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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte LEE AMAITIS

Appeal 2018-006514
Application 14/083,969
Technology Center 3700

Before CYNTHIA L. MURPHY, BRUCE T. WIEDER, and KENNETH G. SCHOPFER, *Administrative Patent Judges*.

MURPHY, *Administrative Patent Judge*.

DECISION ON APPEAL

The Appellant[1] appeals from the Examiner's rejections of claims 1–5, 7, 8, 10, 12–14, 16, and 18 under 35 U.S.C. § 101. We AFFIRM.[2]

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[1] The Appellant is the "applicant" (e.g., "the inventor or all of the joint inventors") as defined in 37 C.F.R. § 1.42. "The real party in interest of the present application is CFPH, LLC." (Appeal Br. 3.)

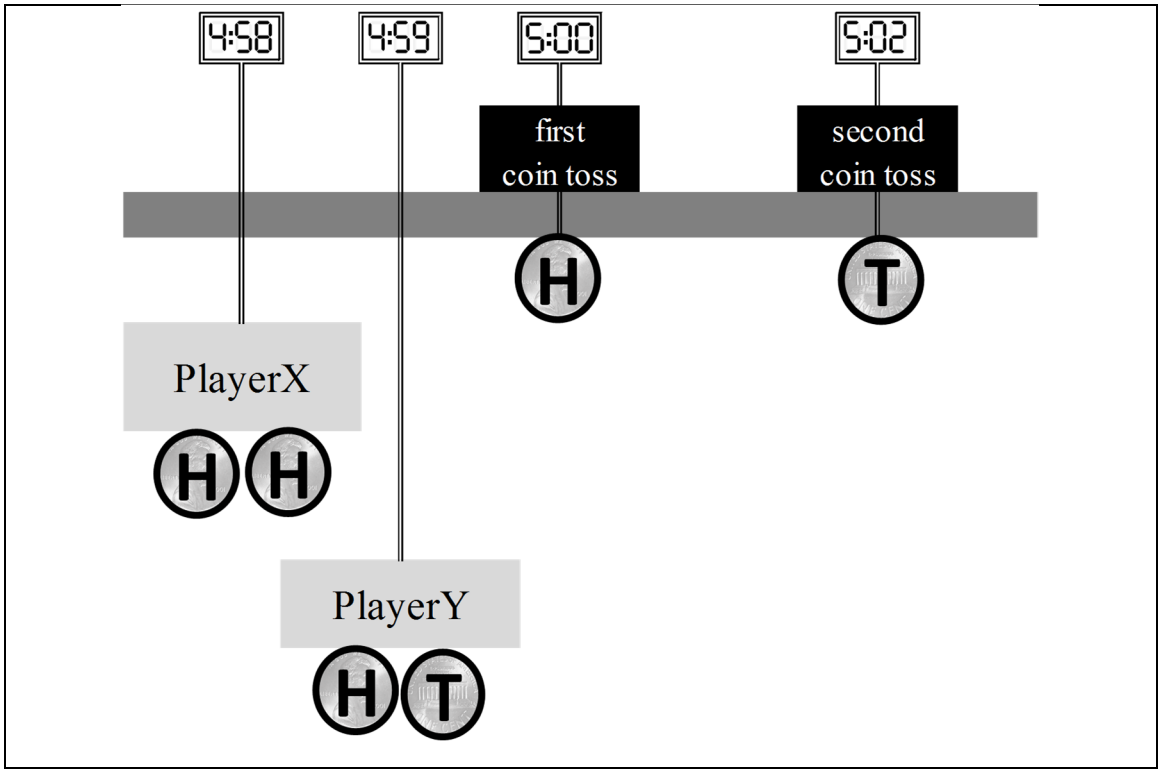
[2] We have jurisdiction over this appeal under 35 U.S.C. § 134 and 35 U.S.C. § 6(b).

BACKGROUND

The Appellant discloses a method involving a "game that is based on a series of binary choices," such as a "coin-toss" game. (Spec. ¶ 306.)

