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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte CAMERON A. FILIPOUR

Appeal 2018-005263
Application 14/169,869
Technology Center 3700

Before JENNIFER D. BAHR, LINDA E. HORNER, and
MICHELLE R. OSINSKI, *Administrative Patent Judges*.

HORNER, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 1–20 under 35 U.S.C. § 101 as being directed to patent ineligible subject matter. Appellant's representative presented arguments at an oral hearing on January 7, 2020.² We have jurisdiction under 35 U.S.C. § 6(b).

¹ We use the word Appellant to refer to “applicant” as defined in 37 C.F.R. § 1.42(a). Appellant identifies the real party in interest as IGT. Appeal Br. 2.

² A transcript of the oral hearing was added to the Official File Wrapper on January 21, 2020 (“Tr.”).

The Examiner rejected the claims on appeal because the claims are directed to a wagering game (i.e., game rules) and a method of managing a game, which are ineligible, and do not include additional elements that amount to significantly more than the abstract idea. Final Act. 2–20. Distinguishing prior Federal Circuit decisions addressing patent ineligibility of certain gaming claims, Appellant argues that the claims on appeal are not directed to an abstract idea and include significantly more than the game rules. Appeal Br. 23–32. For the reasons explained below, we agree with the Examiner’s determination that the subject matter of claims 1–20 is unpatentable under 35 U.S.C. § 101. Thus, we affirm.

CLAIMED SUBJECT MATTER

Appellant’s Specification describes that “[g]aming systems that provide players awards in primary or base games are well known.” Spec. ¶ 2. “Bonus or secondary games are also known in gaming systems.” *Id.* ¶ 4. These bonus games usually are awarded to a player in addition to any awards provided for plays of the primary game, and the bonus games usually do not require an additional wager to be placed by the player. *Id.* The Specification describes that “[p]art of the enjoyment and excitement of playing certain gaming systems is the initiation or triggering of a bonus game, even before the player knows an amount of a bonus award won via the bonus game.” *Id.* The Specification further describes that “[v]arious players continually seek out new and different variations to gaming systems” and “[a] continuing need thus exists for gaming systems and methods that provide new, exciting, and engaging games.” *Id.* ¶ 5.

The claimed subject matter relates generally to “a gaming system and method providing a secondary game having a varying narrative based on

secondary game progress.” Spec. ¶ 6. More specifically, the gaming system enables a player to play a primary game in association with a secondary game. *Id.* ¶ 7. The secondary game progresses based at least in part on certain events that randomly occur during play of the primary game. *Id.* The secondary game includes a narrative or storyline that unfolds or develops based at least in part on the player’s progress in the secondary game. *Id.* Thus, the gaming system leverages the random nature of the primary game to provide an unpredictable secondary game narrative that is linked to the player’s progress in the secondary game to maintain player interest in the secondary game. *Id.*

Claims 1, 6, 9, and 16 are independent. Claim 1 is illustrative of the subject matter on appeal and is reproduced below.³

1. A gaming system comprising:
 - a housing;
 - at least one display device supported by the housing;
 - a plurality of input devices supported by the housing, the plurality of input devices including an acceptor;
 - at least one processor; and
 - at least one memory device that stores a plurality of instructions which, when executed by the at least one processor, cause the at least one processor to operate with the at least one display device and the plurality of input devices to:

³ Appellant argues claims 1–20 as a group. Appeal Br. 21–32; *id.* at 26 (presenting arguments for claim 1 and stating that “[s]imilar reasoning applies to Claims 2 to 20”). We select claim 1 as representative of the group, and claims 2–20 stand or fall with claim 1. *See* 37 C.F.R. § 41.37(c)(1)(iv) (2017).

(a) if a physical item associated with a monetary value is received by the acceptor, establish a credit balance based at least in part on the monetary value, wherein the physical item is one selected from the group consisting of: a ticket associated with the monetary value and a unit of currency;

(b) if an actuation of a wager button is received, place a wager on a play of a primary game, the credit balance being decreasable by the wager, a current primary theme of said primary game being one of a plurality of different primary themes;

(c) randomly determine and display an outcome of said play of the primary game;

(d) determine any awards associated with the displayed outcome of said play of the primary game, the credit balance being increasable by any determined awards;

(e) display any determined awards associated with the displayed outcome of said play of the primary game;

