combined~~ aggregated reward points of the ~~second~~ third type from the reward exchange account by decreasing the reward exchange account by the ~~combined~~ aggregated reward points of the ~~second~~ third type requested to be redeemed by the user for the item selected by the user.

Mot. Amend App'x A, 6–7. We have previously determined “conveying consideration to the reward exchange computer” and “the reward exchange computer redeeming the requested combined reward points” also recite the fundamental economic practice of “currency exchange through transferring and exchanging reward points data” as evidenced by Rewards. Ex. 1004, 10 (members can transfer and redeem points through major airline and hotel programs).

We also are not persuaded by Patent Owner's continued reliance on the differences between currency and reward points. As discussed in detail

previously, the '402 patent describes reward “points” as having a “cash equivalent” and “negotiable worth,” which is consistent with Petitioner’s position that the reward points can be used as currency for purchase transactions. *See* Ex. 1001, 6:43–45. Further, the '402 patent treats reward points as currency and refers to the redemption of reward points as “purchase” transactions for selected items. *Id.* at 4:64–65; 7:18–20; *see id.* at 7:34–36 (“The trading server computer 20 would decrease the user exchange account 54 by the number of points corresponding to the *purchased item* (step 714).”) (emphasis added).

Even if we consider “aggregating” to recite something different from “exchange,” we agree with Petitioner that substitute claim 17 also recites “earning, aggregating, and redeeming reward points[,]” [which] falls squarely into organizing human activity as fundamental economic principles or practice.” Reply Amend 12–14. For example, the proposed substitute claim 17 (red-lined) recites:

a user executing a plurality of first purchase transactions using a first credit card linked to a first credit card reward program of a first reward issuing entity, each of the first purchase transactions *earning a first set of reward points of a first type from the first reward issuing entity*;

the user executing a plurality of second purchase transactions using a second credit card linked to a second credit card reward program of a second reward issuing entity, each of the second purchase transactions *earning a second set of reward points of a second type from the second reward issuing entity, the second reward issuing entity being different from the first reward issuing entity*;

Mot. Amend App’x A 2–3. Both of these limitations recite the steps for earning reward points.

Further, as discussed, the limitations discussed above recite the steps for “decreasing the quantity of reward points,” “convert[ing] the quantity of reward points,” “add[ing] the corresponding amount of converted reward points of the third type to the reward exchange account,” and “combin[ing] the corresponding amount of converted reward points of the third type added to the reward exchange account with reward points of the third type previously stored in the reward exchange account,” “conveying consideration to the trading server computer,” and “redeeming the requested aggregated reward points of the third type from the reward exchange account by decreasing the reward exchange account by the aggregated reward points of the third type requested to be redeemed by the user for the item selected by the user.” These limitations recite the aggregating, and redeeming reward points, which is a fundamental economic practice described in Rewards. *See* Ex. 1004, 10.

3. Step 2A, Prong 2: Whether the Judicial Exception is Integrated into a Practical Application

Again, consistent with Supreme Court and Federal Circuit precedent, the *Guidance* provides that a claim reciting an abstract idea must be further analyzed to determine whether the recited judicial exception is integrated into a practical application of that exception. *Guidance*, 84 Fed. Reg. at 53. “A claim that integrates a judicial exception into a practical application will apply, rely on, or use 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.” *Id.* at 53. However, “[m]erely includ[ing] instructions to implement an abstract idea on a computer” and “merely us[ing] a computer as a tool to perform an

abstract idea” are not “practical applications” under Step 2A, Prong 2. *Id.* at 55.

Patent Owner contends that the proposed substitute claims integrate the judicial exception into a practical application because they recite an “improvement to bartering systems whereby older systems have been found to contain excessive and unacceptable delays and lacked user control such that any attempt to use points from more tha[n] one account were controlled by the company that held the points (e.g. *Ikeda* Exhibit 2013, discussed *infra*.)” Mot. Amend 12. Patent Owner asserts that the proposed substitute claims provide “meaningful limits via an improved, immediate real time solution that is interactively controlled by the user. In addition, the specific process set forth in the claims of converting, adding, and combining the reward points from multiple sources has not been expressly disclosed in the cited prior art.” *Id.* at 12–13. Patent Owner further argues that additional elements 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, such that the claim as a whole is more than a drafting effort designed to monopolize the exception. Mot. Amend. 16–17 (arguing that alternatives exists). Additionally, Patent Owner analogizes the proposed claims to Example 42, claim 1 from the USPTO Eligibility Examples (discussed previously) as demonstrating the proposed claims are patent eligible. *Id.* at 17–18.