In a coin-toss game, "[a] flipping coin" is the "source" of the "game results." (Spec. ¶ 309.) More specifically, when someone (e.g., a dealer at a casino) tosses a coin, it lands with either its "heads" side or its "tails" side facing upward. (*Id.* ¶ 308.) Thus, the toss of a coin is a "binary" event having a real-time "binary" outcome (heads or tails). (*See id.* ¶ 306.)

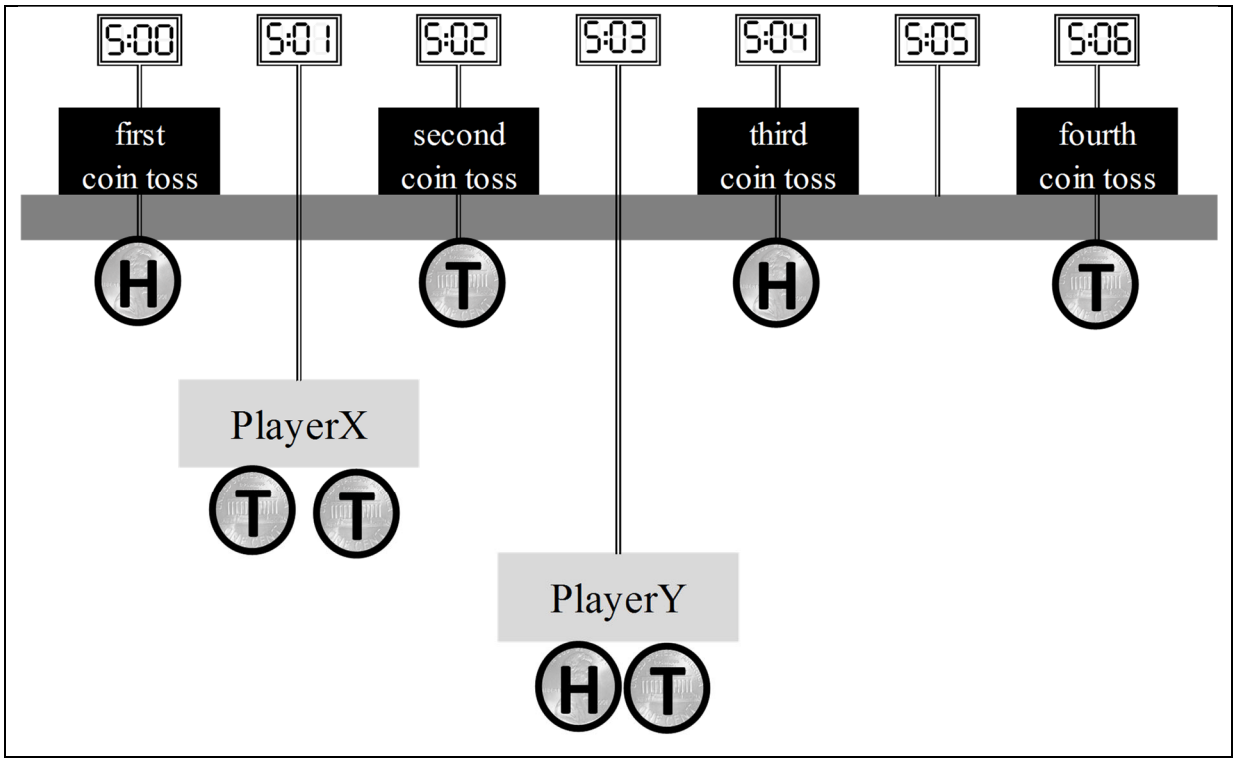
For example, when playing a double-coin-toss game with two players (PlayerX and PlayerY), the dealer can do a first coin toss at 5:00PM and a second coin toss at 5:02PM, as diagrammed below.