(f) upon an occurrence of a first triggering event, for a secondary game including a plurality of different object visitation areas, each object visitation area being associated with: (i) one of the primary themes, and (ii) one of an unvisited status and a visited status:

(A) determine one of the object visitation areas based, at least in part, on the status of each of one or more of the object visitation areas, wherein for each of at least one of the object visitation areas, a probability of determining said object visitation area when said object visitation area has the unvisited status is greater than a probability of determining said object visitation area when said object visitation area has the visited status;

(B) display a secondary game object in association with said determined object visitation area;

(C) if said determined object visitation area has the unvisited status, change the status of said determined object visitation area to the visited status; and

(D) if the primary theme associated with said determined object visitation area is different than the current primary theme of said primary game, change the current primary theme of said primary game to the primary theme associated with said determined object visitation area;

(g) upon an occurrence of a second different triggering event, for the secondary game:

(A) determine one of a plurality of different video segments based at least in part on: (i) the object visitation area that said secondary game object is displayed in association with; and (ii) at least one of any video segments previously displayed for the secondary game; and

(B) display the determined video segment; and

(h) if an actuation of a cashout button is received, initiate a payout associated with the credit balance.

Appeal Br. 34–35 (Claims Appendix).

OPINION

Legal Principles

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, 67 (1972)). Concepts determined to be patent eligible include physical and chemical processes, such as “molding rubber products” (*Diamond v. Diehr*, 450 U.S. 175, 191 (1981)); “tanning, dyeing, making water-proof cloth, vulcanizing India rubber, smelting ores” (*id.* at 182 n.7 (quoting *Corning v. Burden*, 56 U.S. (15 How.) 252, 267–68 (1854))); and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))).

In *Diehr*, the claim at issue recited a mathematical formula, but the Supreme Court held that “a claim drawn to subject matter otherwise statutory does not become nonstatutory simply because it uses a mathematical formula.” *Diehr*, 450 U.S. at 187; *see also id.* at 191 (“We view respondents’ claims as nothing more than a process for molding rubber

products and not as an attempt to patent a mathematical formula.”). Having said that, the Supreme Court also indicated that a claim “seeking patent protection for that formula in the abstract . . . is not accorded the protection of our patent laws, . . . and this principle cannot be circumvented by attempting to limit the use of the formula to a particular technological environment.” *Id.* (citing *Benson* and *Flook*); *see, e.g., id.* at 187 (“It is now commonplace that an *application* of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.”).

If the claim is “directed to” an abstract idea, we turn to the second step of the *Alice* and *Mayo* framework, where “we must examine the elements of the claim to determine whether it contains an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application.” *Alice*, 573 U.S. at 221 (quotation marks omitted). “A claim that recites an abstract idea must include ‘additional features’ to ensure ‘that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].’” *Id.* (alterations in original) (quoting *Mayo*, 566 U.S. at 77). “[M]erely requir[ing] generic computer implementation[] fail[s] to transform that abstract idea into a patent-eligible invention.” *Id.*

In 2019, the PTO published revised guidance on the application of § 101. *See 2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50 (USPTO Jan. 7, 2019) (“Guidance”). Under that guidance, we first look to whether the claim recites:

- (1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing

human activity such as a fundamental economic practice, or mental processes); and

(2) additional elements that integrate the judicial exception into a practical application (*see* MPEP §§ 2106.05(a)–(c), (e)–(h) (9th ed. Rev. 08.2017, Jan. 2018)).

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

(3) adds a specific limitation beyond the judicial exception that are not “well-understood, routine, conventional” in the field (*see* MPEP § 2106.05(d)); or

(4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.

See Guidance, 84 Fed. Reg. at 54–56.

Step One: Does Claim 1 Fall within a Statutory Category of § 101?

We examine whether the claim recites one of the enumerated statutory classes of subject matter, i.e., process, machine, manufacture, or composition of matter, eligible for patenting under 35 U.S.C. § 101.

Claim 1 is directed to a gaming system, including a housing, a display device, input devices, a processor and a memory device, which collectively recite one of the statutory classes (i.e., a manufacture) under 35 U.S.C.

§ 101.

Step 2A, Prong One: Does Claim 1 Recite a Judicial Exception?

We next look to whether the claim recites 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.