In its Opposition, Petitioner asserts that the substitute claims do not improve the functioning of a computer or an existing technological process because the substitute claims introduce generic physical components for a generic environment in which to carry out the abstract idea of currency

exchange through aggregating and exchanging “reward points” data. Opp. Amend 15. Petitioner further asserts that monopolization is just one factor for consideration, which is not enough to make the use of generic computer tools patent eligible. *Id.* at 17; *see id.* at 18 (“PO claims no new web-based technical features and does not describe in any detail *how* a web-based control functions or improves the functioning of a computer or some other technology.”). Petitioner also argues that Example 42, claim 1 is inapposite because claim 1 recites “converting, by a content server, the non-standardized updated information into the *standardized format.*” *Id.* at 18 (emphasis added). Petitioner contends that “[t]he Substitute Claims, on the other hand, are directed at improving a bartering system using generic computer tools, with no technical innovation. The Substitute Claims involve no specialized software and are not directed to dealing with disparate hardware and software systems in order to generate a standardized records format.” *Id.*

We agree with Petitioner. We do not see how the proposed claims present “an improvement to the technical field of bartering systems . . . [by] provid[ing] a web-based user control for *immediate real-time* performance enabling redemption of reward points in transactions that would not otherwise be possible, increasing the utility of disparate reward points stored across several different reward accounts and enhancing overall effectiveness of customer reward programs.” *See* Reply Amend 8. For example, as with original claim 1, proposed substitute claim 17 does not recite any real-time or timing requirements, and the ’402 patent does not teach that the disclosed processes must be performed in real-time. *See* Ex. 1001, 7:58–60 (“The process may be performed in real time *or as a background process* where

the user may select how the transaction should proceed.”) (emphasis added). Further, as Petitioner has argued, there is no evidence to support Patent Owner’s conclusions that a web-based user control enabled “redemption of reward points in transactions that would not otherwise be possible, increasing the utility of disparate reward points stored across several different reward accounts and enhancing overall effectiveness of customer reward programs.” *See* Reply Amend 8. Indeed, Patent Owner has not cited any evidence in the record that supports these conclusions. Again, attorney argument cannot take the place of evidence.

Moreover, even assuming that there may be some “improvement” or advantages to a web-based user controlled reward system, as Patent Owner proposes, there is no evidence that these are *technical* improvements. We observe, again, that the ’402 patent does not teach that traditional reward point programs or systems suffered “excessive and unacceptable delays” or lacked a user interface due to technical problems. Indeed, the ’402 patent does not describe any excessive delay issues, and, further, does not discuss how any of the claimed features would have provided a “real-time” technical improvement for this delay. *See, generally* Ex. 1001. Instead, the ’402 patent teaches that “[t]he process may be performed in *real time or as a background process* where the user may select how the transaction should proceed.” Ex. 1001, 7:58–60 (emphasis added). Likewise, the ’402 patent does not indicate a web-based user interface improved any computer technology, other technology, or technical field. *Id.* Instead, as discussed, the ’402 patent teaches reward point exchange and redemption systems faced business concerns involving user experience and customer retention. Ex. 1001, 1:39–46 (“In order to attract and retain business customers,

airlines, hotels, car rental companies, chain retailers, telecom providers, etc. have historically introduced frequent use programs that offer awards of ‘frequent flyer miles’ or other such incentives schemes based on the distance traveled or use by that customer. *Competition has forced airlines to modify the manner in which mileage was acquired to include travel related purchases by consumers.*”) (emphasis added). And, again, the ’402 patent teaches that

[t]he prior art does not provide for a consumer to utilize relatively small amounts of reward points in any manner. In addition, a consumer often can only redeem points in an airline-related manner (i.e. to obtain a free ticket or upgrade from coach to first class). This prior art does not recognize the need for a consumer to exchange reward points for non-travel related goods, and in particular renders relatively small numbers of points useless. For example, a consumer that does not travel often may have 500 points in United Airlines, 700 points in USAir, and 1000 points in TWA, each of which is relatively useless in the prior art.