The dealer's instructions for interacting with the players during this coin-toss game are: **receive** PlayerX's *two predictions* (HH) at 4:58PM; **receive** PlayerY's *two predictions* (HT) at 4:59PM; do the first coin toss at

5:00PM to **receive** a *real-time outcome* (H); do the second coin toss at 5:02PM to **receive** a *real-time outcome* (T); **determine** that the *real-time outcomes* (HT) do not match PlayerX's *two predictions* (HH); **determine** that the *real-time outcomes* (HT) do match PlayerY's *two predictions* (HT); **transmit** *an indication* to (e.g., tell) PlayerX that he/she did not win the game; and **transmit** *an indication* to (e.g., tell) PlayerY that he/she did win the game and a corresponding award.

Alternatively, in the double-coin-toss game diagrammed below, the dealer does a first coin toss at 5:00PM, a second coin toss at 5:02PM, a third coin toss at 5:04PM, and a fourth coin toss at 5:06PM.



The dealer's instructions for interacting with the players during this coin-toss game are: do the first coin toss at 5:00PM to **receive** a *real-time outcome* (H); **receive** PlayerX's *two predictions* (HH) at 5:01PM; do the second coin toss at 5:02PM to **receive** a *real-time outcome* (T); **receive**

PlayerY's *two predictions* (HT) at 5:03PM; do the third coin toss at 5:04PM to **receive** a *real-time outcome* (H); do the fourth coin toss at 5:06PM to **receive** a *real-time outcome* (H); **determine** that the *real-time outcomes* (HTHT) do not match PlayerX's *two predictions* (HH); **determine** that the *real-time outcomes* (HTHT) do match PlayerY's *two predictions* (HT); **transmit** *an indication* to (e.g., tell) PlayerX that he/she did not win the game; and **transmit** *an indication* to (e.g., tell) PlayerY that he/she did win the game and a corresponding award.

With the Appellant's method, a "processor," rather than a dealer, follows the **receiving**, **determining**, and **transmitting** instructions for interacting with players during a coin-toss game. (*See* Appeal Br. 5–6.)

ILLUSTRATIVE CLAIM
(with bracket text, bolding, and italicizing added)

1. A method comprising:

[(a)] **receiving**, by at least one processor via a communication network, *data indicative of a plurality of real-time outcomes of a plurality of binary events that take place during a period of time*;

[(b)] *during the period of time, after a first binary event and before a second binary event subsequent to the first binary event,* **receiving**, by the at least one processor, *data indicative of a first selection of binary outcomes* from a first remote device;

[(c)] **receiving**, by the at least one processor, *data indicative of a first set of binary outcomes of the plurality of binary events*;

[(d)] **determining**, by the at least one processor*, whether the first set of binary outcomes that occurs after receiving the first selection do not match the first selection;*

> [(e)] *in response to determining that the first set of binary outcomes does not match the first selection* **transmitting**, by the at least one processor, *an indication to the first device that the first selection did not result in a win of a game*;
>
> [(f)] *during the period of time, after the second binary event but before a third binary event subsequent to the second binary event,* **receiving**, by the at least one processor, *data indicative of a second selection of binary outcomes* from a second remote device;
>
> [(g)] **receiving**, by the at least one processor, *data indicative of a second set of binary outcomes of the plurality of binary events*;
>
> [(h)] **determining**, by the at least one processor*, whether the second set of binary outcomes does match the second selection, in which the second set includes at least one binary outcome of the first set*; and
>
> [(i)] *in response to determining that the second set of binary outcomes does match the second selection*, **transmitting***,* by the at least one processor, *an indication* to the second remote device *that the second selection resulted in a win of the game and an indication of an award*.

REJECTION

The Examiner rejects claims 1–5, 7, 8, 10, 12–14, 16, and 18 under 35 U.S.C. § 101 as directed to a judicial exception without significantly more. (*See* Final Action 2.)