Claim 1 recites the memory device stores instructions that cause the processor to operate with the display device and input devices to perform various functions associated with conducting a wagering game. The Examiner found these game rules amount to a “method of exchanging and resolving financial obligations based on probabilities.” Final Act. 2–5 (identifying the functions recited in steps (a) through (h) of claim 1 as reciting “game rules.”). For the reasons that follow, we agree with the Examiner that claim 1 recites rules for conducting a wagering game.

First, the claim recites that the instructions cause the processor, in response to receipt of a physical item associated with a monetary value, to “establish a credit balance based at least in part on the monetary value.” Claim 1, step (a). This step is part of a method of conducting a wagering game. In other words, in order to be able to place a bet, one has to establish that they have money with which to wager. This step is a fundamental part of exchanging and resolving financial obligations based on probabilities. As the Examiner correctly noted, this step recites a simple accounting process that establishes an account for later game play. Final Act. 3. We discuss below in prong 2 of the step 2A analysis the additional limitations in this step, which recite that the account is established in response to receipt of a physical item, i.e., a ticket or a unit of currency, input into an acceptor.

Second, the claim recites that the instructions cause the processor, in response to actuation of a wager button, to “place a wager on a play of a primary game, the credit balance being decreasable by the wager, a current primary theme of said primary game being one of a plurality of different

primary themes.” Claim 1, step (b). This step is akin to step (b) recited in method claim 1 discussed in *In re Smith*, 815 F.3d 816, 817–18 (Fed. Cir. 2016), in which the dealer accepts a wager from each player. Placing a wager is the first step in a method of conducting a wager game that involves exchanging and resolving financial obligations based on probabilities. The fact that the credit balance is decreasable by the wager is an inherent feature of a credit balance established for the purpose of wagering. And the general recitation that the primary game has a primary theme does not remove the recited step from the realm of abstraction. We discuss below in prong 2 of the step 2A analysis the additional limitation in this step, which recites that the wager is placed in response to actuation of a wager button.

Third, the claim recites that the instructions cause the processor to “randomly determine and display an outcome of said play of the primary game.” Claim 1, step (c). This step is akin to step (c) recited in method claim 1 in *Smith*, in which the dealer deals cards from a random set of playing cards. In other words, a method of conducting a wagering game entails randomly determining an outcome and informing the player of the outcome. This step is a fundamental part of exchanging and resolving financial obligations based on probabilities.

Fourth, the claim recites that the instructions cause the processor to “determine any awards associated with the displayed outcome of said play of the primary game, the credit balance being increasable by any determined awards.” Claim 1, step (d). This step is akin to steps (h) and (i) recited in method claim 1 in *Smith*, in which the dealer determines if the player has won the game and resolves the wagers based on whether the player won. Again, a method of conducting a wagering game entails determining if a

player has won the game and resolving the wager placed on the game by the player. Thus, this step is a fundamental part of exchanging and resolving financial obligations based on probabilities.

Fifth, the claim recites that the instructions cause the processor to “display any determined awards associated with the displayed outcome of said play of the primary game.” Claim 1, step (e). This simple outputting step is part of a method of conducting a wagering game in which the result of the wager and game play is made visible to the player in order to resolve the wager. Thus, this step is a fundamental part of exchanging and resolving financial obligations based on probabilities.

Sixth, the claim recites that the instructions cause the processor to:

upon an occurrence of a first triggering event, for a secondary game including a plurality of different object visitation areas, each object visitation area being associated with: (i) one of the primary themes, and (ii) one of an unvisited status and a visited status:

(A) determine one of the object visitation areas based, at least in part, on the status of each of one or more of the object visitation areas, wherein for each of at least one of the object visitation areas, a probability of determining said object visitation area when said object visitation area has the unvisited status is greater than a probability of determining said object visitation area when said object visitation area has the visited status;

(B) display a secondary game object in association with said determined object visitation area;

(C) if said determined object visitation area has the unvisited status, change the status of said determined object visitation area to the visited status; and

(D) if the primary theme associated with said determined object visitation area is different than the current primary

theme of said primary game, change the current primary theme of said primary game to the primary theme associated with said determined object visitation area.