Ex. 1001, 3:26–36 (emphases added). Thus, the ’402 patent teaches that business concerns for customer retention created a need for a better consumer experience that includes the ability to use a smaller number of points. *Id.* However, the ’402 patent does not indicate that this business concern is one that requires a technical improvement. In contrast, the ’402 patent describes all the components and functions of the disclosed system as generic in nature.

For example, substitute claim 17 recites that the user executes a plurality of first purchase transactions and a plurality of second purchase transactions to earn a first set and a second set of reward points, and that these are stored in a first reward server computer and a second reward server computer. The ’402 patent makes clear that existing generic computers and

reward point programs already performed these functions. Specifically, the '402 patent expressly teaches that the reward server entities may be any type of entity that has a service for allocating points or consideration for user actions. Ex. 1001, 5:42–43. The '402 patent further teaches that

[t]he reward server computers 10, 12, 14 may be of any type of accessible server capable of holding data about a user along with a corresponding earned value that is negotiable for other goods, services, or points of another system. In the preferred embodiment, the airline reward server computer 10 may refer to one or several different airlines that have frequent flyer programs or the like. The credit card reward server computer 12 may refer to any type and number of credit card server systems capable of holding, increasing or decreasing a user's earned rewards acquired according to the terms of the credit card program to which the user has enrolled. The marketing reward server computer 14 may refer to one or a multitude of network accessible marketing systems that allow a user to have an account where points or other redeemable value may be stored, updated and redeemed by a user.

Ex. 1001, 5:44–58 (emphases added). The '402 patent expressly teaches that the reward servers can be any generic computer, including those in the “PRIOR ART” shown in Figures 1–3. *Id.* at 5:23–26 (“The user of this system may acquire and accumulate rewards through any prior art means such as shown on FIG. 1, which are then posted in a user's reward point account 52 that is accessible through the reward server computer 10.”); *see id.* at 5:17–22 (“Any type of reward server may also be used in this system. The reward server computer may be a credit card reward program such as offered by American Express where the user earns rewards based on purchases or an advertising based award program where the user earns rewards by selecting advertising content.”) (emphasis added).

Additionally, the '402 patent teaches that the “trading server

computer may be *any type of computer system that allows users to access the system in order to perform the processes involved in this invention.*” Ex. 1001, 5:58–61 (emphasis added). Further, the ’402 patent teaches that “all of the systems described are accessible through the Internet and *the user may freely navigate to any site by means well known in the art.*” Ex. 1001, 5:61–64 (emphasis). In reading these portions of the ’402 patent, we refer again to Dr. Siegel’s testimony in paragraph 40 that

[t]he webpage and control may be provided in accord with well-known practices of providing a webpage in a browser for navigating the internet with a button, hyperlink or other selectable object, so as to establish an interactive communication between the processors of the reward server and the exchange server. Ex. 1001 at 6:5-24; 5:58-63; 9:3-10.

Ex. 2018 ¶ 40. As such, the evidence as a whole supports Petitioner’s position that the limitations of proposed substitute claim 17 do not present any technical improvement to computer technology or other technology.

Proposed Claim 17’s recitation of a “third type” or “third set of reward points of a third type, the third set of reward points being an aggregated set of reward points comprising a first quantity of converted reward points and a second quantity of converted reward points” does not alter our determination. The ’402 patent, again, does not indicate that the trading server performs any function (e.g., adding, combining, and storing) other than generic ones on these reward points regardless of which type of reward points they may be. Further, the claimed computer components of proposed claim 17 are also recited at a high level of generality and are merely invoked as tools to perform an existing rewards points exchange and redemption process. However, a computer “employed only for its most basic function . . . does not impose meaningful limits on the scope of those

claims.”). *Bancorp*, 687 F.3d at 1278

Our determination is also not changed by Patent Owner’s contention that the proposed claims do not monopolize or pre-empt the field because there are alternatives. For the reasons discussed above, we determine the additional elements recited in proposed claim 17 are directed to generic computer components and functions that do not apply or use the fundamental economic practice in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment. Thus, the claim as a whole is little more than a drafting effort designed to monopolize the exception.