JUDICIAL EXCEPTIONS

The Patent Act defines subject matter eligible for patent protection as "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof." (35 U.S.C. § 101.) Yet the Supreme Court has "long held" that this provision contains an important implicit exception: "[l]aws of nature, natural phenomena, and

abstract ideas are not patentable." (*Ass'n for Molecular Pathology* v. *Myriad Genetics, Inc.*, 569 U. S. 576, 589 (2013).) These three concerns are "judicially created exceptions to § 101," or more concisely, "judicial exceptions." (*McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1311 (Fed. Cir. 2016).) Thus, an "abstract idea" is a judicial exception to subject matter (e.g., a method) that would otherwise be deemed patent eligible under 35 U.S.C. § 101.

THE *ALICE* TEST

In *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208 (2014), the Supreme Court provided a two-step test to detect when an attempt is being made to patent an abstract idea in isolation. (*Id.* at 217–18.) In *Alice* step one, a determination is made as to whether the claim at issue is "directed to" an abstract idea. (*Id.* at 218.) When analyzing a claim under *Alice* step one, attention can be given to whether an abstract idea recited in the claim has been integrated into a practical application. (*See id.* at 217.) While a judicial exception (e.g., an abstract idea) cannot be patented, "an *application*" of a judicial exception "to a known structure or process may well be deserving of patent protection." (*Diamond v. Diehr*, 450 U.S. 175, 187 (1981); *see also Bilski v. Kappos*, 561 U.S. 593 (2010).)

If the claim at issue is "directed to" an abstract idea, *Alice* step two must be performed. (*See Alice*, 573 U.S. at 217–18.) In the second step of the *Alice* test, a determination is made as to whether "additional elements" in the claim, both individually and as an ordered combination, contribute "significantly more" than the abstract idea. (*Id.)* When analyzing a claim under *Alice* step two, attention is given to whether additional elements, and

any ordered combination thereof, are "well-understood," "routine," or "conventional." (*Id.* at 225.)

2019 § 101 GUIDANCE

The 2019 Revised Patent Subject Matter Eligibility Guidance ("2019 § 101 Guidance") provides us with specific steps for discerning whether a claim passes the *Alice* test for patent eligibility. (*See* 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019).) These steps are "[i]n accordance with judicial precedent" and consist of a two-pronged Step 2A and a Step 2B. (*Id.* at 52.)

ANALYSIS

The Examiner determines that independent claim 1 is "directed to" an abstract idea; and the Examiner determines that additional elements in independent claim 1 do not amount to "significantly more" than this abstract idea. (*See* Final Action 2.) More succinctly, the Examiner concludes that independent claim 1 fails the *Alice* test for patent eligibility. We have carefully considered the Appellant's arguments about the wrongness of the Examiner's conclusion (*see* Appeal Br. 8–11), however, for the reasons explained below, we are not swayed thereby.

Step 2A – Prong One

Per the 2019 § 101 Guidance we begin our analysis with the first prong of Step 2A ("Prong One"), where we determine whether the claim "recites" an abstract idea. (2019 § 101 Guidance, 84 Fed. Reg. at 54.) The Guidance "extracts and synthesizes key concepts identified by the courts as abstract ideas," and these concepts include "[c]ertain methods of organizing

human activity," and, more particularly, "interactions between people," and, even more particularly, "rules or instructions." (*Id.* at 52.)

For example, claims describing "rules" and/or "instructions" for a dealer's interaction with players during a card game, "are drawn to an abstract idea." (*In re Smith*, 815 F.3d 816, 819 (Fed. Cir. 2016).) In *Smith*, the dealer's rules/instructions for interacting with the players included "accepting" game-related data from the players, "shuffling" a deck of cards, "dealing" cards to the players, examining" the players' hands, "resolving" player-versus-dealer standoffs, "expos[ing]" a card to the players, "allowing" to take an additional card or stand pat, "comparing" the value of each player's hand, and "resolving" the game. (*Id.* at 817–818.)