Claim 1, step (f), substeps (A) through (D). This step amounts to instructions for determining a particular award, i.e., the award of a secondary game, based on play of the primary game. For instance, the Specification describes that a first triggering event that triggers an award of the secondary game includes a first secondary game movement event, such as three symbol display areas in a slot machine each displaying a wind symbol. Spec. ¶ 44. If the award is a secondary game, then this step includes the processor determining which secondary game to display to the user and displaying it, while keeping track of what displays the user already may have seen and coordinating theming between the primary and secondary games. For instance, in the slot machine example described in the Specification, the gaming system determines which object visitation area in the secondary game to visit based on which areas have not yet been visited and proximity of the area to the current visitation area. *Id.* ¶ 46. This step and its subordinate steps are merely rules of conducting the wagering game, including how the game is displayed to the user based on the user's past play. This step and its subordinate steps are a fundamental part of exchanging and resolving financial obligations based on probabilities.

Further, even if one were to find that the specificity of the recited limitation goes beyond simply exchanging and resolving financial obligations based on probabilities, the recited limitations nonetheless pertain to managing personal behavior. Specifically, the awarding of a secondary game and the selection of particular theming of the secondary game based

on the user's past play is designed to keep the player interested in playing the game. Spec. ¶¶ 7, 19; Tr. 7:14–19, 18:6–14.

Seventh, the claim recites that the instructions cause the processor to
upon an occurrence of a second different triggering
event, for the secondary game:

(A) determine one of a plurality of different video
segments based at least in part on: (i) the object visitation area
that said secondary game object is displayed in association
with; and (ii) at least one of any video segments previously
displayed for the secondary game; and

(B) display the determined video segment.

Claim 1, step (g), substeps (A), (B). This step amounts to instructions for determining a particular award for the secondary game, i.e., the award of display of a video segment, based on play of the primary game. For instance, the Specification describes that a second triggering event that triggers an award of a video segment can occur when three symbol display areas in a slot machine each display a story symbol. Spec. ¶ 59. This step and its subordinate steps are merely rules of conducting the wagering game and how awards are provided to the user based on the user's play. This step and its subordinate steps are a fundamental part of exchanging and resolving financial obligations based on probabilities.

Further, even if one were to find that the specificity of the recited limitation goes beyond simply exchanging and resolving financial obligations based on probabilities, the recited limitations nonetheless pertain to managing personal behavior. Specifically, the awarding of a video segment for play of a secondary game is designed to keep the player interested in playing the game. Spec. ¶¶ 7, 19; Tr. 7:14–19, 18:6–14.

Finally, eighth, the claim recites that the instructions cause the processor to “initiate a payout associated with the credit balance.” Claim 1, step (h). This is the final step of any method of conducting a wagering game, i.e., the payout for a winning bet. This simple outputting step is necessary to resolve the wager. Thus, this step is a fundamental part of exchanging and resolving financial obligations based on probabilities.

Each of the above-described steps relates to rules of conducting a wagering game, in which the rules are part of exchanging and resolving financial obligations based on probabilities, and/or relates to managing personal behavior. *See In re Marco Guldenaar Holding B.V.*, 911 F.3d 1157, 1160 (Fed. Cir. 2018) (holding that rules for playing games “is one type of certain method of organizing human activity.”); *In re Smith*, 815 F.3d at 818 (holding that rules for conducting a wager game compare to fundamental economic practices). Fundamental economic practices and managing personal behavior or relationships or interactions between people fall within the abstract idea exception subgrouping of certain methods of organizing human activity. Guidelines, 84 Fed. Reg. at 52. Thus, each of the steps discussed above recites a certain method of organizing human activity, which is a judicial exception.

Considered as a whole, these steps discussed above, under their broadest reasonable interpretation, contribute to the rules of playing the game and recite steps for managing interactions between people, which are certain methods of organizing human activity. These limitations are similar to other processes that courts have determined are certain methods of organizing human activity. *See, e.g., Marco Guldenaar*, 911 F.3d at 1160–61 (holding that a claimed “method of playing a dice game” was drawn to an

abstract idea); *Smith*, 815 F.3d at 819 (holding that a “method of conducting a wagering game” using a deck of playing cards was drawn to an abstract idea).

Step 2A, Prong Two: Does Claim 1 Recite Additional Elements that Integrate the Judicial Exceptions into a Practical Application?

Following our Office guidance, having found that claim 1 recites a judicial exception, we next determine whether the claim recites “additional elements that integrate the exception into a practical application” (*see* MPEP §§ 2106.05(a)–(c), (e)–(h)). *See* Guidance, 84 Fed. Reg. at 54.