Additionally, we agree with Petitioner that Example 42, claim 1 is inapposite. Unlike the proposed substitute claims, Example 42, claim 1 is directed to improving the functioning of computer technology. Here, the proposed claims are not directed to a technical improvement over the prior art systems by, for example, converting rewards point data into a *standardized* format. The proposed claims and the ’402 patent do not teach a standardized format or *format* conversion for the reward points exchange.

Based on the complete record, we determine that Petitioner has shown sufficiently that the additional limitations recited in proposed claims 17–20 do not integrate the fundamental economic practice into a practical application.

4. Step 2A, Prong 2: Whether the Judicial Exception is Integrated into a Practical Application

Petitioner argues that the proposed claims provide no inventive concept and recite “storing, transferring, and exchanging data. Opp. Amend 19. Patent Owner argues that the proposed claims recite more than the abstract idea because the claims require “(1) the use of credit cards to obtain

two types of points, (2) three different databases containing reward information from separate vendors; (3) four separate computer systems; (4) a communications network; (5) a communication method, namely, a web application; (6) and using combined reward data to facilitate the purchase of an actual product.” Mot. Amend 19.

As discussed in detail above, the ’402 patent teaches that the “rewards server computer,” may be any conventional reward server computer such as those in use by existing and conventional reward server programs. *See* Ex. 1001, 5:18–22 (“The reward server computer may be a credit card reward program such as offered by American Express where the user earns rewards based on purchases or an advertising based award program where the user earns rewards by selecting advertising content.”), 5:44–47 (“The reward server computers 10,12, 14 may be of any type of accessible server capable of holding data about a user along with a corresponding earned value that is negotiable for other goods, services, or points of another system.”). Further, the functions and steps performed by the “reward server computer,” required by claim 17, for example, are also nothing more than generic and basic functions of a computer. Claim 17 requires that the reward server computers recited (1) store a first/second set of reward points in the accounts on the reward server computer; and (2) provide a web page comprising a “control” for initiating communication over the computer network with the reward exchange computer. *See* Ex. 1001, C1, 1:30–36, 1:43–45. The Supreme Court and Federal Circuit have held repeatedly that “storing” data is “well-understood, routine, conventional” activity. *Alice Corp.*, 134 S. Ct. at 2359, (creating and maintaining “shadow accounts”); *Ultramercial, Inc. v. HULU, Inc.*, 772 F.3d 709, 716 (Fed. Cir. 2014) (updating an activity log); *see also*

Versata Dev. Group, Inc. v. SAP Am., Inc., 793 F.3d 1306, 1334 (Fed. Cir. 2015) (storing and retrieving information in memory). Further, providing a web page with a hyperlink or button to navigate the internet was also well-understood as evidenced by Dr. Siegel’s testimony and the ’402 patent. Ex. 1001, 5:26–31 (“The trading server computer 20 is in communication through the network 2 with a user on a user computer 40 and *is additionally able to connect to the reward server computers 10,12,14 through the network 2 in accordance with techniques well known in the art for Internet communications.*”) (emphasis added); Ex. 2018 ¶ 40 (“*The webpage and control may be provided in accord with well-known practices of providing a webpage in a browser for navigating the internet with a button, hyperlink or other selectable object, so as to establish an interactive communication between the processors of the reward server and the exchange server. Ex. 1001 at 6:5-24; 5:58-63; 9:3-10.*”) (emphasis added).

Additionally, the ’402 patent teaches that the “reward exchange computer” also may be “any type of computer system that allows users to access the system in order to perform the processes involved in this invention.” Ex. 1001, 5:58–61. With respect to claim 17, we discern that the “trading server” performs the process of converting, aggregating, and redeeming the reward points, which require:

decreasing the quantity of reward points designated by the user from the corresponding reward account on the reward server computer,

causing the trading server computer to:

convert the quantity of reward points decreased from the corresponding reward account on the reward server computer from the respective type stored in the corresponding reward account into a corresponding

amount of reward points of the third type at a predetermined reward server conversion rate,

add the corresponding amount of converted reward points of the third type to the reward exchange account, and

combine the corresponding amount of converted reward points of the third type added to the reward exchange account with reward points of the third type previously stored in the reward exchange account, and

conveying consideration to the trading server computer, the consideration having a value equivalent to the quantity of reward points decreased from the corresponding reward account on the reward server computer;

the user requesting the trading server computer to redeem at least some of the aggregated reward points of the ~~second~~ third type from the reward exchange account for an item selected by the user; and

the trading server computer redeeming the requested aggregated reward points of the third type from the reward exchange account by decreasing the reward exchange account by the aggregated reward points of the third type requested to be redeemed by the user for the item selected by the user.