Independent claim 1 sets forth a method comprising steps (a)–(i). These steps recite **receiving**, **determining**, and **transmitting** instructions that a dealer would follow when interacting with two players (e.g., PlayerX and PlayerY) during a coin-toss game. These recitals cover the example double-coin-toss game discussed and diagrammed above, where the dealer does a first coin toss at 5:00PM, a second coin toss at 5:02PM, a third coin toss at 5:04PM, and a fourth coin toss at 5:06PM. We discuss steps (a)–(i) in the context of this example.

Step (a) recites **receiving** *data indicative of a plurality of real-time outcomes of a plurality of binary events that take place during a period of time*, step (c) recites **receiving** *data indicative of a first set of binary outcomes of the plurality of binary events,* and step (g) *recites* **receiving** *data indicative of a second set of binary outcomes of the plurality of binary events*. (Appeal Br., Claims App.) These recitals instruct the dealer to do

the four coin tosses at 5:00PM, 5:02PM, 5:04PM, and 5:06PM to **receive** *real-time outcomes* (HTHT).[3]

Step (b) recites *during the period of time, after a first binary event and before a second binary event subsequent to the first binary event,* **receiving** *data indicative of a first selection of binary outcomes*; and step (f) recites *during the period of time, after the second binary event but before a third binary event subsequent to the second binary event,* **receiving** *data indicative of a second selection of binary outcomes*. These recitals instruct the dealer to **receive** PlayerX's *two predictions* (TT) at 5:01PM and to **receive** PlayerY's *two predictions* (HT) at 5:03PM.[4]

Step (d) recites **determining** *whether the first set of binary outcomes that occurs after receiving the first selection do not match the first selection;* and step (h) recites **determining** *whether the second set of binary outcomes does match the second selection, in which the second set includes at least one binary outcome of the first set*. These recitals instruct the dealer to

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[3] The *first set of binary outcomes* is the actual outcomes of the second and third coin tosses (HTHT) and the *second set of binary outcomes* is the actual outcomes of third and fourth coin tosses (HTHT). Thus, the second set of binary outcomes *includes at least one binary outcome of the first set,* namely the actual outcome (H) of the third coin toss.

[4] The *first selection of binary options* are PlayerX's predictions for the second and third coin-tosses (TT), the *second selection of binary options* are PlayerY's predictions for the third and fourth coin-tosses (HT). As Player X's predictions are received at 5:01PM, they are received *after the first binary event* (the first coin toss at 5:00PM) and *before the second binary event* (the second coin toss at 5:02PM). As PlayerY's predictions are received at 5:03PM, they are received *after the second binary event* (the second coin toss at 5:02PM), and *before the third binary event* (the third coin toss at 5:04PM).

determine that the *actual outcomes* (HTHT) do not match PlayerX's *two predictions* (TT); and to **determine** that the *actual outcomes* (HTHT) do match PlayerY's *two predictions* (HT).

Step (e) recites *in response to determining that the first set of binary outcomes does not match the first selection,* **transmitting** *an indication that the first selection did not result in a win of a game*, and step (i) recites *in response to determining that the second set of binary outcomes does match the second selection*, **transmitting** *an indication that the second selection resulted in a win of the game and an indication of an award*. These recitals instruct the dealer to **transmit** *an indication* to (e.g., tell) PlayerX that he/she did not win the game, and to **transmit** *an indication* to (e.g., tell) PlayerY that he/she did win the game and a corresponding award.

Thus, independent claim 1 recites the instructions for a dealer to follow when interacting with players during a coin-toss game. These "instructions" or "rules" for interacting with people constitute a "[c]ertain method[] of organizing human activity" that is an abstract idea. (*See* 2019 § 101 Guidance, 84 Fed. Reg. at 52.)

Consequently, under Prong One of Step 2A, independent claim 1 recites an abstract idea, and we proceed to the second prong of Step 2A ("Prong Two").

Step 2A – Prong Two

In Prong Two, we evaluate whether the claim contains additional elements that "integrate" the abstract idea "into a practical application." (*See* 2019 § 101 Guidance, 84 Fed. Reg. at 52.) 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 54.)

Additional elements" are "claim features, limitations, and/or steps that are recited in the claim beyond the identified judicial exception." (2019 § 101 Guidance, 84 Fed. Reg. at 55, n. 24.) Thus, the "additional elements" in independent claim 1 are those "beyond" the recited **receiving**, **determining**, and **transmitting** instructions for interacting with PlayerX and PlayerY during the coin-toss game.

When an additional element in a claim is a "computer," the relevant question is not whether the claim requires the computer to accomplish a recited function. (*Alice*, 573 U.S. at 223.) Rather, "the relevant question" is whether the claim does more than simply "instruct the practitioner to implement the abstract idea" on a computer. (*Id.* at 225.) The mere recitation of a computer in the claim, and/or words simply saying "apply" the abstract idea "with a computer," will not "transform the abstract idea into a patent-eligible invention." (*Id.* at 223.) In short, the sheer introduction of a computer into the claim is not enough to "impart patent eligibility." (*Id.*)

Independent claim 1 requires a "processor," rather than a dealer, to follow the recited **receiving**, **determining**, and **transmitting** instructions. Independent claim 1 also requires the processer to **receive** the *players' predictions* from, and to **transmit** the players' *winning indications* to, "remote device[s]." In other words, claim 1 simply says to apply the abstract idea (i.e., the recited instructions for interacting with players during a coin-toss game) with a computer (i.e., the processor). The remote devices (e.g., the players' computer devices) are, at most, sources or destinations peripheral to the processor's application of this abstract idea. Thus, the

additional elements in independent claim 1 (i.e., the processor and the remote devices) do not, individually, integrate the recited abstract idea into a practical application.

The 2019 § 101 Guidance requires us to also look at independent claim 1 as a whole in our evaluation of whether the abstract idea has been integrated into a practical application. ((*See* 2019 § 101 Guidance, 84 Fed. Reg. at 54.) Even when additional elements are not enough on their own to meaningfully limit an exception, the claimed combination of these additional elements may still provide the practical application. (*Id.*) Indeed, the Federal Circuit has held that it is possible for "an inventive concept" to reside in "the non-conventional and non-generic arrangement of known, conventional pieces," such as "a set of generic computer components." (*BASCOM Global Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016).)

Here, however, independent claim 1 does not specify an arrangement, much less an ordered arrangement, of computer components. Although independent claim 1 recites that the processor somehow receives the real-time outcomes "via a communication network," the claim language does not require this network to coordinate or cooperate with any other computer components. As for the remote devices, claim 1 does not require them to have any relationship with the communication network, and/or with each other.

Consequently, under Prong Two of Step 2A, the additional elements in independent claim 1 do not integrate the abstract idea (instructions for interacting with players during a coin-toss game) into a practical application, and we proceed to Step 2B.

Step 2B

In Step 2B, we evaluate whether "additional elements recited in the claim[] "provide[s] 'significantly more' than the recited judicial exception." (*See* 2019 § 101 Guidance, 84 Fed. Reg. at 56.) More particularly, we evaluate whether these additional elements "add[] a specific limitation or combination of limitations that are not well-understood, routine, conventional activity," or whether they instead "simply append[] well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception." (*Id.*) If the additional elements in a claim consist of a conventional arrangement of conventional computer components, they will not amount to significantly more, and the claim fails the *Alice* test for patent eligibility. (*Id.*)

The Specification states that "[i]t will be readily apparent to one of ordinary skill in the art" that the disclosed methods may be implemented by "general purpose computers." (Spec. ¶ 58.) Also, a "processor" is defined as "one or more microprocessors, central processing units (CPUs), computing devices, microcontrollers, digital signal processors, or like devices or any combination thereof, regardless of the architecture." (*Id.* ¶ 59.) The Specification also says that "[t]he computer may communicate with the devices directly or indirectly, via any wired or wireless medium" and "[e]ach of the devices may themselves comprise computers or other computing devices." (*Id.* ¶ 68.) Thus, the Specification describes claim 1's additional elements (i.e., the processor, the communication network, and the remote devices) as a conventional arrangement of conventional computer components.

Consequently, under Step 2B, the additional elements in independent claim 1 do not provide significantly more than the recited abstract idea (instructions for interacting with players during a coin-toss game). We therefore agree with the Examiner that independent claim 1 fails the *Alice* test for patent eligibility.

The Appellant's Arguments

The Appellant argues that the Federal Circuit's holding in *Smith* (i.e., that instructions for a dealer's interaction with players during a card game is an abstract idea) "is irrelevant to the instant case." (Appeal Br. 9.) The Appellant points out that, in *Smith*, the claimed game was played using "physical cards," and "required no networking or processing technology." (*Id.*) The Appellant seems to be saying that, when making the determination as to what a claim is "directed to," all of the limitations in the claim must be taken into consideration. We do not disagree.

The Appellant's concern highlights the difference between a claim **reciting** an abstract idea, and a claim being **directed to** an abstract idea, which is clarified in the 2019 § 101 Guidance. During Prong One of Step 2A, our focus is generally on the non-computer limitations in a claim to evaluate whether the claim **recites** an abstract idea. Thus, *Smith* is very relevant during our Prong-One evaluation because, when we focus on the non-computer limitations of claim 1, they closely parallel the non-computer limitations in the *Smith* claims, because they recite instructions for interacting with players during a game.

Significantly, however, a claim which **recites** an abstract idea is not automatically or necessarily **directed to** an abstract idea. Indeed, it is possible for additional elements in the claim (e.g., computer components) to

integrate a recited abstract idea into a practical application. Thus, during our Prong-Two evaluation, any "networking or processing technology" recited in independent claim 1 (and seemingly lacking in *Smith*) must be taken into consideration. As discussed above, here, the computer-related limitations recited in claim 1 amount to using the processor only to "apply" the recited instructions for interacting with players during a coin-toss game. We disagree, therefore, with the Appellant's contention that independent claim 1 is directed to a "method for communicating gaming information among various devices over a network." (Appeal Br. 9.)

The Appellant argues that "the lack of prior art references in the instant application indicates that the claimed subject matter recites 'significantly more' than the prior art." (Appeal Br. 11.) The Appellant seems to be saying that, if an examiner is unable to locate an abstract idea in the prior art, then any claim embracing this not-yet-located abstract idea indisputably passes the *Alice* Test. But even a "brilliant" abstract idea "does not by itself satisfy the § 101 inquiry." (*Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 591 (2013).)

The Appellant argues that independent claim 1 "does not preempt all ways of online gaming." (Appeal Br. 10.) However, "questions on preemption are inherent in and resolved by the § 101 analysis." (*Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) (citing *Alice*, 573 U.S. at 216).) And, although "preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility." (*Id.*)

Thus, after careful consideration of the Appellant's arguments, we still agree with the Examiner that independent claim 1 is directed to a judicial exception without significantly more.

Summary

We sustain the Examiner's rejection of independent claim 1 under 35 U.S.C. § 101. The Appellant argues the claims on appeal as group (*see* Appeal Br. 8–12), and so we likewise sustain the Examiner's rejection of claims 2–5, 7, 8, 10, 12–14, 16, and 18.[5]

CONCLUSION

Claims Rejected	Basis	Affirmed	Reversed
1–5, 7, 8, 10, 12–14, 16, 18	§ 101 – subject matter eligibility	1–5, 7, 8, 10, 12–14, 16, 18	

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

AFFIRMED

[5] "When multiple claims subject to the same ground of rejection are argued as a group or subgroup by appellant, the Board may select a single claim from the group or subgroup and may decide the appeal as to the ground of rejection with respect to the group or subgroup on the basis of the selected claim alone." (37 CFR § 41.37(c) (1)(iv).)