The preamble of claim 1 is directed to a “gaming system.” The body of claim 1 recites certain physical components of the gaming system in a generic manner. Specifically, claim 1 recites that the gaming system comprises “a housing,” “at least one display device supported by the housing,” “a plurality of input devices supported by the housing, the plurality of input devices including an acceptor,” “at least one processor,” and “at least one memory device that stores a plurality of instructions which, when executed by the at least one processor, cause the at least one processor to operate with the at least one display device and the plurality of input devices” to perform various functions. Also, steps (a), (b), and (h) inferentially recite additional features. Step (a) recites that a credit balance is established based, at least in part, on the monetary value of a physical item received by the acceptor of the input devices, wherein the physical item is selected from the group consisting of a ticket and a unit of currency. Step (b) recites that a wager is placed on a play of a primary game “if an actuation of a wager button is received.” Step (h) recites that a payout is initiated “if an actuation of a cashout button is received.”

The Examiner interpreted this claim language as reading on a computer with a keyboard, a display, a scanner, (optionally) a printer, and an internet connection. Ans. 14. The Examiner’s interpretation is reasonable when these limitations are read in light of the Specification. Appellant’s Specification describes, “It should be appreciated that a ‘gaming system’ as used herein refers to various configurations of: (a) one or more central servers, central controllers, or remote hosts; (b) one or more EGMs; and/or (c) one or more personal gaming devices, such as desktop computers, laptop computers, tablet computers or computing devices, personal digital assistants (PDAs), mobile telephones such as smart phones, and other mobile computing devices.” Spec. ¶ 91. The Specification supports a reading of “gaming system” that encompasses a general-purpose computer having generic computer components. We agree with the Examiner that the buttons recited in claim 1 encompass buttons on a keyboard, for instance. Ans. 14, ¶ 31 (finding that the wager button could be the “W” key and the cashout button could be the “C” key on a standard keyboard). We further agree with the Examiner that the claim, as written, encompasses an acceptor that is capable of receiving a ticket via scanning. *Id.* at 14, ¶ 29 (reading the acceptor on a “common scanner.”). *See also* Spec. ¶ 105 (describing that “the [electronic gaming machine (EGM)] includes one or more input devices” that “may include any suitable device that enables an input signal to be produced and received by the at least one processor of the EGM.”); *see also id.* ¶ 106 (describing that the payment device can be configured to communicate with a player’s mobile device “to retrieve relevant information associated with that player to fund the EGM”).

These physical components of the gaming system are recited generically and encompass any computing device that can be used to input data and store and run software. The physical components of the gaming system are not specific to any particular manifestation of the gaming system (e.g., a dedicated gaming machine, versus a game played on a PC, home gaming system, or handheld device).

Thus, the steps of claim 1 are recited as being performed with generic computer components that, when considered both individually and in combination, do not implement the judicial exception with, or use the judicial exception in conjunction with, a particular machine or manufacture that is integral to the claim. The recitations of the generic structures, with which the recited steps are performed, are merely instructions to apply the judicial exception in the context of a game. Thus, the claims do not apply, rely on, or use rules of conducting the wagering game in a manner that imposes a meaningful limit on those aspects of the claim. *See, e.g., Smith*, 815 F.3d at 819 (“Just as the recitation of computer implementation fell short in *Alice*, shuffling and dealing a standard deck of cards are ‘purely conventional’ activities” that are not “sufficient to ‘transform’ the claimed subject matter into a patent-eligible application of the abstract idea.”). Rather, the claim is simply a drafting effort designed to monopolize the rules of conducting a wagering game of claim 1.

Even if we were to agree with Appellant’s initial argument that the “acceptor” or the inferentially recited “wager button” and “cashout button” limit the scope of claim 1 to implementation of the rules of conducting a wagering game using a dedicated gaming machine, such as a slot machine, we do not find that such a limitation is adequate to impose a meaningful

limit on the judicial exception. Rather, the recitation of physical components of a dedicated gaming machine are akin to a field of use limitation and amount to a drafting effort designed to monopolize the judicial exception.