Mot. Amend App'x A 5–6. Similar to original claim 1, we determine these steps describe basic electronic recordkeeping performed by the trading server to aggregate, decrease, add, convert, combine, store, and redeem reward points, and to convey consideration (i.e., value equivalent to the quantity of reward points decreased) for the exchange of reward points. Again, *Alice* explains, using a computer to create and maintain electronic recordkeeping and “to obtain data [and] adjust account balances” are the most basic functions of a computer. *Alice*, 134 S. Ct. at 2359. Further, there is no indication in the record that these steps are anything employ more than conventional practices. *See* Ex. 1001, Figs. 1–3 (describing conventional reward point programs); *see* Ex. 1006 ¶¶ 114–119 (discussing conveyance of

consideration by Continental’s OnePass program (Ex. 1013–1014).

Further, we determine the use of a web-based user “control” also does not render the proposed claims patent eligible under Step Two of *Alice*. Neither the ’402 patent nor challenged claims indicate that the interface or control are anything other than generic computer components that perform generic functions. Again, this is not enough to render the claims patent-eligible. *See, e.g., Mortgage Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d at 1324–25 (generic computer components such as an “interface,” “network,” and “database” “do not satisfy the inventive concept requirement”).

We also are not persuaded that any of the remaining limitations, individually or in combination with the others, amount to more than well-understood, routine, and conventional practices and computer components. Proposed claim 17 also recites the well-understood practice of earning reward points through credit card purchase transactions (*see* Ex. 1001, C1, 1:23–29) and the use of a “computer network.” Both of these features were conventional. *See* Ex. 1001, 1:48–55, 5:10–22

Thus, having considered the claimed limitations individually and in combination, we determine that proposed claim 17 recites generic computer components and conventional functions to implement a fundamental economic practice. We determine that proposed claim 17 is unpatentable by a preponderance of the evidence under § 101.

For the same reasons, we determine that the recited elements of substitute claims 18–20 are unpatentable by a preponderance of the evidence under § 101.

IV. CONCLUSION⁹

Accordingly, Petitioner has met its burden of demonstrating that the '402 patent is a covered business method patent eligible for review.

Petitioner has also met its burden of demonstrating by a preponderance of the evidence that claims 1, 2, 5, 6, 9, 10, 13, and 14 of the '402 patent are unpatentable under 35 U.S.C. § 101.

Claims Challenged	Statutory Basis	Claims Shown Unpatentable
1, 2, 5, 6, 9, 10, 13, and 14	§ 101	1, 2, 5, 6, 9, 10, 13, and 14
Overall Outcome		1, 2, 5, 6, 9, 10, 13, and 14

Further, based on the entirety of the record, we determine that proposed substitute claims 17–20 are unpatentable by a preponderance of the evidence based on 35 U.S.C. § 101.

Motion to Amend Outcome	Claims
Substitute Claims: Proposed in the Amendment	17–20
Substitute Claims: Motion to Amend Denied	17–20

⁹ Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this decision, we draw Patent Owner's attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding*. See 84 Fed. Reg. 16654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. See 37 C.F.R. § 42.8(a)(3), (b)(2).

This is a Final Written Decision of the Board under 35 U.S.C. § 328(a). Parties to the proceeding seeking judicial review of this decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

V. ORDER

For the reasons provided, it is:

ORDERED that claims 1, 2, 5, 6, 9, 10, 13, and 14 of the '402 patent are unpatentable;

FURTHER ORDERED that Patent Owner's Contingent Motion to Amend is *denied*; and

FURTHER ORDERED that, because this is a Final Written Decision, parties to the proceeding seeking judicial review of the Decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

CBM2018-00035
Patent 8,423,402 C1

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