Appellant appears to shift its argument in its Supplemental Appeal Brief and at the oral argument.⁴ Instead of arguing that the physical components, such as the acceptor, wager button, and cashout button, of the gaming system impose a meaningful limit on the abstract idea, Appellant argues that programming a general purpose computer to carry out specific steps of the primary game and the secondary game as recited in the claim creates a “special-purpose computer” that is a practical application of the abstract idea. Specifically, Appellant argues that “the claims integrate the alleged abstract idea into a practical application[, which is] a special-purpose gaming system configured to operate in a very particular manner.” Supp. Appeal Br. 2. Appellant argues that “[b]ecause the secondary game progresses based on the play of the primary game, the gaming system leverages the random nature of the primary game to provide an unpredictable secondary game narrative that is nevertheless linked to the player’s progress in the secondary game to maintain player interest in the secondary game.” *Id.* at 2–3. Appellant similarly argued during the oral hearing that the practical application is “a unique gaming system configured to operate in a very specific manner.” Tr. 13:4–6. Appellant contends that

⁴ Appellant argued in the Appeal Brief that these specialized components, i.e., an acceptor, a wager button, and a cashout button, limit the scope of the “gaming system” of claim 1 so that it is not merely a “general-purpose computing device.” Appeal Br. 29. Appellant abandoned this argument during the oral hearing. Tr. 10:17–11:4.

by programming a general purpose computer to carry out specific steps of the primary game and the secondary game as recited in claim 1, the claim recites a new special-purpose computer that is analogous to a new, unconventional deck of cards. Tr. 14:11–19 (drawing an analogy to *In re Smith*, 815 F.3d at 818).

Appellant’s analogy to *Smith* is misplaced. The claim at issue in *Smith* was directed to a method of conducting a wagering game. *Smith*, 815 F.3d at 817. The rules for playing the game included the dealer examining hands of dealt cards to determine if any hand has a “Natural 0” count, and either resolving wagers or continuing play in a specific manner based on the result of this examination, and then resolving wagers based on a specific scoring system. *Id.* at 817–18. In the rejection of the claims under 35 U.S.C. § 101, the Examiner acknowledged that the set of rules for playing the game were new, but the Examiner found that the rules were an abstract idea. *Id.* at 818. The court in *Smith* agreed that the claims, “directed to rules for conducting a wagering game, compare to other ‘fundamental economic practice[s]’ found abstract by the Supreme Court.” *Id.* at 818–19 (agreeing with the Board that “[a] wagering game is, effectively, a method of exchanging and resolving financial obligations based on probabilities created during the distribution of the cards.”). The court then examined, under step two of the *Alice* inquiry, whether the claim recited an inventive concept sufficient to transform the set of rules for a game into a patent eligible application. *Id.* at 819. The court found that the additional limitations in the claim recited “shuffling and dealing a standard deck of cards.” *Id.* The court held that these additional limitations are “‘purely conventional’ activities” that are not sufficient to transform the abstract

game rules into a patent-eligible application of the abstract idea. *Id.* The court further explained, “[t]hat is not to say that all inventions in the gaming arts would be foreclosed from patent protection under § 101” and that “[w]e could envisage, for example, claims directed to conducting a game using a new or original deck of cards potentially surviving step two of *Alice*.” *Id.*

Appellant’s argument that the combination of its specific rules for conducting a wagering game on a general-purpose computer creates a special purpose computer that amounts to a practical application of the abstract idea misses the mark. Appellant is asking us to ignore the holding of *Smith*. In *Smith*, the court did not find that the combination of the new rules for playing a game with a conventional deck of cards creates a special purpose deck of cards. Likewise, in this case, Appellant has not imposed meaningful limits on the rules for playing a game simply by programming a general-purpose computer to perform them.

Here, the additional elements recited in claim 1 do not reflect an improvement in the functioning of a computer, or an improvement to other technology or a technical field. *See* Tr. 17:24–18:7 (Appellant’s counsel admitting that the claimed invention is “not improving the speed,” “not improving the processor,” and “not improving access to data”). Instead, Appellant argues that the improvement that provides a practical application in claim 1 is “an improved game” that people want to play by “keeping the player’s interest in the second game from the random nature of the interrelatedness of the two games.” *Id.* at 18:7–14.

Under step one of the *Alice* inquiry, “we evaluate the focus of the claimed advance over the prior art to determine if the character of the claim as a whole, considered in light of the specification, is directed to excluded

subject matter.” *Trading Technologies Int’l, Inc. v. IBG LLC*, 921 F.3d 1084, 1092 (Fed. Cir. 2019) (citations and internal quotation marks omitted). Here, the claims are directed to an improvement in the game itself so as to keep the player’s interest in the game. The problem the invention is designed to solve is the age-old problem faced by casinos; that of keeping a player’s interest so that the player will continue wagering. *See* Tr. 7:14–19 (“[T]hat’s IGT’s business. That’s the technology. It’s having a game, it’s having a technology presented to a user that makes it so the user will want to go back to the game and fill the casinos. That’s the primary purpose of the entire business.”).

The invention is not directed to solving a problem rooted in computer technology. This asserted improvement to the manner in which a game is played does not reflect an improvement in the particular manufacture, i.e., the gaming machine. Rather, the improvement lies in the rules for conducting a wagering game, which is the judicial exception itself. At the oral argument, Appellant’s counsel drew analogies to the inventions found to be patent eligible in *DDR Holdings, LLC v. Hotel.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014), *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356 (Fed. Cir. 2018), and *Data Engine Techs. LLC v. Google LLC*, 906 F.3d 999 (Fed. Cir. 2018). Tr. 16:5–18:14. We address each of these cases in turn.

The court in *DDR* found that the claims, which were directed to creating a composite web page that displays product information from a third-party merchant, but retains the host website’s “look and feel,” did not recite a mathematical algorithm or a fundamental economic or longstanding commercial practice. 773 F.3d at 1257. The court said that the claims

address a challenge particular to the Internet of retaining website visitors. *Id.* “[T]hese claims stand apart because they do not merely recite the performance of some business practice known from the pre-Internet world along with the requirement to perform it on the Internet. Instead, the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.” *Id.* By contrast, Appellant’s claim 1 before us is directed to a business problem of the gaming industry, i.e., how to keep customers interested in playing a wagering game, and not to a problem rooted in computer technology or specifically arising in the realm of computer gaming.

In *Core Wireless*, the claims were directed to an improved user interface for computing devices and to a particular manner of summarizing and presenting information in electronic devices with small screens. 880 F.3d at 1362–63. The claims recited limitations that restrain the type of data that can be displayed in the summary window and require that the device applications exist in an “un-launched state.” *Id.* The court held that the claimed invention improved upon prior art interfaces that required the user to scroll and switch views. *Id.* at 1363. “The disclosed invention improves the efficiency of using the electronic device by bringing together ‘a limited list of common functions and commonly accessed stored data,’ which can be accessed directly from the main menu.” *Id.* The court noted that this improved the speed of a user’s navigation. *Id.* “This language clearly indicates that the claims are directed to an improvement in the functioning of computers, particularly those with small screens.” *Id.* Unlike the case in *Core Wireless*, Appellant admits that the subject matter of claim 1 does not

improve the speed of the computer or improve the user's access to data.
Tr. 18:1–7.

In *Data Engine*, the court held that the claims solved a known technological problem in computers, i.e., spreadsheets that required users to master complex and arbitrary operations and search through complex menu systems for commands, by providing a highly intuitive user-friendly interface. 906 F.3d at 1007–08. “The improvement allowed computers, for the first time, to provide rapid access to and processing of information in different spreadsheets, as well as easy navigation in three-dimensional spreadsheets.” *Id.* at 1008. The court noted that the industry applauded the invention as “improving computers’ functionality as a tool” and that “the claims require a specific interface and implementation for navigating complex three-dimensional spreadsheets using techniques unique to computers.” *Id.* at 1008–09. Unlike the case in *Data Engine*, the subject matter of claim 1 does not improve the computer’s functionality; rather, it makes an “improved game” that players will want to play. Tr. 18:6–14.

In short, the additional elements discussed above: (1) do not improve the functioning of a computer or other technology; (2) are not applied with any particular machine; (3) do not effect a transformation of a particular article to a different state; and (4) are not applied in any meaningful way beyond generally linking the use of the judicial exception to a particular technological environment. *See* MPEP §§ 2106.05(a)–(c), (e)–(h). The additional elements recited in claim 1 merely include instructions to implement the rules for conducting a wagering game on a computer and use the computer as a tool to implement the rules. *See* MPEP § 2106.05(f) (“Use of a computer or other machinery in its ordinary capacity for . . . tasks

(e.g., to receive, store, or transmit data) or simply adding a general purpose computer or computer components after the fact to an abstract idea . . . does not provide significantly more.”). Thus, the additional elements do not add meaningful limits to the judicial exception recited in claim 1. Consequently, the claimed invention does not integrate the abstract idea into a “practical application.” Thus, claim 1 is directed to an abstract idea, which is a judicial exception to patent eligible subject matter under 35 U.S.C. § 101.

Step 2B: Does Claim 1 Recite an Inventive Concept?

We next consider whether claim 1 recites any elements, individually or as an ordered combination, that transform the abstract idea into a patent-eligible application, e.g., by providing an inventive concept. *Alice*, 573 U.S. at 217–18. The guidance similarly states, under Step 2B, “examiners should . . . evaluate the additional elements individually and in combination . . . to determine whether they provide an inventive concept (*i.e.*, whether the additional elements amount to significantly more than the exception itself).” 84 Fed. Reg. at 56 (emphasis added).

As discussed above, the additional elements include generic recitations of conventional computer components. These additional elements, when considered individually and as an ordered combination, do not add a specific limitation or combination of limitations that are not well-understood, routine, conventional activity in the field. Rather, the claimed computer components are recited at such a high level of generality as to encompass any computer capable of being programmed with rules for conducting the wagering game. And as discussed above, the Specification describes that the “gaming system” refers to configurations of “desktop

computers, laptop computers, table computers or computing devices,” etc. Spec. ¶ 91.⁵

Appellant concedes that its argument under Step 2B is “not about the physical pieces and it’s not about the computer per se that the invention could be applied to.” Tr. 5:11–13; *id.* at 6:20–25 (“we’re not talking about whether it’s a conventional computer. Obviously, this software can be run on [a] conventional computer. We’re not necessarily even talking about the physical components, the slot machine, the input/outputs, the acceptor that you use to enter a wager.”). Rather, Appellant argues that “[w]hat is not routine and conventional is the combination of elements in the claims” including “a primary game” and a related “secondary game” that “progresses based at least in part on certain events that occurred during the play of the random game.” *Id.* at 5:13–19. Appellant argues that “[t]his invention is a new – it’s essentially the software is running a new system. It’s not conventional, it’s not routine.” *Id.* at 9:24–10:2. Appellant argues “these claims in software are no different than the new deck [of cards] that *In re Smith* talked about and which Judge Moore and Judge Hughes said would pass step 2 of *Alice*. It’s just in the form of software.” *Id.* at 7:1–5. *See also id.* at 11:5–8 (“The basis of the argument is what’s new, again, is the new 52 card deck. It’s the new software carried out – the new system carried out in the software is our argument on step 2”).

This argument fails because what makes the software arguably “new” is the abstract idea, i.e., the steps relating to the method of conducting a

⁵ Further, the Examiner provided ample evidence that the claimed physical components, as properly interpreted, are conventional components of machines used for gaming. Final Act. 9–15.

wagering game. According to the Guidance, under Step 2B, “examiners should . . . evaluate *the additional elements* individually and in combination . . . to determine whether they provide an inventive concept (*i.e.*, whether the additional elements amount to significantly more than the exception itself).” *See* Guidance, 84 Fed. Reg. at 56 (emphasis added). Thus, the second step of the inquiry (Step 2B) considers those elements within the claim other than those drawn to the judicial exception. *See, e.g.*, Examples accompanying Guidance (Example 37 (claim 3 analysis) and Example 40 (claim 2 analysis)). *See also BSG Tech LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1290 (Fed. Cir. 2018) (“It has been clear since *Alice* that a claimed invention’s use of the ineligible concept to which it is directed cannot supply the inventive concept that renders the invention ‘significantly more’ than that ineligible concept.”).

Claim 1 fails to add a specific limitation beyond the judicial exception that is not ‘well-understood, routine, conventional’ in the field. Instead, claim 1 “simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.” *See* Guidance, 84 Fed. Reg. at 56. For the reasons discussed above, we find no element or combination of elements recited in claim 1 that contains any “inventive concept” or adds anything “significantly more” to transform the abstract concept into a patent-eligible application. *Alice*, 573 U.S. at 221.

For these reasons, we find no error in the Examiner’s rejection of claims 1–20 under 35 U.S.C. § 101.

CONCLUSION

We sustain the Examiner's rejection of claims 1–20 under 35 U.S.C. § 101. Thus, we affirm.

DECISION SUMMARY

In summary:

Claims Rejected	35 U.S.C. §	Basis	Affirmed	Reversed
1–20	101	Patent ineligible subject matter	1–20	

TIME PERIOD FOR RESPONSE

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED