UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LIGHT & WONDER, INC.
Petitioner

v.

EVOLUTION MALTA LIMITED
Patent Owner

U.S. Patent No. 11,011,014

PETITION FOR *INTER PARTES* REVIEW

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PETITION FOR *INTER PARTES* REVIEW OF U.S.P.N. 11,011,014

I. INTRODUCTION

Light & Wonder, Inc. ("L&W" or "Petitioner) requests *inter partes* review of U.S. Patent No. 11,011,014 ("'014 Patent," EX1001), assigned to Evolution Malta Limited ("Evolution" or "PO"). The '014 Patent is directed to a variant of the wagering game roulette: Instead of assigning each roulette position the same payout (*e.g.*, a 35:1 payout for straight wagers on single positions), the '014 Patent increases the payout for one or more randomly selected roulette positions. But this simple tweak to roulette's conventional rules has been known in the art for decades, and the district court has already held the patent "invalid under *Alice*," rejecting PO's argument that the claims recite a technological improvement. EX1022, 15. PO nevertheless continues to assert its invalid patent (EX1023), thus prompting this petition. Petitioner requests institution of IPR and cancellation of claims 1-3, 5-11, 13-19, and 21-24.

II. THE '014 PATENT AND CLAIM CONSTRUCTION

A. Summary Of The '014 Patent

The '014 Patent is entitled "Systems, Methods, and Media for Implementing Internet-Based Wagering." EX1001, Title. The patent describes a roulette-based system that uses a roulette wheel, a ball, and a "hardware processor" configured to perform various functions. *Id.*, 1:31-50. The '014 Patent's hardware processor—which can be "any suitable" processor or circuitry "for controlling the functioning"

of an off-the-shelf "general-purpose computer," *Id.*, 6:32-48—performs functions of a dealer conducting the game of roulette.

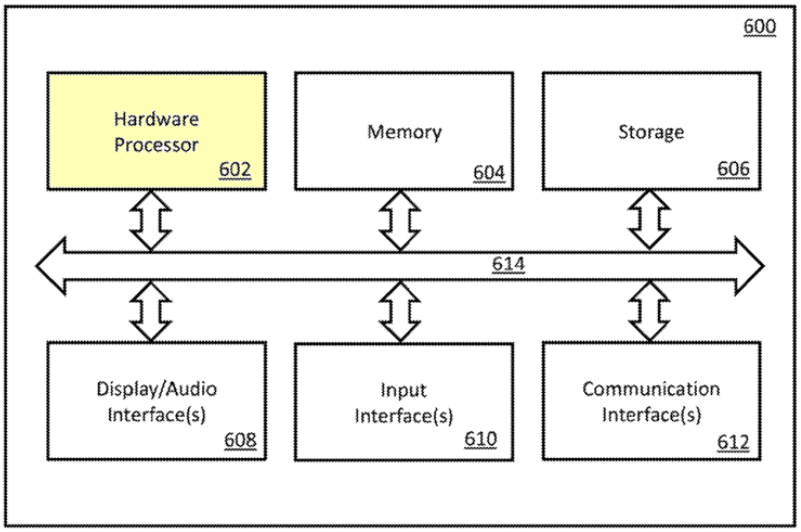


FIG. 6

Id., Fig. 6.

In embodiments, the hardware processor generates a graphical user interface (GUI) that is displayed on player devices. *Id.*, 4:15-27. The player devices "receive bets via the [GUI]" and allow a player to play roulette. *Id.* Figure 3 shows an example GUI including a video area 302 and a betting interface area 304 (*id.*, Fig. 3, 5:43-47):

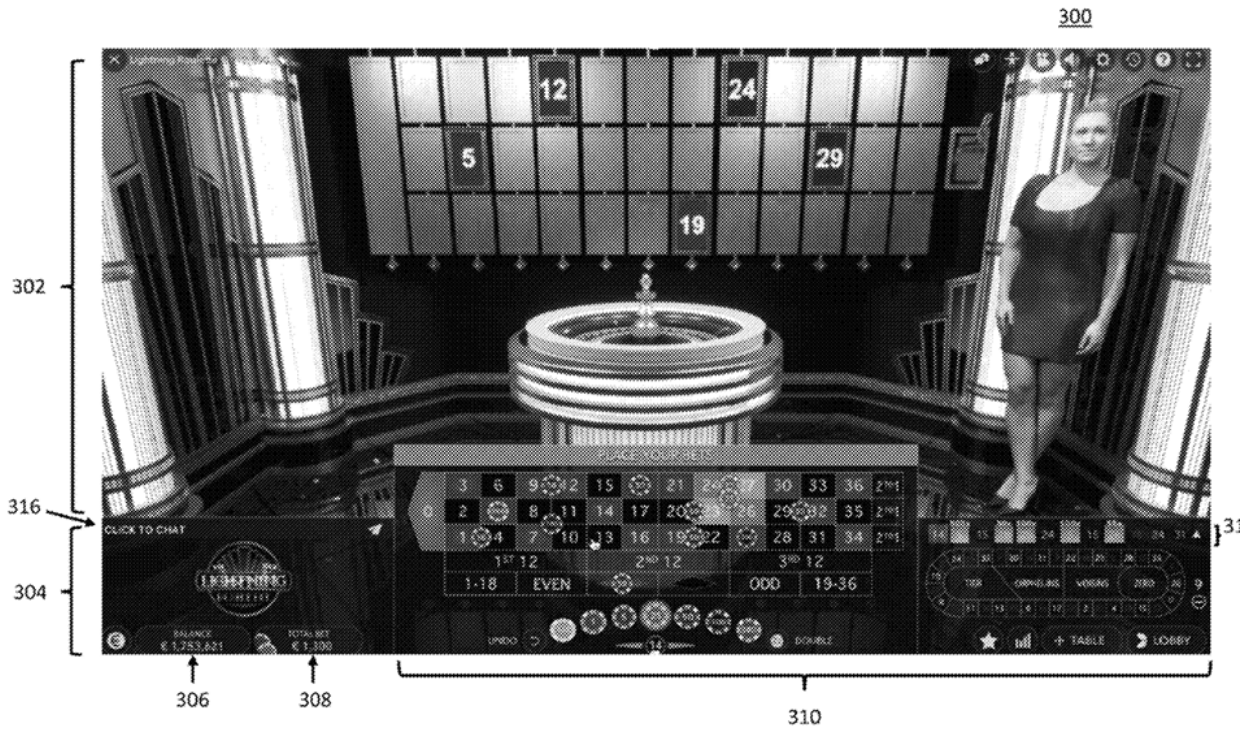


FIG. 3

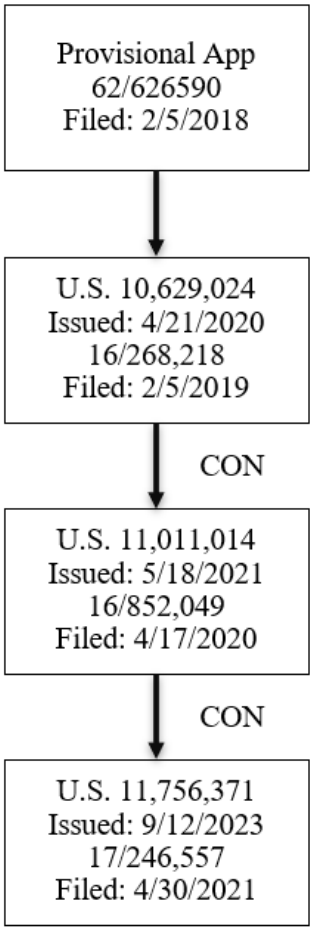
The video area can include video of the roulette wheel, the game presenter, LEDs, lights, displays, or other visual effects. *Id.*, 5:47-50. The betting interface 304 can display the player's account balance 306 and total bet amount 308. *Id.*, 5:57-62. In area 310, the player can place a bet on a number on the roulette wheel using a simulated roulette board. *Id.*, 5:62-65.

The '014 Patent claims the step of "randomly select[ing] a first selected position on the roulette wheel for the spin of the roulette wheel prior to the ball falling into an outcome position on the roulette wheel." *Id.*, Claim 1, 8:31-35; *see also* claims 9, 17. When this randomly selected number on the roulette wheel matches the number on which the player has placed a bet and the number into which

the ball has fallen on the roulette wheel, the player receives an increased payout, *e.g.*, from 49:1 to 499:1. *Id.*, 5:15-26, 6:25-31.

B. Patent Family And File History

The ’014 Patent is one of several patents in a family of related patents that also includes U.S. Patent No. 10,629,024 (“the ’024 Patent,” EX1005) and U.S. Patent No. 11,756,371 (“the ’371 Patent,” EX1011):



As shown above, the ’014 Patent claims priority to U.S. Provisional Application No. 62/626,590 filed February 5, 2018. EX1001. Without conceding its propriety, Petitioner applies February 5, 2018 as the priority date of the

challenged claims in this petition. Petitioner reserves its right to challenge priority in this or other proceedings.

Application No. 16/852,049, which eventually issued as the '014 Patent, was filed on April 17, 2020, with a single independent claim. EX1002, 18. Applicant filed a preliminary amendment on June 24, 2020, amending claim 1 and adding new claims 2-24. *Id.*, 48-58. On January 22, 2021, the Patent Office allowed all pending claims without any rejections. *Id.*, 77. The Notice of Allowance provided Reasons for Allowance referencing the Yee patent (EX1009) cited herein. EX1002, 83-84. The Office's reasons for allowance of the '014 Patent mirror those for the '024 Patent (EX1006, 93-94) and are based on arguments set forth by Applicant during the prosecution of the '024 Patent. *Id.*, 79-80.

C. Claim Construction And The Level Of Ordinary Skill In The Art

1. Claim Construction

In this proceeding, claims are interpreted under the same standard applied by Article III courts. Under this standard, words in a claim are given their plain meaning, which is the meaning understood by a person of ordinary skill in the art (POSA) in view of the patent and file history. In this Petition, all the claim terms are given their plain meaning, as understood by a POSA.

2. The POSA's Skill Level

For purposes of this proceeding, Petitioner maintains a POSA at the time of the '014 Patent would have been a person having at least a Bachelor's Degree in

electrical engineering, computer science, or computer engineering, or undergraduate training in an equivalent field and at least two years of relevant experience in electronic gaming technology. Additional graduate education could substitute for professional experience, and significant work experience could substitute for formal education. EX1003, ¶¶[0022]-[0026].

III. REQUIREMENTS FOR IPR UNDER 37 C.F.R. § 42.204

A. Grounds For Standing Under 37 C.F.R. § 42.204(a)

L&W certifies that the '014 Patent is eligible for IPR, and that L&W is not barred or estopped from requesting IPR of claims 1-3, 5-11, 13-19, and 21-24 on the challenged grounds.

B. Identification Of Challenge Under 37 C.F.R. § 42.204(b) And Relief Requested

L&W requests IPR on the following grounds:

Ground	Claims	Basis
Ground 1	1-3, 5-7, 9-11, 13-15, 17-19, 21-23	§ 102 and § 103 based on EX1007, U.S. Patent Pub. No. 2008/0248853 to Kido ("Kido")
Ground 2	8, 16, 24	§ 103 based on Kido and EX1009, U.S. Patent No. 9,600,974 to Yee ("Yee")
Ground 3	1-3, 5-7, 9-11, 13-15, 17-19, 21-23	§ 102 and § 103 based on EX1008, U.S. Patent Pub. No. 2016/0155296 to Baron ("Baron")
Ground 4	8, 16, 24	§ 103 based on Baron and Yee

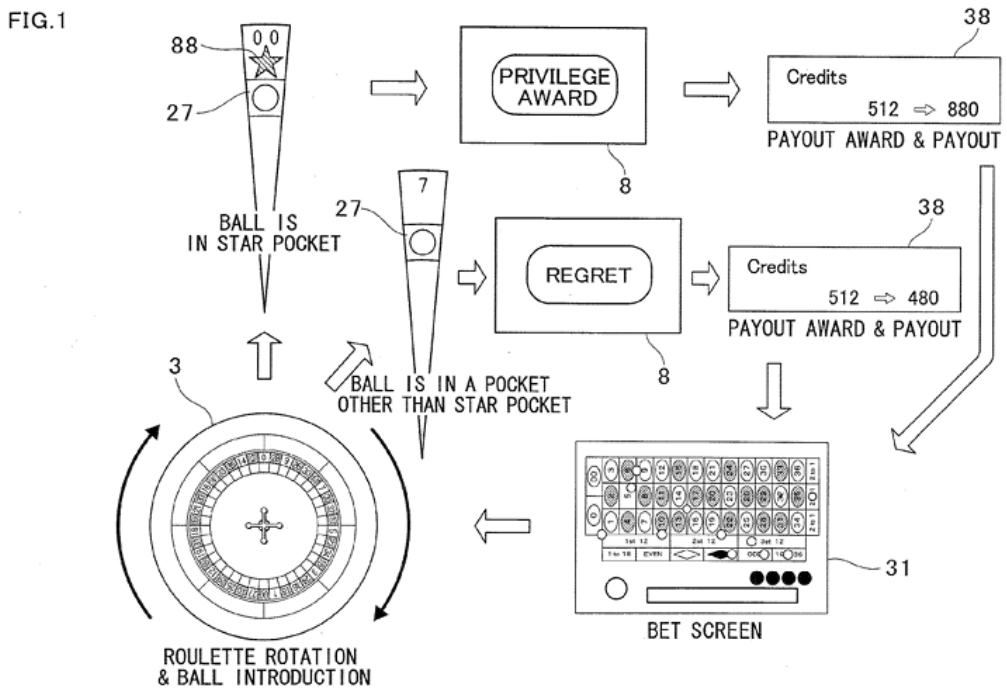
IV. CLAIMS 1-3, 5-11, 13-19, AND 21-24 ARE UNPATENTABLE

A. Ground 1: Kido Anticipates, And Would Have Rendered Obvious, Claims 1-3, 5-7, 9-11, 13-15, 17-19, And 21-23.

1. Summary Of Kido

Kido, EX1007, entitled "Gaming Machine Awarding Special Payout Starting From Star Mark and Playing Method Thereof," was filed March 28, 2008 and published October 9, 2008. Kido is prior art under at least AIA 35 U.S.C. § 102(a)(2).

Kido describes a multi-player roulette wagering game in which players are arranged around the periphery of a table that includes a roulette wheel at its center. EX1007, ¶[0127]. Similar to the '014 Patent, Kido's system includes a randomly selected position that, when the ball drops into it and a player has bet on that position, results in an award of "a privilege and a payout of the privilege." *Id.*, ¶[0114].



Id., Fig. 1.

Kido describes a variety of privileges that may be applied, including a "Prog bonus" applicable when the roulette ball comes to rest "in the star mark 88 in the roulette gaming device 1." *Id.*, ¶[0221]. In the event of a "Prog bonus," the winning player receives not only the normal payout for winning but also an accumulated value, which as the name suggests, progressively increases over time. *Id.*, ¶[0221].

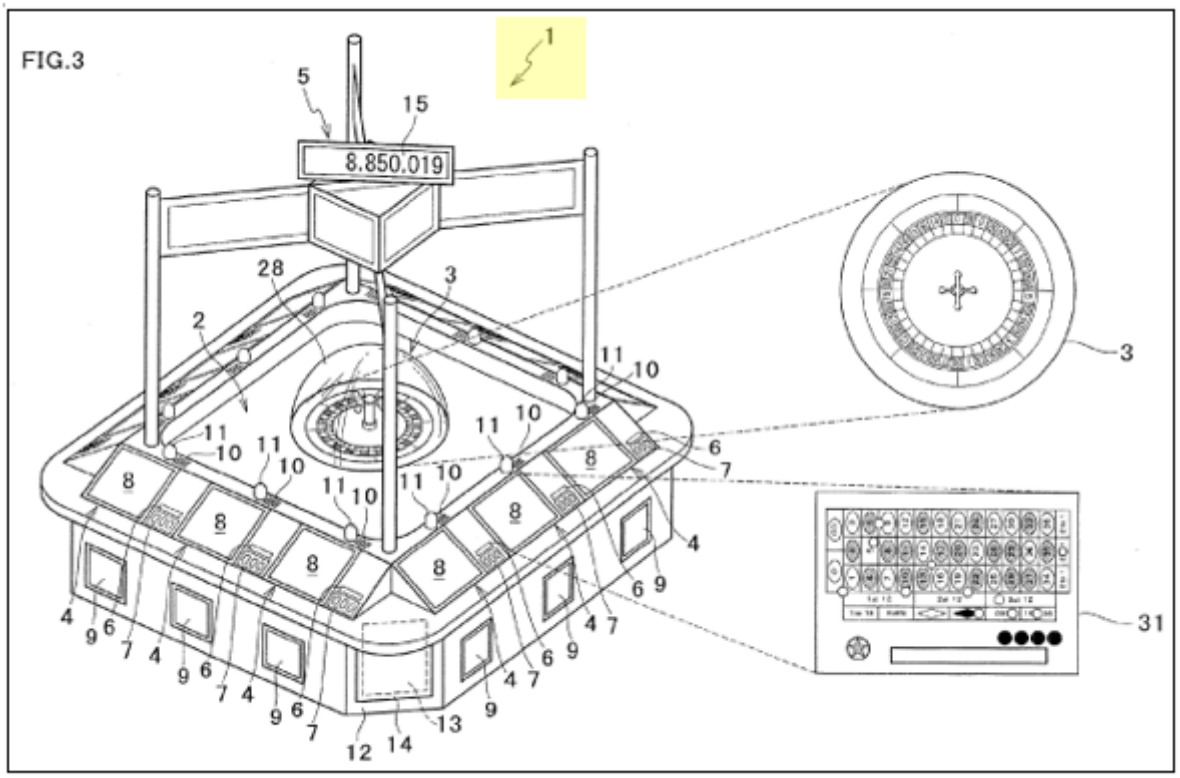
2. Independent Claims 1, 9, And 17

Independent claim 1 is directed to a "system for wagering," and independent claims 9 and 17 are respective method and computer-readable medium claims with similar limitations. EX1020 (chart numbering each element of claims 1, 9, and 17 and comparing similar elements side-by-side). In view of these similarities, claims 1, 9, and 17 are addressed together.[1]

(a) Preamble: "A system for wagering, comprising:"

To the extent limiting, Kido discloses the preambles of claims 1, 9, and 17. EX1003, ¶¶[0322]-[0324]; EX1020. Figure 3 of Kido (reproduced below) depicts "a schematic structure of a roulette gaming device 1." EX1007, ¶[0126].

[1] In the headings that follow, the elements of claim 1 are reproduced. Differences between the language of claims 1, 9, and 17 are addressed in the discussion for each element.



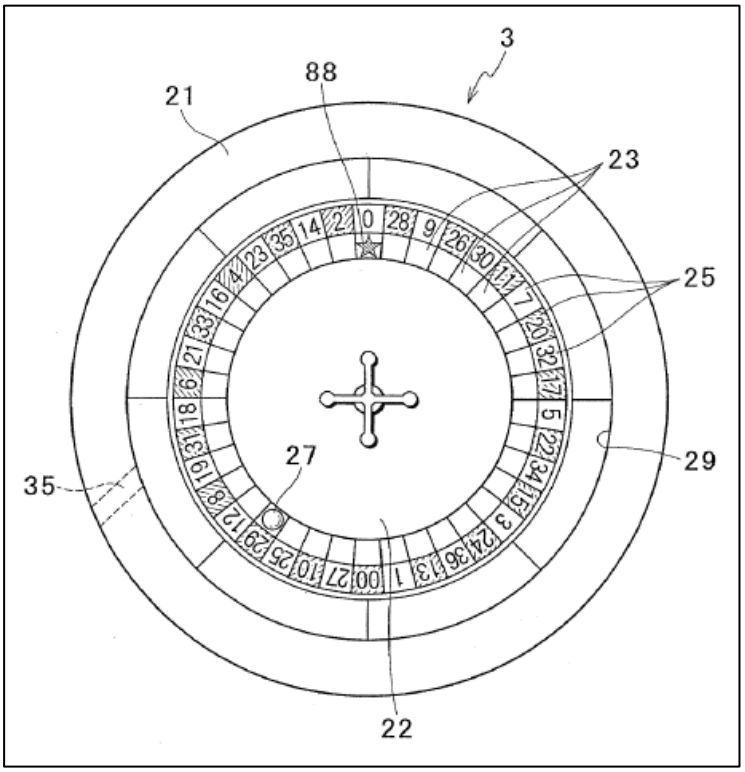
The roulette gaming device 1 of Figure 3 includes twelve stations 4, where each station 4 is "for receiving a bet operation of a player." *Id.,* ¶[0127]. Kido's roulette gaming device 1 is therefore a "system for wagering," as recited in the preamble of claim 1. *See also id.*, ¶[0006].

Kido's title ("Gaming Machine Awarding Special Payout Starting from Star Mark and *Playing Method* Thereof") and disclosure of various routines (including Figure 12's prog bonus routine and Figure 14's star positioning determining routine, described below) show that Kido also discloses a "method for wagering," as recited in the preamble of claim 9. EX1003, ¶[0395].

Kido further discloses a "non-transitory computer-readable medium containing computer executable instructions that, when executed by at least one processor, cause the at least one processor to perform a method for wagering," as recited in the preamble of claim 17. *Id.*, ¶[0410]. Kido describes that its methods for wagering are performed using CPUs 81, 91, which execute computer instructions stored in memories 82/83 and 92/93, respectively. EX1007, ¶[0154], [0163].

(b) Element 1: "a roulette wheel;"

Kido discloses element 1 of claim 1. EX1003, ¶¶[0325]-[0326]. As depicted in Figure 3 (reproduced above), Kido's roulette gaming device 1 includes a roulette unit 3 with a roulette wheel. EX1007, ¶¶[0132]-[0135]. The roulette wheel 22 of the roulette unit 3 is also depicted in Figure 4:



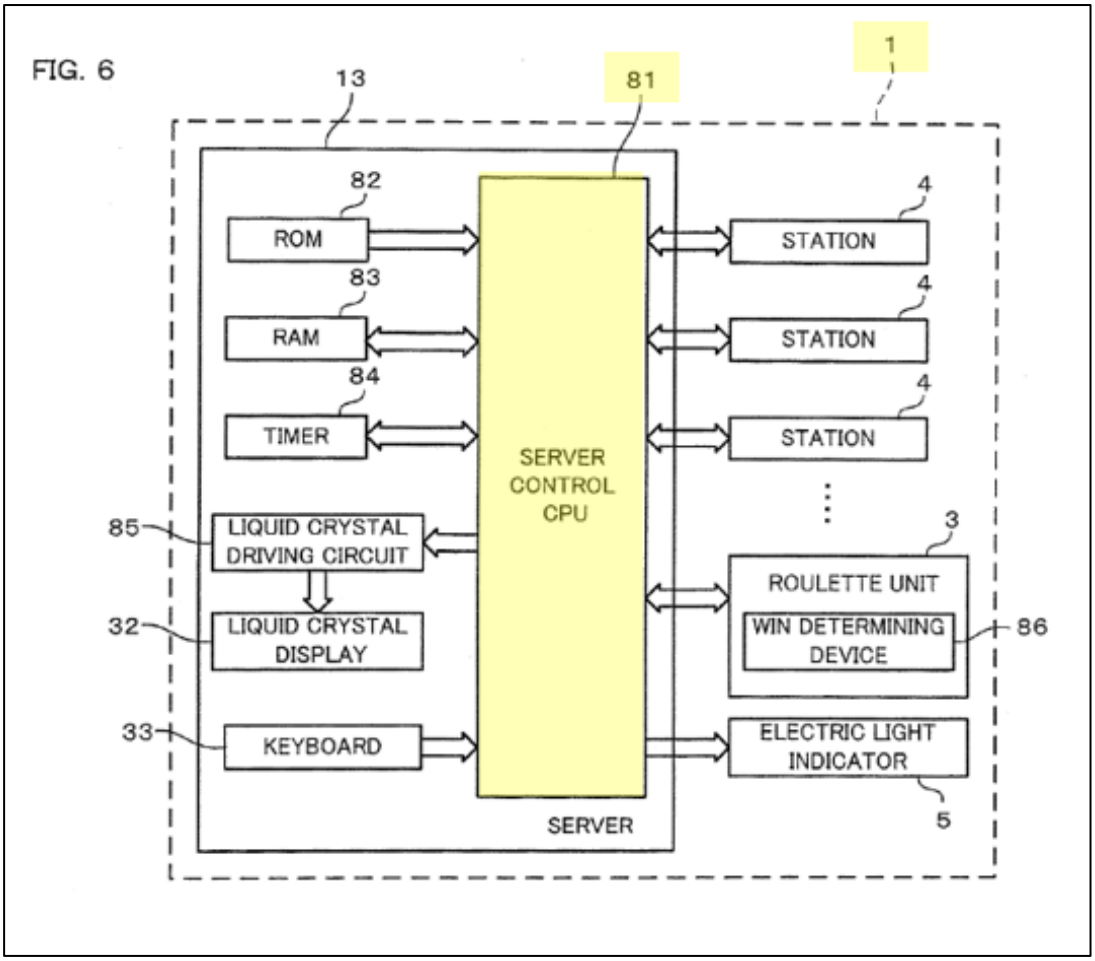
Id., Fig. 4.

(c) Element 2: "a ball configured to be used in the roulette wheel;"

Kido discloses element 2 of claim 1. EX1003, ¶¶[0327]-[0328]. As depicted in Figure 4 (reproduced above), the roulette unit 3 of Kido's roulette gaming device 1 includes a frame 21 with "a ball insertion slot 35…. The ball insertion device is structured to insert the ball 27 from the ball insertion slot 36 onto the wheel 22." EX1007, ¶¶[0133], [0136].

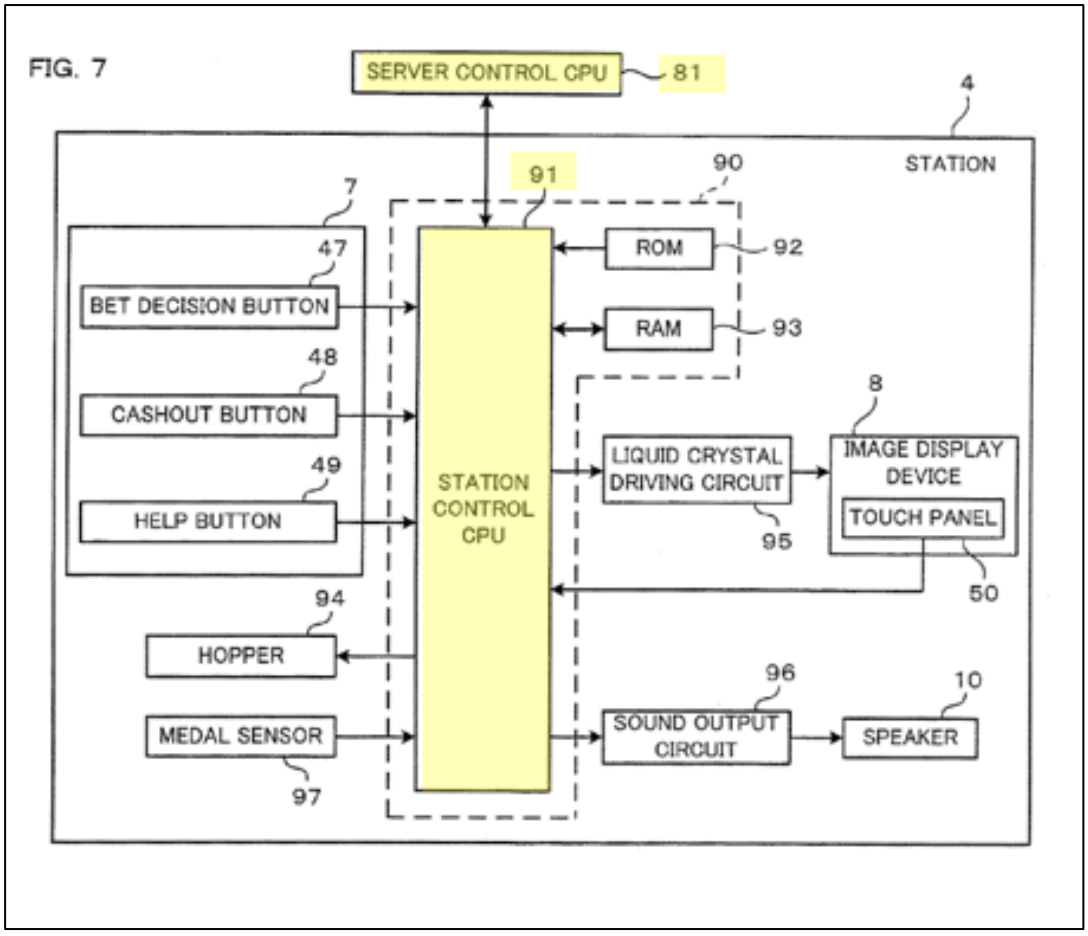
(d) Element 3: "at least one hardware processor collectively configured to:"

Kido discloses element 3 of claim 1. EX1003, ¶¶[0329]-[0334]. Kido's roulette gaming device 1 includes a server control CPU 81 for implementing roulette. EX1007, ¶¶[0152]-[0160]. As shown in Figure 6 below, the server control CPU 81 communicates with the player stations 4 of the roulette gaming device 1:



Id., Fig. 6.

Kido further discloses that each player station 4 has its own station control CPU 91 that controls various aspects of the roulette game and is coupled to the server control CPU 81 (*id.*, ¶¶[0161]-[0170]):

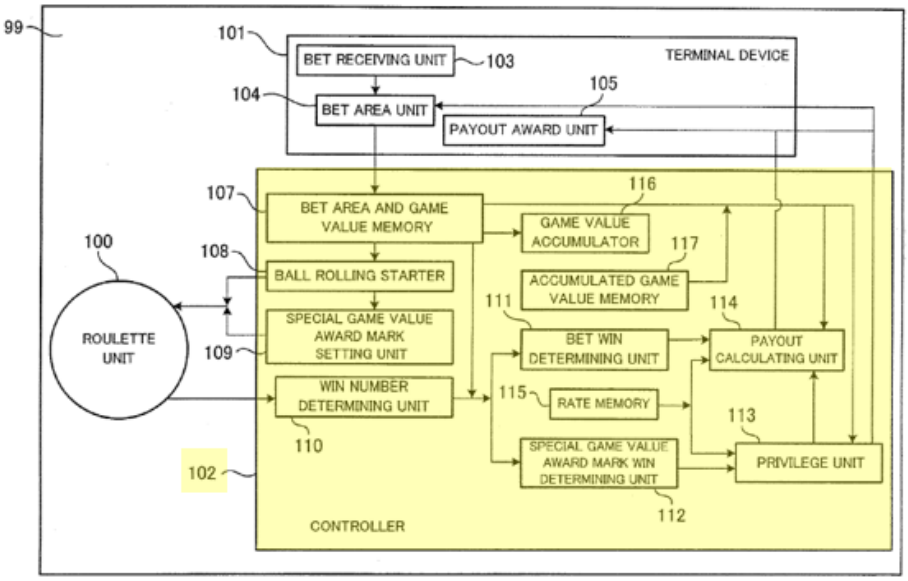


Id., Fig. 7.

Kido's server control CPU 81 and station control CPUs 91 disclose the claimed "at least one hardware processor," with the CPUs 81, 91 being collectively configured to perform each of the steps of claims 1, 9, and 17 of the '014 Patent, as explained below. Further, Kido's CPUs 81, 91 are "hardware processors," as referred to in the '014 Patent. EX1003, ¶[0330]. The acronym "CPU" stands for "central *processing* unit," and a CPU is a *hardware* component. *Id.*; *see also* EX1001, 6:43-48 (the term "hardware processor" encompasses "any suitable hardware processor," including processors "for controlling … general-purpose" computers). Here, Kido's CPUs 81,

91 are hardware for controlling aspects of a roulette game via computers (*see*, *e.g.*, Figure 6's ROM 82, RAM 83 and Figure 7's ROM 92, RAM 93 for storing computer instructions and data used by the CPUs 81, 91). The CPUs 81, 91 are therefore "at least one hardware processor," as claimed.

Kido's disclosure of the claimed "at least one hardware processor" is further reflected in Figure 2, which is a conceptual "block diagram" of the roulette gaming device 1. EX1007, ¶¶[0065], [0080], [0105], [0127], [0130]. Kido's Figure 2 includes a block for a controller 102 that corresponds to the server 13 of Figure 6 (reproduced above), which includes the aforementioned server control CPU 81. *Id.*, ¶¶[0105], [0153].



Id., Fig. 2.

A POSA would have understood that the physical hardware components of the server 13 described with respect to Figures 3 and 6—*e.g.*, server control CPU 81, ROM 82, RAM 83—are configured to perform the conceptual blocks of the controller 102 of Figure 2. EX1003, ¶[0332]. The controller 102, implemented with the physical hardware components of Figures 3 and 6, is therefore a "hardware processor" that executes programs for implementing roulette. *Id.*; EX1007, ¶[0111] (Controller 102 is "embodied in hardware or software, as required.").

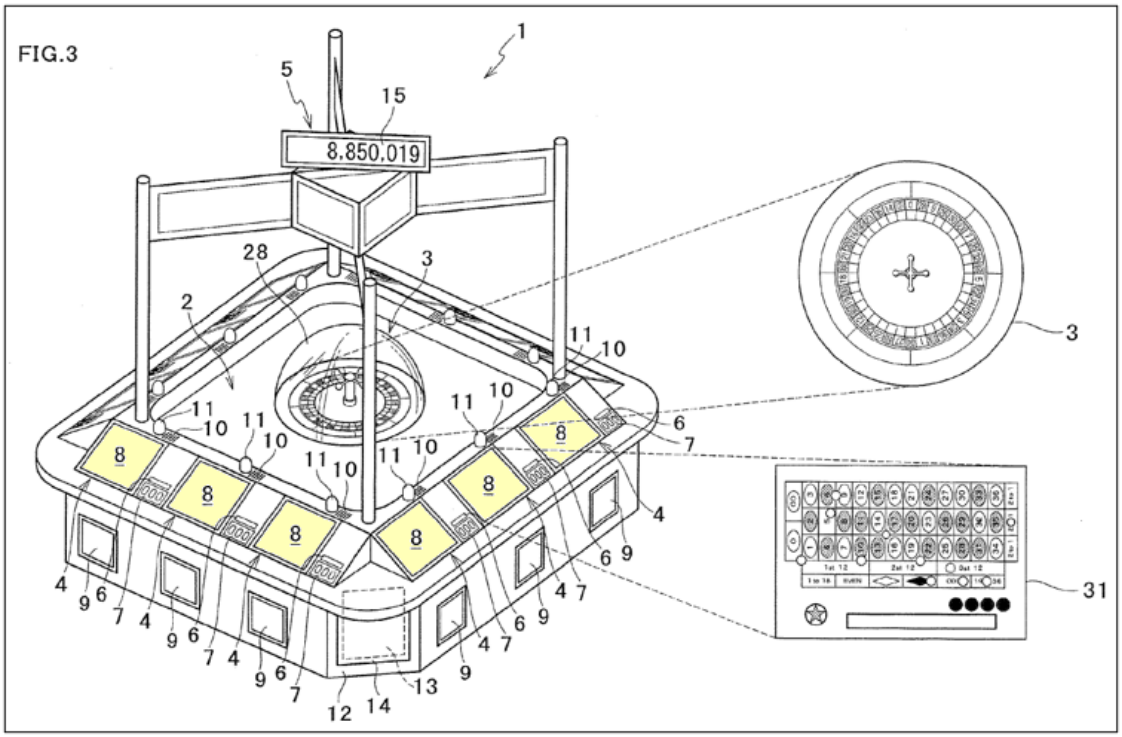
(e) Element 4: "generate a first graphical user interface for presentation on a first player device of a first player;"

(f) Element 5: "generate a second graphical user interface for presentation on a second player device of a second player;"

Kido discloses (i) elements 4 and 5 of claim 1; and (ii) elements 1 and 2 of claims 9 and 17. EX1003, ¶¶[0335]-[0339], [0396]-[0397], [0411]-[0412], ; EX1020. As explained above, Figure 3 of Kido discloses a roulette gaming device 1 with twelve stations 4 (EX1007, ¶¶[0085], [0122], [0127]), and the stations 4 disclose the claimed first and second player devices. Kido states that each of the stations 4 "serves as a bet unit for receiving a bet operation of a player and a payout unit for awarding a medal. The bet operation is an operation that a player predicting a win number of the roulette unit 3 inputs the contents such as number corresponding to the predicted win number." *Id.* ¶[0127]. Accordingly, the stations 4 are "player device[s]" because they enable a

user to interact with the roulette gaming device 1 and play a wagering game. *See* EX1001, 4:13-14.

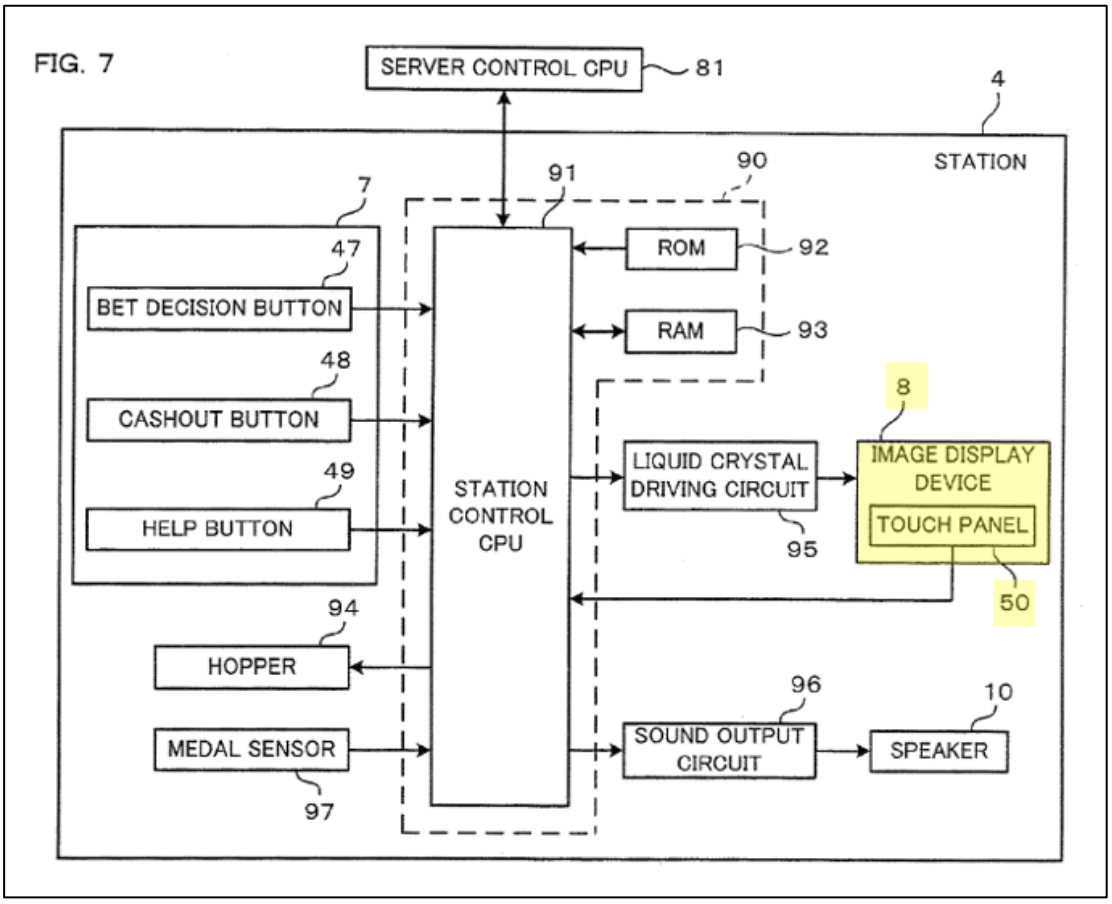
Further, Kido's CPUs 81, 91 (*i.e.*, "at least one hardware processor") generate first and second graphical user interfaces for presentation on the respective first and second player devices. EX1003, ¶¶[0338]-[0339]. Each station 4 in Kido has an image display device 8 that "displays an image relating to a game and has a game area that receives a bet operation by a player." EX1007, ¶[0143].



Id., Fig. 3.

Kido further discloses that "[t]he image display device 8 is a liquid crystal display of a touch panel type having [a] touch panel 50 attached to a front thereof.

When an icon displayed on the liquid crystal is pushed with a finger and the like, the icon is selected." *Id.* ¶[0147].



Id., Fig. 7. Kido also explains that "[o]n the touch panel 50, a player makes a bet operation with chips in the BET screen," by "push[ing] the screen with a finger, thereby indicating a bet area 72, on which a bet is made." *Id.*, ¶¶[0167], [0177].

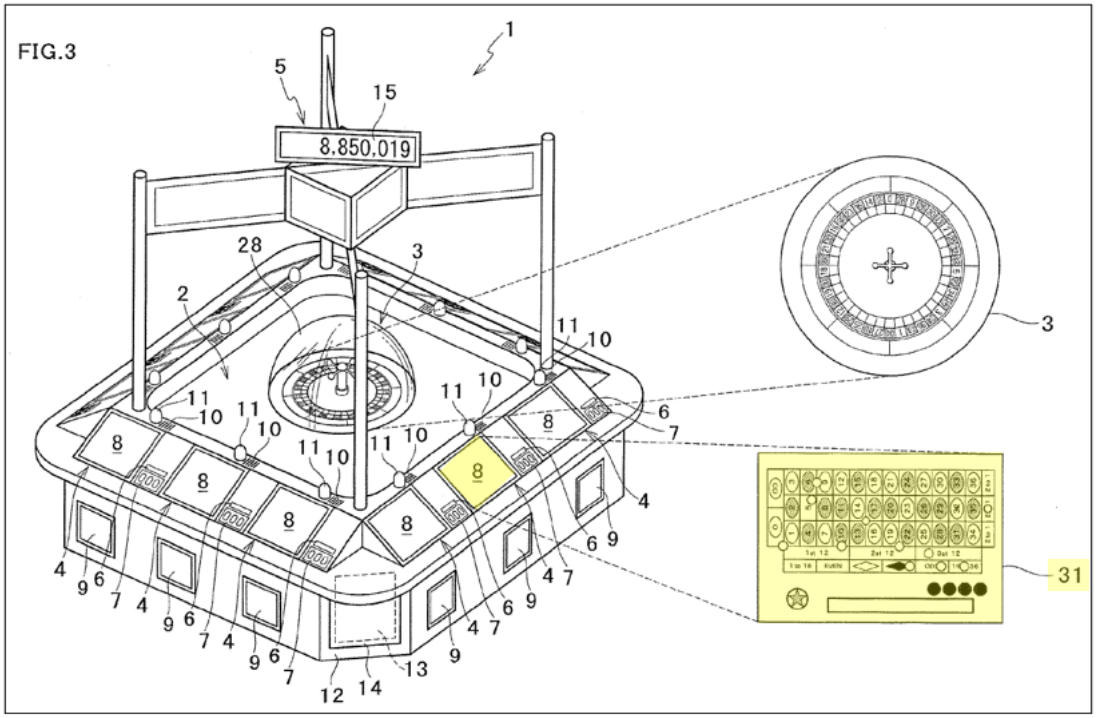
Because each of Kido's image display devices 8 presents a user interface that enables a user to interact with the roulette gaming device 1 via graphical elements and visual indicators, Kido discloses "generate a first graphical user interface for presentation on a first player device of a first player" and "generate a second graphical

user interface for presentation on a second player device of a second player," as claimed. EX1003, ¶¶[0337]-[0338]. Kido's graphical user interfaces are generated by the CPUs 81, 91 (*i.e.*, the "at least one hardware processor"). EX1007, ¶¶[0161]-[0170], [0188], [0193].

(g) Element 6: "receive first bet information for a first bet on a spin of the roulette wheel via the first graphical user interface, the first bet information corresponding to only a single first position on the roulette wheel;"

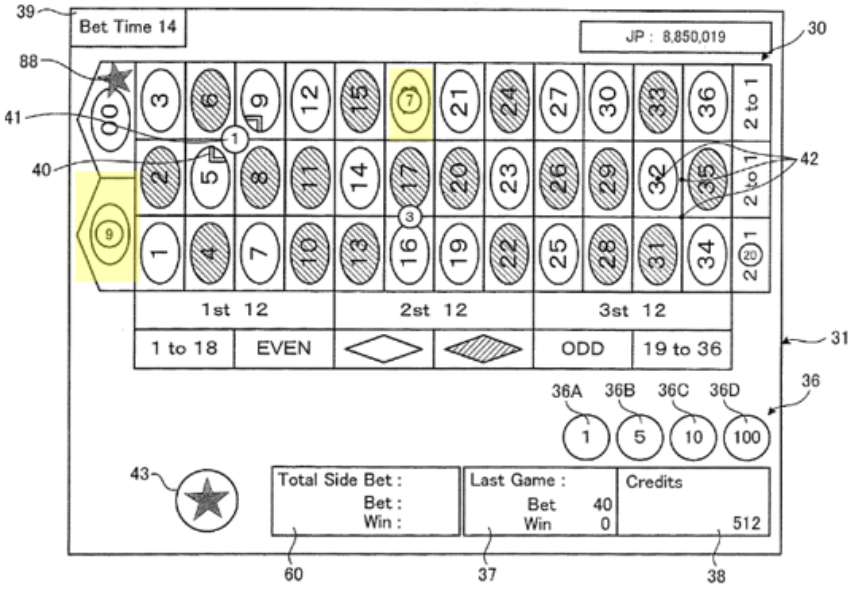
(h) Element 7: "receive second bet information for a second bet on the spin of the roulette wheel via the second graphical user interface, the second bet information corresponding to only a single second position on the roulette wheel that is different from the single first position;"

Kido discloses (i) elements 6 and 7 of claim 1; and (ii) elements 3 and 4 of claims 9 and 17. EX1003, ¶¶[0340]-[0345], [0398]-[0399], [0413]-[0414]; EX1020. Kido discloses that the graphical user interfaces presented on the image display devices 8 display bet screens 31 that enable the roulette gaming device 1 to receive bet information for bets:



Id., Fig. 3, ¶¶[0174]-[0188].

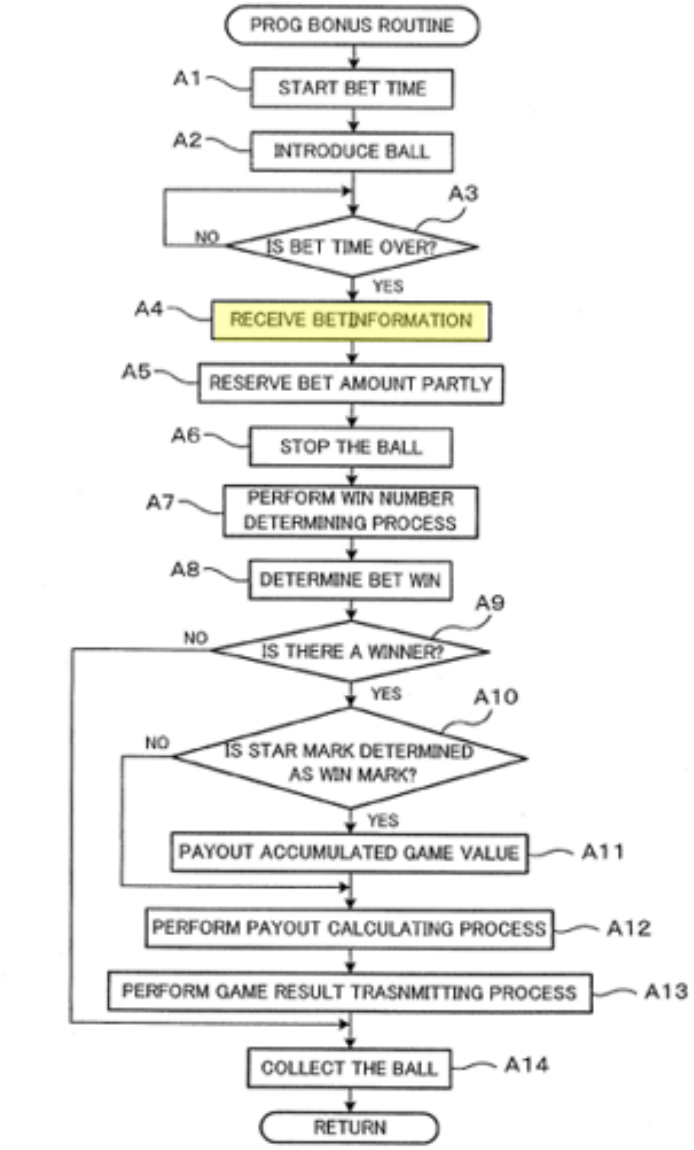
With respect to the bet screens on the stations' respective graphical user interfaces, Kido describes that the CPUs 81, 91 (*i.e.*, the "at least one hardware processor") receive bet information corresponding to bets via the touch panels 50 of players' respective image display devices 8. EX1007, ¶[0167]; *see also id.*, ¶¶[0127], [0177]. The CPUs 81, 91 are configured to receive the first and second bet information, each corresponding to only a "single … position on the roulette wheel," as claimed. Kido's Figure 5, for example, shows that the bet screen 31 enables a user to make a "straight up" bet, which is a bet corresponding to only a single position (*id.*, ¶[0190]:



Id., Fig. 5; *see also id.*, ¶¶[0172], [0182].

In Kido, the first and second bets are "on a spin of the roulette wheel," as claimed. Kido's Figure 12 "is a flow chart of a Prog routine program" (EX1007, ¶[0075]) executed by the roulette gaming device 1, showing that bet information is received at step A4 (highlighted in yellow below) for a spin of the roulette wheel:

FIG. 12



Id., Fig. 12; ¶¶[0221], [0230].

Specifically, at step A1 a BET timer starts and counts down the remaining time for the player to place a bet. EX1007, ¶[0222]; *see also* Fig. 5 (numeral 39). At step A2 of Figure 12, during the elapsing BET time, a "ball insertion device is driven to introduce the ball 27 into the wheel 22." *Id.*, ¶[0223]. Then when the BET timer

elapses in step A3, betting is closed and no further bets can be made. *Id.*, ¶[0224]. A POSITA would understand this process to be equivalent to traditional physical roulette in casinos, where betting is available both before the ball is released into the wheel and for a short period of time after, until the dealer announces "no more bets." EX1003, ¶[0343]. At step A4 the server "receives the bet information" for each station. EX1007, ¶[0225]. During this process, the ball eventually slows down and falls into a pocket in the wheel (*id.*, ¶[0227]), after which the remaining steps of Figure 12 are executed, and "[t]hen, the process returns to the step of A1 and is transited to a next game." *Id.*, ¶[0233]. Accordingly, the bet information received at step A4 is "on a spin of the roulette wheel," as claimed: In each round of the roulette game played on the device of Kido, players make bets on the spin of the ball into the roulette wheel that is about to occur (or that is currently in progress), and bet information for each bet is received by the CPUs 81 and 91 for that spin. EX1003, ¶[0343].

Finally, Kido discloses that the "single second position" (corresponding to the second bet) is different than the "single first position" (corresponding to the first bet), as claimed. Kido describes twelve stations disposed around a roulette unit at which players can place bets on the various numbers on a roulette board. EX1007, ¶¶[0127], [0167], [0177], [0182], Fig. 5. Kido's roulette gaming device 1 enables a player to place a second bet on any of the numbers on a roulette wheel, including a single second position that is different from the bet placed on the single first position. EX1003,

¶¶[0344]-[0345]. The example of Kido's Figure 5 (reproduced above), for example, shows two different, single-position (straight up) bets on positions "0" and "18." EX1007, Fig. 5.

(i) Element 8: "determine that the roulette wheel and the ball have been spun for the spin of the roulette wheel;"

Kido discloses (i) element 8 of claim 1; and (ii) element 5 of claims 9 and 17. EX1003, ¶¶[0346]-[0353], [0400], [0415]; EX1020. Kido discloses that the CPU 81 is configured to spin the roulette wheel and ball:

> Further, the server control CPU 81 drives a drive motor provided to the roulette unit 3, thereby shooting a ball 27 or rotating the wheel 22.

EX1007, ¶[0154].

> The server control CPU 81 rotates the wheel 22 or introduces the ball 27, based on the time information of the timer 84, which will be described later.

Id., ¶[0157]; *see also id.*, ¶¶[0108] ("a ball rolling starter 108 that rolls a ball on [the roulette] wheel"), [0114], [0223], [0227] ("the wheel 22 being rotated"). Because the CPU 81 causes the roulette wheel and ball to spin, the CPU 81 necessarily "determine[s] that the roulette wheel and the ball have been spun." EX1003, ¶[0347].

The CPU 81 is also configured to determine that the ball has landed in a position. EX1007, ¶¶[0227]-[0228]. Because the CPU 81 (i) starts the spinning of the wheel and ball, and (ii) later determines that the ball has stopped, the CPU 81 necessarily "determine[s] that the roulette wheel and the ball have been spun" during

the interim period. EX1003, ¶[0348]. Likewise, a POSA would have understood that because Kido's roulette gaming device 1 is configured to determine a "win number" (*i.e.*, the number of the position into which the ball lands) and players' payouts for the spin of the wheel (EX1007, ¶¶[0228]-[0231]), the device 1 necessarily determines that the roulette wheel and ball have been spun, else there would be no win number or payouts to determine. EX1003, ¶[0348].

The determination that the wheel and ball have been spun is "for the spin of the roulette wheel," as claimed. In the prog bonus routine of Figure 12, the ball and wheel are spun (EX1007, ¶¶[0223]-[0227]), and the subsequent steps of the routine are then performed, including determining that the ball has stopped and making playouts to players for the spin of the wheel. *Id.*, ¶¶[0228]-[0232]. At the conclusion of the routine, "the process returns to the step of A1 and is transited to a next game." *Id.*, ¶[0233]. The CPU 81's determination that the wheel and ball have been spun—as evidenced at least by the CPU 81's spinning of the wheel and determination of win numbers and payouts for the spin—thus occurs for a spin of the wheel, as claimed. EX1003, ¶[0350].

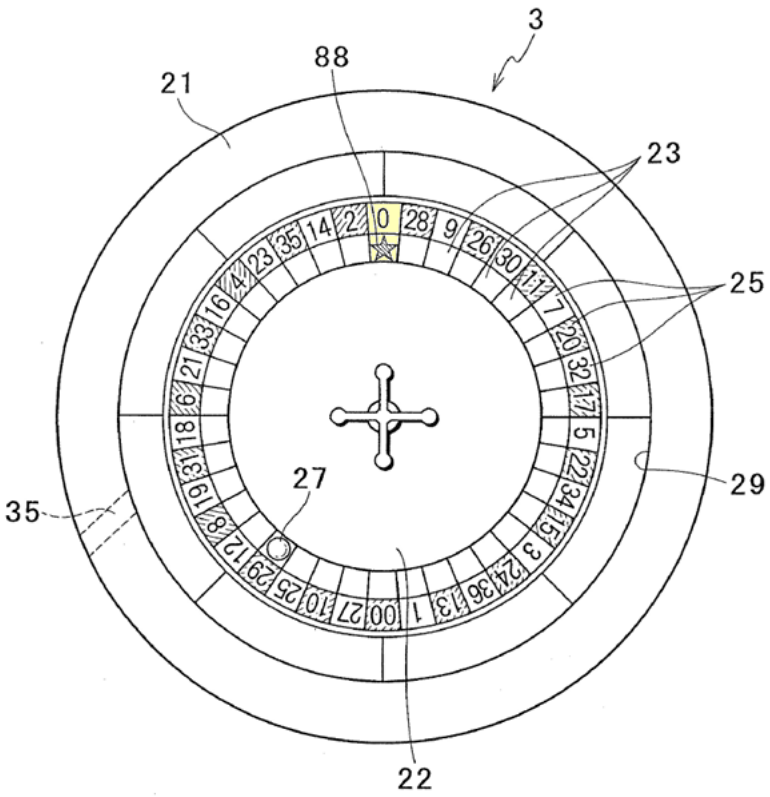
In the related litigation, Patent Owner argues that Kido does not disclose this limitation. EX1010, 103. This is wrong for the reasons just explained. Moreover, Kido's disclosure is consistent with the '014 Patent, which describes a "wheel sensor 104 [that] can detect the spinning of the wheel and the position in which the

ball falls. The sensor can be implemented in any suitable manner." EX1001, 3:11-13. Kido similarly discloses that "a win number of the roulette unit 3 [is] determined by a sensor" (EX1007, ¶[0156]), and a POSA would have understood that this sensor would be used to determine that the wheel and ball have been spun. *Id.*, ¶¶[0108], [0114], [0137], [0138], [0154], [0201], [0215], [0228], [0241], [0259]. At minimum, it would have been obvious to use Kido's sensor to detect the spinning of the wheel and ball, as is well-known in the art. Mr. Friedman explains in his expert declaration that a POSA would have been motivated to use Kido's sensor to provide a variety of functions—*e.g.*, detecting the spinning of the wheel and ball and then determining the position into which the ball lands—thereby avoiding the costs of unnecessary, duplicative components. EX1003, ¶[0352].

(j) Element 9: "randomly select a first selected position on the roulette wheel for the spin of the roulette wheel prior to the ball falling into an outcome position on the roulette wheel, wherein the first selected position is the same as the single first position;"

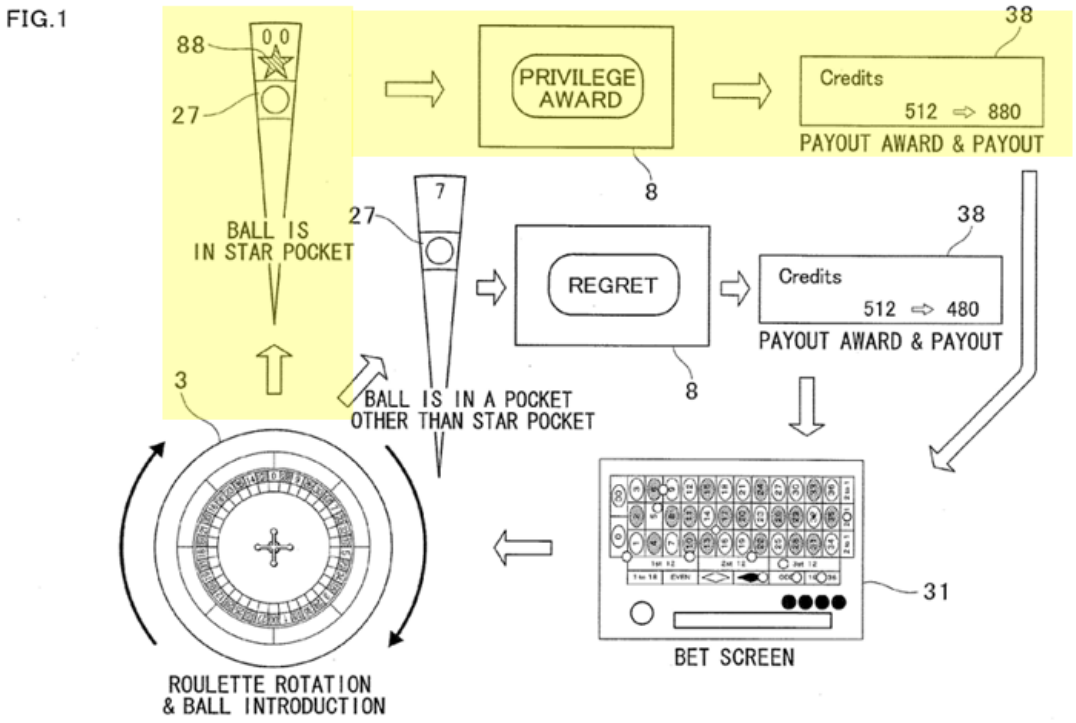
Kido discloses (i) element 9 of claim 1; and (ii) element 6 of claims 9 and 17. EX1003, ¶¶[0354]-[0363], [0401], [0416]; EX1020. Kido discloses "special game value award mark[s]" associated with positions on a roulette wheel. EX1007, ¶[0108]. When a "win number" (*i.e.*, the number of the position of the roulette wheel into which the ball comes to rest) has the same position as the special game value award mark, and a player has bet on that position, a "privilege and a payout of the privilege" are

awarded. *Id.*, ¶¶[0108] ("a privilege [is awarded] when the win number is the special game value award mark and the mark bet on is also the special game value award mark"), [0114]. One such special game value award mark is the aforementioned "star mark." *See id.*, Abstract; Section IV.A.1 above. Figure 4 shows a star mark 88 associated with the position numbered "0" on the roulette wheel:



Ex1007, Fig. 4.

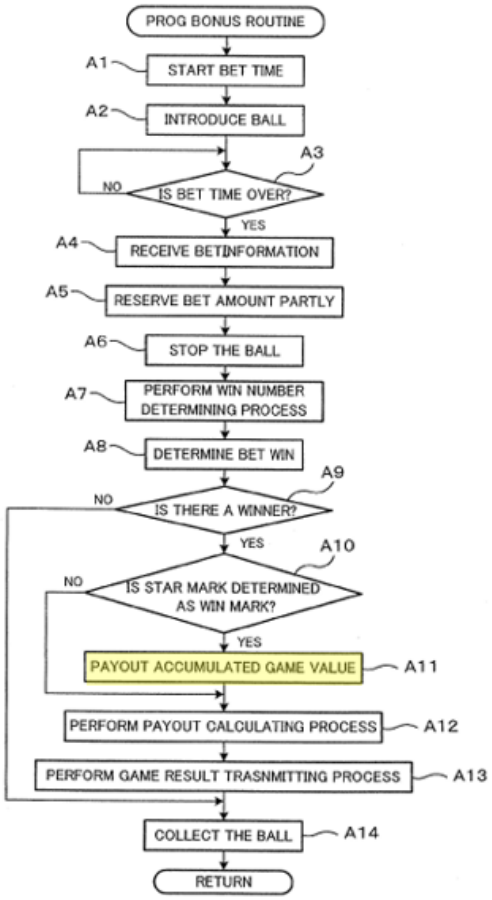
When the ball lands in a position associated with a star mark, and a player has bet on that position, the player receives a privilege award, such as an increased payout:



Id., Fig. 1; *see id.*, ¶[0186].

The prog bonus routine of Kido's Figure 12 shows that the accumulated prog bonus is awarded at step A11 when (i) a player bets on the position into which the ball lands, and (ii) that position has an associated star mark:

FIG. 12



Id., Fig. 12, ¶[0230].

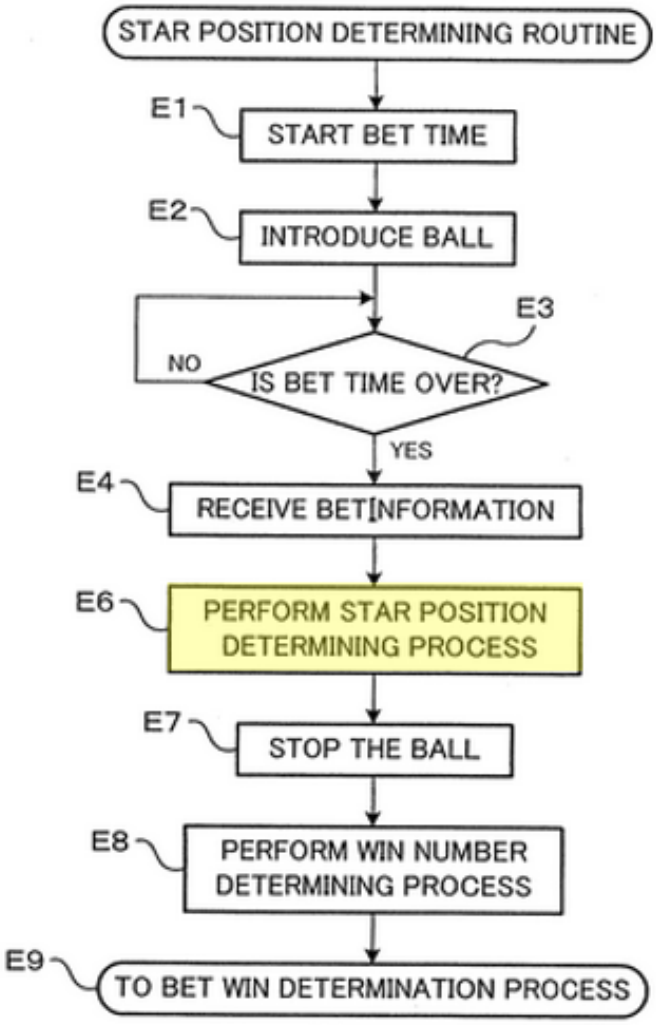
Kido states that "a position of the star mark 88" may be "set in advance" of a roulette game starting. *Id.*, ¶¶[0209], [0221], [0249]. Alternatively, the position of the star mark 88 may be randomly selected by the CPU 81 "after the bet receiving time is over," but before "the ball rolled in the roulette unit is stopped" (*id.*, ¶¶[0114], [0265]):

> In … the Prog routine[,] … the server control CPU 81 starts a bet time (E1) and introduces the ball 27 to the wheel 22 (E2). ***Then, in a step of [B6], a star mark 88, which becomes a starting point for awarding a***

> ***privilege in each routine, is randomly selected from the numbers (one of "0", "0" and "1" to "36)*** indicated on the numbered plates 25 until the ball is stopped (E7) after the bet time is over (E3, YES).

Id., ¶[0250]; *see also id.*, ¶[0114].

Figure 14 confirms Kido's description that the CPU 81's random selection of a position for the star mark 88 in step E6 occurs before the ball is stopped at step E7, *i.e.*, "prior to the ball falling into an outcome position on the roulette wheel," as claimed:



Id., Fig. 14; *see also* ¶[0114].

A POSA would have immediately envisaged the use of Kido's Figure 14 star position determining routine in the prog bonus routine of Kido's Figure 12. EX1003, ¶[0359]; *see Kennametal, Inc. v. Ingersoll Cutting Tool Co*., 780 F.3d 1376, 1382-83 (Fed. Cir. 2015). Kido expressly describes this, stating that the star position determining routine can be used in "the Prog routine." EX1007, ¶¶[0249]-[0250]. Further, Kido states that the Figure 14 routine for randomly determining the star mark's position after the bet time is over is an alternative to determining the position in advance, and a POSA would have understood both alternatives as being viable options for determining the star mark's position in the prog bonus routine of Figure 12. EX1007, ¶¶[0221], [0249]-[0250], [0265].

Kido thus discloses "randomly select a first selected position on the roulette wheel … prior to the ball falling into an outcome position on the roulette wheel," which is the limitation allegedly missing from the Yee reference (EX1009) applied during prosecution of the '014 Patent family. EX1002, 50; EX1006, 72; EX1012, 92. Contrary to Patent Owner's (erroneous) characterization of Yee, Kido's random position selection is performed by a hardware processor and occurs prior to the ball falling into an outcome position on the roulette wheel. EX1007, ¶[0112]. The random position selection in Kido is not determined by "the ball dropping into [a] position." EX1006, 80. Kido thus remedies the supposed deficiency of Yee. EX1003, ¶[0360].

Kido also discloses "wherein the [randomly selected] first selected position is the same as the single first position [on which the first player has placed a bet]." EX1001, Claim 1. Kido describes that the "privilege and a payout of the privilege" for the star mark are only available when the first selected position (*i.e.*, the "star mark") is the same as the single first position, *i.e.*, the number on which the player has placed a bet. EX1007, ¶ [0114]; EX1003, ¶[0361].

Kido's first selected position is randomly selected "for the spin of the roulette wheel," as claimed. Kido's Figure 14 (reproduced above) "is a flow chart of a star position determining routine program of [the] roulette gaming device 1," and this figure shows that the random selection of the star mark position at step E6 occurs for a spin of the roulette wheel. EX1007, ¶[0249], Fig. 14. Specifically, at step E2, "the ball 27 [is introduced] to the wheel 22." *Id.*, ¶[0250]. Then, while the ball and wheel are spinning and before the ball lands at step E7, the server control CPU 81 randomly selects the position for the star mark. *Id.*; *see also id.*, ¶[0112]. After the ball lands at step E7, steps E8 and E9 are performed to determine the win number for the spin (*i.e.*, the position in which the ball landed for the spin) and whether there was a winner for the spin. *Id.*, ¶¶[0229]-[0230], [0250]. Accordingly, the position for the star mark randomly selected at step E6 is "for the spin of the roulette wheel," as claimed: In each round of roulette, the wheel is spun, and the position of the star mark is randomly selected for that spin of the wheel. EX1003, ¶[0362].

In the related litigation, Patent Owner argues that Kido does not disclose this claim element, arguing that Kido's special game values only provide a privilege "in the next game of roulette," not a privilege "for the spin" of a current game. EX1010, 103. But this argument ignores the prog bonus routine of Kido's Figure 12, whereby the server control CPU 81 awards the prog bonus privilege in a current roulette game, not in a subsequent one. EX1003, ¶¶[0350], [0359]. Moreover, other portions of Kido broadly describe awarding "a privilege and a payout" when a player successfully bets on a special game value award mark without any suggestion that the privilege and payout are received in the next game of roulette. EX1007, ¶¶[0112], [0114].

(k) Element 10: "determine a first payout for the first single position and a second payout for the single second position for the spin of the roulette wheel, wherein the first payout is higher than the second payout;"

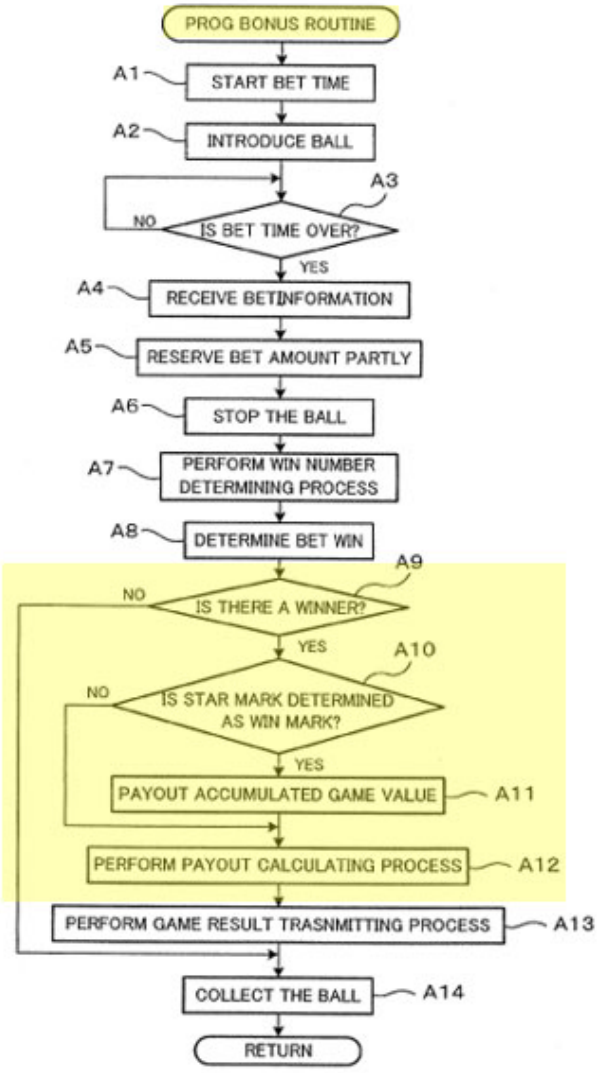
Kido discloses (i) element 10 of claim 1; and (ii) element 7 of claims 9 and 17. EX1003, ¶¶[0364]-[0372], [0402], [0417]; EX1020. In Kido's prog bonus routine, the "first payout" for the claimed "first position on the roulette wheel" (which corresponds to the "first bet information for a first bet from a first player device of a first player") is higher than the claimed "second payout for the single second position" of the roulette wheel (which corresponds to the "second bet information for a second bet from a second player device of a second player") because the first payout will

include not only the basic payout for selecting the win number but also an additional payout in the form of the "Prog bonus." EX1007, ¶¶[0114], [0221].[2]

More specifically, Figure 12 of Kido and its corresponding description make clear that the prog bonus payout is awarded at step A11 if the conditions of A9 and A10 are met:

[2] In other routines, Kido uses multipliers to make the first payout higher than the second payout, similar to the '014 Patent. *E.g.*, EX1007, Figs. 8-9 (e.g., normal payout rate of 35:1 for straight bets, but a higher 71:1 payout rate on straight bets hitting a "star bonus"), ¶¶[0172]-[0173], [0195]-[0207].

FIG. 12



Id., Fig. 12; ¶¶[0221], [0229]-[0231].

As shown above, when there has been a win on the star mark (*i.e.*, conditions A9 and A10 are both satisfied), the method proceeds to step A11 and pays out the accumulated prog bonus. By contrast, for a player's bet that is *not* "a win in the star mark (A10, NO), the server control CPU 81 executes a payout calculating process (A12). In the payout calculating process, the win chip is recognized in each station 4

and a sum of payout amounts of credits to be paid out to each station 4 … [are] calculated." *Id.*, ¶¶[0231]; *see also* [0221].

Because the "single second position [corresponding to a player's second bet information] … is different than the single first position [corresponding to another player's first bet information]" (EX1001, Claim 1), a first payout that receives Kido's accumulated prog bonus payout is necessarily higher than a second payout that does not receive the prog bonus. Accordingly, Kido's CPU 81 is configured to "determine a first payout for the first single position and a second payout for the single second position[,] … wherein the first payout is higher than the second payout." EX1003, ¶¶[0366]-[0368].

Kido determines the first and second payouts "for a spin of the roulette wheel," as claimed. As explained above for elements 6 and 7, Kido's Figure 12 "is a flow chart of a roulette game processing program" executed by the server control CPU 81 of the roulette gaming device 1. EX1007, ¶[0221]. At step A2, a "ball insertion device is driven to introduce the ball 27 into the wheel 22," and the ball is eventually received in a pocket. *Id.*, ¶¶[0223], [0227]-[0228]. After the ball is received in a pocket, the remaining steps of Figure 12 are executed, with the server control CPU 81 determining the first and second payouts by performing steps A9-A12, as explained above. The ball is collected at step A14 for the spin of the wheel, and "the process [then] returns

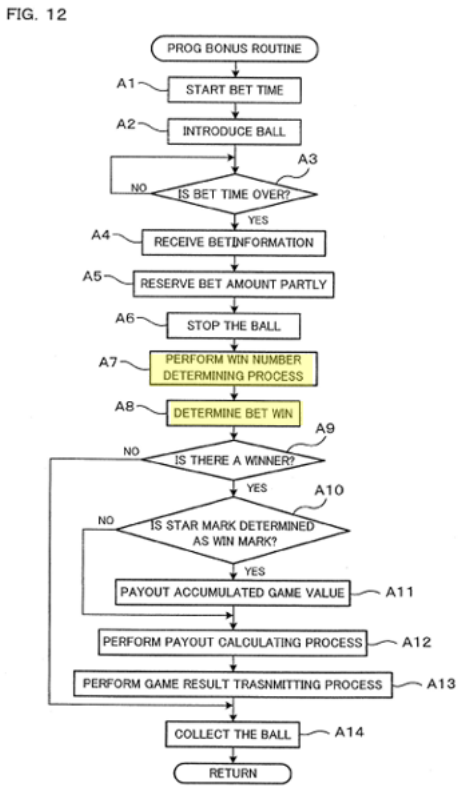
to the step of A1 and is transited to a next game." *Id.*, ¶¶[0228]-[0233]. Kido's payouts are thus determined "for the spin of the roulette wheel," as claimed.

In the related litigation, Patent Owner argues that Kido's prog bonus is "accumulated from prior games of roulette" and therefore "is not for the single 'spin of the roulette wheel.'" EX1010, 103-04. But the claims do not limit the *source* of the first payout, and nothing in the intrinsic evidence excludes the first payout from being sourced from a progressive pot accumulated over rounds. EX1003, ¶[0371]. In any case, a POSA would have also understood that the prog bonus could be sourced from a single round of roulette, as explained by Mr. Friedman. *Id*. Further, Kido more generally describes awarding "a privilege and a payout" to players as a bonus in a current game round, without limiting such payouts to progressive payouts. EX1007, ¶¶[0112], [0114].

(l) Element 11: "determine that the ball has fallen in the single first position for the spin of the roulette wheel; and"

Kido discloses (i) element 11 of claim 1; and (ii) element 8 of claims 9 and 17. EX1003, ¶¶[0373]-[0375], [0403], [0418]; EX1020. In step A7 of the Figure 12 prog bonus routine, the server control CPU 81 determines "the numbered pocket 23 into which the ball 27 is received." EX1007, ¶[0228]. Then, in step A9, the CPU 81 determines "whether the chip bet in each station 4 wins, from the bet information of each station 4 received in the step of A4 and the win number determined in the step

of A7." *Id.*, ¶[0229].



Id., Fig. 12, ¶[0221].

In determining whether a player's bet on a single first position is a winner at step A8, the CPU 81 necessarily determines whether the ball has fallen into the single first position. EX1003, ¶[0373]. For a straight up bet on a single position, that is how a player wins—only if the ball falls into that position—meaning that Kido's system necessarily "determine[s] that the ball has fallen in the single first position," as claimed. *See also* EX1007, ¶[0108]. The CPU 81's determination occurs "for the spin of the roulette wheel": As explained above, the steps of Figure 12 (including A7 and A8) occur within a single round of roulette, for a single spin of the roulette wheel,

until the routine "returns to the step of A1 and is transited to a next game." *Id.*, ¶[0233].

(m) Element 12: "indicate that the first player is to be paid at the first payout for the spin of the roulette wheel."

Kido discloses (i) element 12 of claim 1; and (ii) element 9 of claims 9 and 17. EX1003, ¶¶[0376]-[0378], [0404], [0419]; EX1020. In step A13 of the Figure 12 rog bonus routine, the server control CPU 81 executes:

> a game result transmit process of transmitting to all the stations 4 a signal relating to a display change accompanying the payout of credits based on the payout calculating process of A12 and the determination of a win number. When paying out the credits to the station 4, the credit data corresponding to the payout amount is outputted from the server 13 to the station control unit 9 of the station 4 for which a win is made. The credit data is added to the RAM 93 of the corresponding station 4.

EX1007, ¶[0232].

The game result transmit process of step A13 indicates that the first player is to be paid at the first payout: The "signal relating to a display change" updates the display to show the first player's increased number of credits indicative of the first payout. *Id.*, Fig. 12, ¶[0232]; EX1003, ¶[0376]. Likewise, the credit data added to the RAM 93 indicates the first payout. EX1007, ¶[0232]; EX1003, ¶[0377]. Kido also explains that the gaming machine may use "an image display device that displays a game

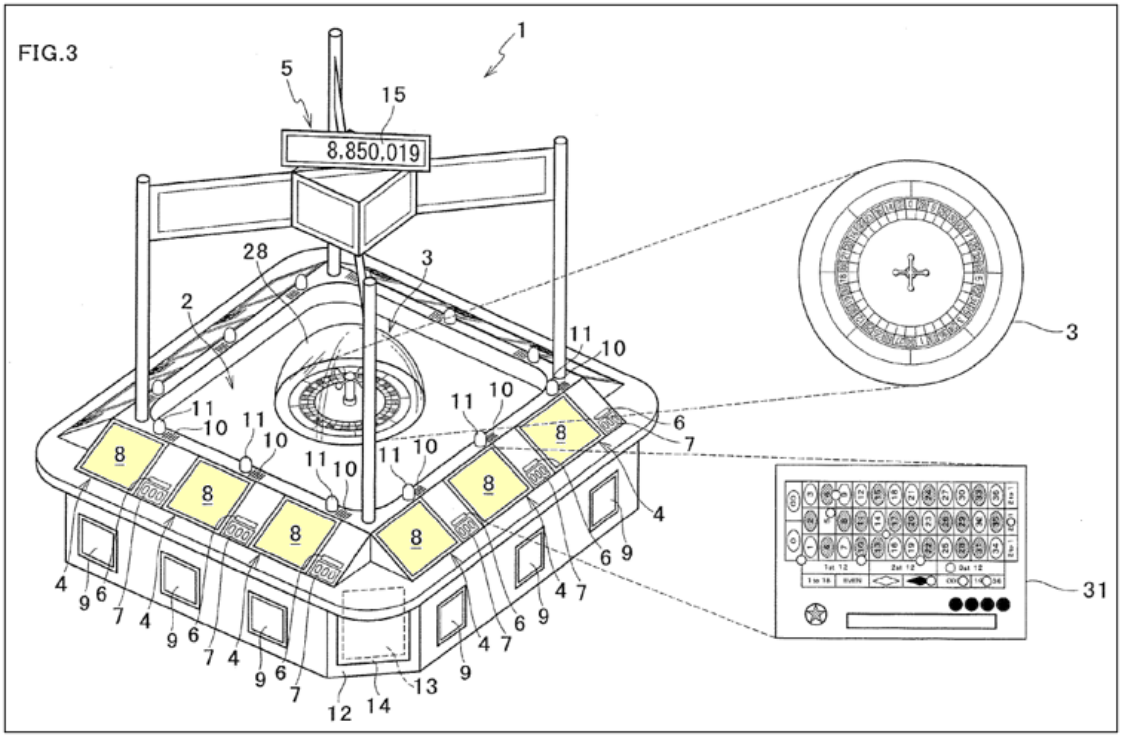
result." EX1007, ¶[0082]. A POSA would understand that the "game result" on the game display recited in Kido would include the first payout. EX1003, ¶[0377].

Kido indicates that the first player is to be paid at the first payout "for the spin of the roulette wheel." As explained above, the steps of Figure 12 (including A13) occur within a single round of roulette, for a single spin of the roulette wheel, until the routine "returns to the step of A1 and is transited to a next game." EX1007, ¶[0233].

3. Claims 2, 10, And 18

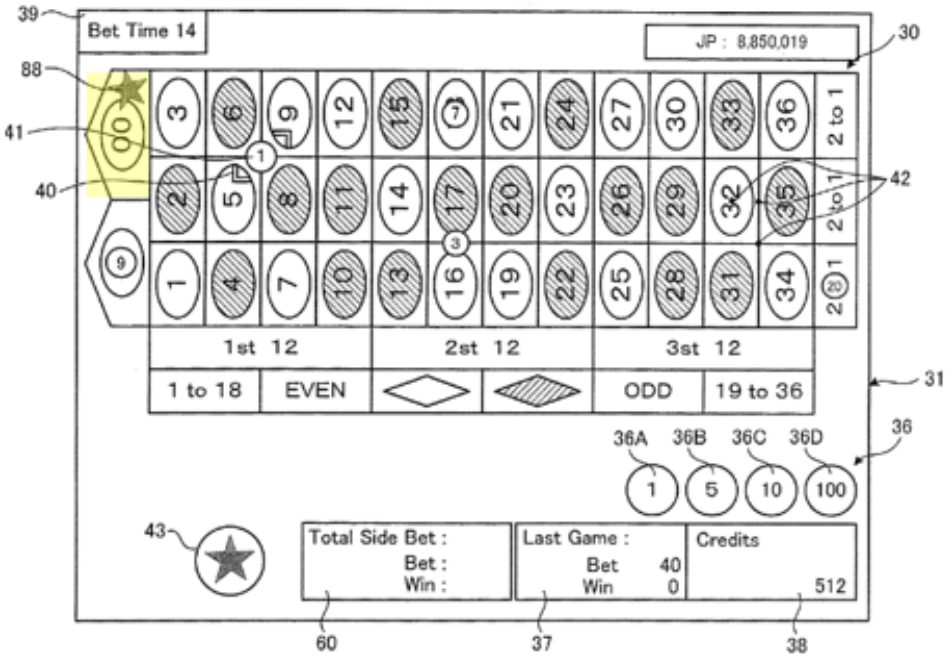
Claim 2 depends from claim 1, reciting: "further comprising a display adjacent to the roulette wheel that indicates the first selected position." Dependent claims 10 and 18 depend from claims 9 and 17, respectively, and recite similar limitations. EX1021. Kido discloses these limitations. EX1003, ¶¶[0381], [0405], [0420].

Each player station 4 in Kido has an image display device 8 that is adjacent to the roulette wheel:



EX1007, Fig. 3, ¶[0143].

The image display devices 8 indicate the position of the star mark 88 (*i.e.*, the "first selected position"). EX1003, ¶[0381]. Figure 5 shows the bet screen 31 displayed on the image display devices 8, with the bet screen 31 including an image of a star to indicate the position of the star mark 88:



Id., Fig. 5; *see also id.*, ¶[0122].

4. Claims 3, 11, And 19

Claim 3 depends from claim 2, reciting: "wherein the at least one hardware processor is further configured to cause a lightning visual effect to be presented in connection with indicating the first selected position." Dependent claims 11 and 19 depend from claims 10 and 18, respectively, and recite similar limitations. EX1021.

Claims 3, 11, and 19 are anticipated by and obvious over Kido for the same reasons as claims 2, 10, and 18 because the language added in claims 3, 11, and 19 is non-limiting printed matter. *Praxair Distrib., Inc. v. Mallinckrodt Hosp. Prods. IP Ltd.*, 890 F.3d 1024, 1032 (Fed. Cir. 2018). The claimed "lightning visual effect" is directed to communicative content for "indicating the first selected position" and has

no functional relationship with any substrate (*e.g.*, screen) on which it is displayed. *See In re Bryan*, 323 F. App'x 898, 901 (Fed. Cir. 2009).

In any case, Kido renders obvious the limitations of claims 3, 11, and 19. EX1003, ¶¶[0382]-[0388], [0406], [0421]. Kido's CPUs 81, 91 ("at least one hardware processor") are configured to display a star image for indicating the first selected position, as explained above for claim 2. It would have been an obvious, elementary design choice to display a lightning visual effect instead of the star image. EX1003, ¶[0383]. The prior art is replete with disclosure of visual effects for identifying randomly selected roulette positions, and it would have been obvious to a POSA to use a lightning visual effect or another visual indicator to show Kido's random selection of positions. *See*, *e.g.*, EX1016 (Miltenberger), 11:19-45; EX1017 (Hsu), 3:59-61.

Kido also discloses that "[w]hen the special game value award mark bet on is at the mark that the ball enters, a letter notifying the player that it is made a win in the special game value award mark is displayed on the image display device." EX1007, ¶¶[0122], [0188]. In addition, "[t]he roulette gaming device 1 has … an electric light indicator 5." *Id.*, ¶[0126]. "[T]he server control CPU 81 is associated with the electric light indicator 5. The server control CPU 81 controls light emission of a light emitting member such as LED to perform an effect by an electric spectacular and to display predetermined letters on the electric light indicator 5." *Id.*, ¶[0158].

Kido thus discloses that, when the number bet on by the player is the same as the special game value award mark, Kido's system generates both sound effects and visual effects "to perform an effect by an electric spectacular." *Id.* Given that the standard dictionary definition of "spectacular" as a noun is "an elaborate show or display" (EX1061), a POSA would have understood that the nature of the spectacular to be generated "when in connection with indicating the first selected position" would have been an arbitrary design choice. EX1003, ¶[0384]. Consequently, in view of Kido's disclosure, the use of a "lightning visual effect" would have been an obvious design choice.

5. Claims 5, 13, And 21

Claim 5 depends from claim 1, reciting: "wherein the at least one hardware processor is further configured to: randomly select a second selected position on the roulette wheel; and determine a payout for the second selected position that is different than the payout for the single first position." Dependent claims 13 and 21 depend from claims 9 and 17, respectively, and recite similar limitations. EX1021. Kido renders obvious these limitations. EX1003, ¶¶[0389]-[0392], [0407], [0422].

As explained above, Kido discloses randomly selecting a star mark (EX1007, ¶[0282]) used to award a "prog bonus" in addition to the normal payout when the ball comes to rest in the roulette wheel position corresponding to the randomly selected star mark. *Id.*, ¶[0265]. A POSA would have understood that, after a first selected

position is randomly selected, it would have been obvious to randomly select a second selected position. EX1003, ¶¶[0389]-[0390]. Simply reciting two or more of something (*i.e.*, a randomly selected position on the roulette wheel) as opposed to a single instance of that thing does not, by itself, qualify as a nonobvious difference. *See*, *e.g.*, *In re Harza*, 274 F.2d 669, 671 (CCPA 1960).

Kido also discloses that, after it is determined that the mark (*i.e.*, position) of the roulette wheel in which the ball has come to rest, "the payout calculator unit 114 calculates a payout corresponding to the bet area bet, based on the payout rate relative to the bet type stored in the rate memory." EX1007, ¶[0114]. A POSA would have readily understood that, upon randomly selecting a second position (which itself would have been obvious, as explained above), it would be equally obvious to make the payout for the second randomly selected position different than the first randomly selected position. EX1003, ¶[0391]. The payout for the second randomly selected position could either be (i) the same as, or (ii) different than the payout for the first randomly selected position, and it would have been obvious for a POSA to select either of these two options. *Id.*

Further, as explained above, Kido describes an objective of providing a roulette gaming device with new features for avoiding "monotonous" play and "increasing a player's game desire." EX1007, ¶¶[0006]-[0008]. A POSA would have recognized that using different payouts for the first and second randomly selected positions would

add excitement for players, thus motivating the POSA to select this option. EX1003, ¶[0392]. Further, the random selection of multiple positions with different payouts was known in the art, which would have further motivated a POSA to employ this technique in Kido. *See*, *e.g.*, EX1018 (Raedt), Abstract.

6. Claims 6, 14, And 22

Claim 6 depends from claim 1, reciting: "wherein the at least one hardware processor is further configured to cause the ball and the roulette wheel to automatically spin." Dependent claims 14 and 22 depend from claims 9 and 17, respectively, and recite similar limitations. EX1021. Kido discloses these limitations. EX1003, ¶¶[0393], [0408], [0423].

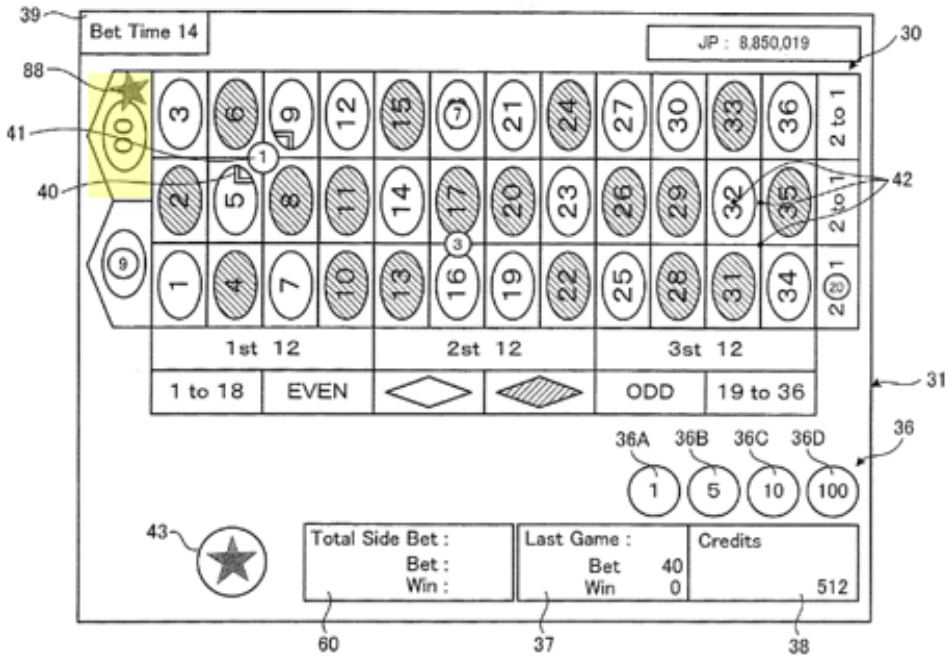
Kido discloses that the CPU 81 is configured to cause the roulette wheel and ball to spin automatically, without human intervention. EX1007, ¶¶[0154] ("[T]he server control CPU 81 drives a drive motor provided to the roulette unit 3, thereby shooting a ball 27 or rotating the wheel 22."), [0157]; *see also id.*, ¶¶[0108], [0114], [0221], [0223], [0227].

7. Claims 7, 15, And 23

Claim 7 depends from claim 1, reciting: "wherein the first graphical user interface includes a roulette board and wherein the at least one hardware processor is further configured to highlight the first selected position in response to the first selected position being randomly selected." Dependent claims 15 and 23 depend

from claims 9 and 17, respectively, and recite similar limitations. EX1021. Kido discloses these limitations. EX1003, ¶¶[0394], [0409], [0424].

The first graphical user interface presented on a first image display device 8 displays a bet screen 31 with a table-type betting board 30 (EX1007, ¶¶[0175], [0186]), as shown in Figure 5:



Id., Fig 5. Kido's betting board 30 displayed on the first graphical user interface is a "roulette board," as claimed. EX1003, ¶[0394].

Further, in Kido, the at least one hardware processor is configured to highlight the first selected position in response to the first selected position being randomly selected. *Id.* The randomly selected star mark 88 is displayed on the roulette wheel (EX1007, Fig. 4, element 88) and on the betting board 30 of the bet screen 31 (*id.*,

Fig. 5, element 88; ¶[0068]). A POSA would have understood that the display of the randomly selected star mark 88 serves as a type of highlighting, thereby disclosing this limitation. EX1003, ¶[0394].

B. Ground 2: Claims 8, 16, And 24 Would Have Been Obvious In View Of Kido And Yee

1. Summary Of Yee

Yee, EX1009, entitled "Methods of Administering Roulette Bonus Wagers and Related Apparatuses and Systems," was filed September 20, 2013, and issued March 21, 2017. Yee is prior art under at least AIA 35 U.S.C. § 102(a)(2).

Yee describes a multi-player roulette system that includes a playing table 400 having a roulette wheel 406 at its center and multiple player stations 412 arranged on two sides of the table 400. EX1009, Fig. 5A.

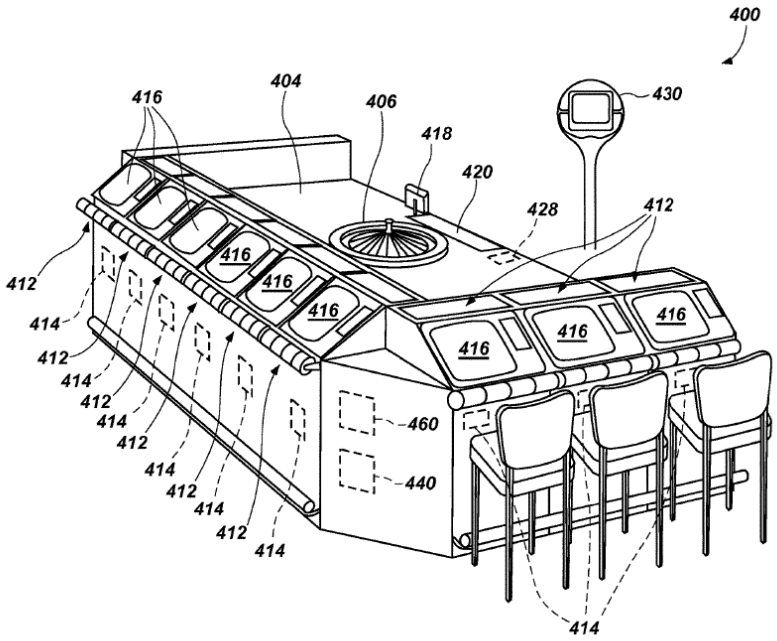


FIG. 5A

Yee's system selects a random number that, under specific circumstances, is used to award a winning player an enhanced payout. *Id.*, Abstract. Yee discloses that such enhanced payouts may be calculated using a randomly selected "multiplier" which, when triggered, increases the payout "to an amount of the wager multiplied by the randomly selected multiplier." *Id.* The multipliers may be "10 times, 25 times, 50 times, 100 times, 250 times, 500 times, and 1,000 times for a payout." *Id.*, 2:15-20. For example, Yee's Figure 3 depicts a display surface 140 having a multiplier area 142 displaying that the multiplier to be applied is "x1000 YOUR BET!" *Id.*, Fig. 3, 13:52-56.

2. Motivations To Combine

It would have been obvious to one of skill in the art at the time of the '014 Patent to modify the roulette gaming system of Kido to include features of Yee. EX1003, ¶¶[0426]-[0427]. For example, a POSA would have found it obvious to incorporate into Kido's system Yee's display of the payout enhancement ("x1000 YOUR BET!" EX1009, Fig. 3, 13:52-56), so that the players could easily determine the value of the increased payout, which would potentially increase the quantity and/or value of bets. EX1003, ¶[0427]. Further, Kido describes an objective of providing a roulette gaming device with new features for avoiding "monotonous" play and "increasing a player's game desire." EX1007, ¶¶[0006]-[0008]. A POSA would have recognized that displaying the payout enhancement (as taught in Yee) would add

excitement for players, and a POSA would have been motivated to use this feature in Kido for at least this reason. EX1003, ¶[0426].

Additionally, Kido and Yee both describe multi-player roulette systems that use one or more computer processors to accept bets, display information about game status, and otherwise control operations of the system. *See*, *e.g.*, EX1007 (Kido), Fig. 3, ¶¶[0162]-[0170]; EX1009 (Yee), Fig. 5A, 19:10-20:26. Kido and Yee also both relate to computerized roulette systems having an enhanced payout feature that is based on a randomly selected number. EX1003, ¶¶[0426]-[0427]. In addition, a POSA would have been motivated to modify Kido's roulette gaming system to use various features of Yee because the combination amounts to applying a known technique to yield predictable results. *Id.*, ¶[0426].

3. Claims 8, 16, And 24

Claim 8 depends from claim 1, reciting: "wherein the at least one hardware processor is further configured to indicate '500x' at the first selected position on a roulette board in the first graphical user interface." Dependent claims 16 and 24 depend from claims 9 and 17, respectively, and recite similar limitations. EX1021.

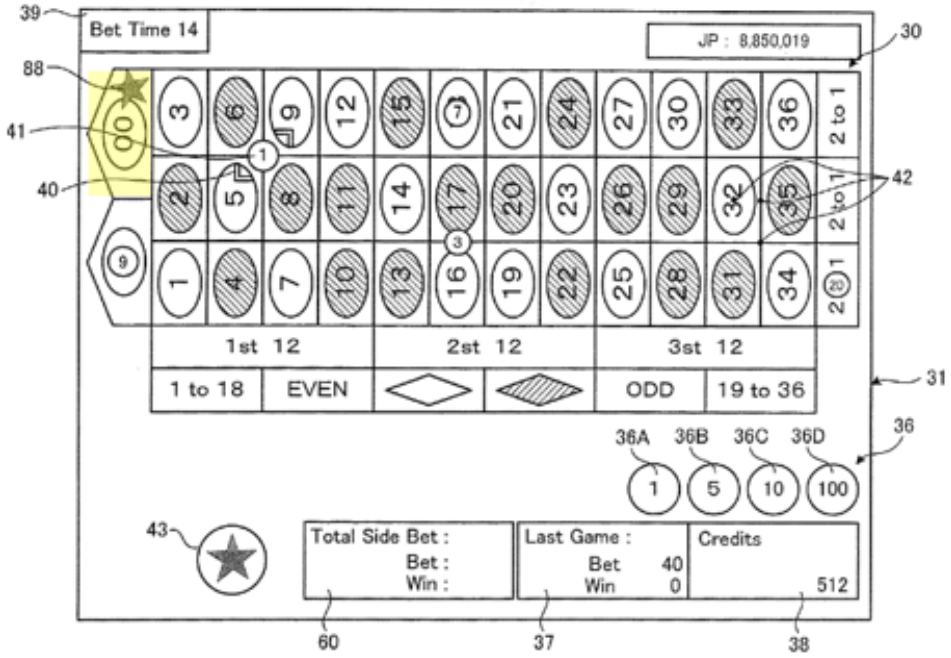
Claims 8, 16, and 24 are anticipated by and obvious over Kido for the same reasons as claims 1, 9, and 17 because the language added in claims 8, 16, and 24 is non-limiting printed matter. The claimed "wherein the at least one hardware processor is further configured to indicate '500×'" is directed to communicative

content and has no functional relationship with the first player device on which the content is displayed.

In any case, the limitations of claims 8, 16, and 24 are rendered obvious by Kido in view of Yee. EX1003, ¶¶[0555]-[0567]. Kido and Yee both relate to roulette gaming systems including an enhanced payout feature based on a randomly selected number. For example, Kido discloses awarding "a game value obtained by multiplying a predetermined rate by the predetermined game value." EX1007, ¶[0046]. Similarly, Yee discloses that, under specific circumstances, "an amount of the payout [is] an amount of the wager multiplied by a randomly selected multiplier." EX1009, 1:9-16. Yee further discloses that such multipliers may be "10 times, 25 times, 50 times, 100 times, 250 times, 500 times, and 1,000 times for a payout." *Id.*, 2:15-20. For example, Yee's Figure 3 depicts a display surface 140 having a multiplier selection area 142 displaying that the multiplier to be applied is "x1000 YOUR BET!" *Id.*, Fig. 3, 13:52-56.

Given these disclosures, a POSA would have understood that the enhanced payout to be used and displayed is an arbitrary design choice. As such, a game designer would, depending on business decisions, be motivated to use and display a 500x multiplier. Indeed, Yee expressly discloses that the multiplier can be "500 times." *Id.*, 2:15-20. It would have been obvious to display the 500x "at the first selected position on a roulette board in the first graphical user interface": As explained

above for claims 7, 15, and 23, Kido's first graphical user interface displays a betting board 30 with a star mark showing the randomly selected position:



EX1007, Fig. 5.

A POSA would have found it obvious to display "500x" instead of the star mark at the first selected position in the combination of Kido and Yee because this would advantageously perform two functions, *i.e.*, showing which position was randomly selected and informing players of the increased payout applicable for that position. EX1003, ¶[0561].

C. Ground 3: Baron Anticipates, And Would Have Rendered Obvious, Claims 1-3, 5-7, 9-11, 13-15, 17-19, And 21-23

1. Summary Of Baron

Baron, EX1008, entitled "Methods of Administering Wagering Games of Roulette with Progressive Side Wagers," was filed December 2, 2014 and published on June 2, 2016. Baron is prior art under at least AIA 35 U.S.C. § 102(a)(1).

Baron discloses "[m]ethods of administering wagering games" involving accepting "a wager from a player on a game of roulette" on a "predicted roulette outcome," *i.e.*, accepting a bet from a player relating to a number on a roulette wheel EX1008, Abstract, Fig. 1. The player's predicted roulette outcome is compared to a plurality of roulette outcomes that are randomly selected in a single round of roulette. *Id.*, ¶¶[0028], [0039]-[0041], Fig. 1. Baron states that the randomly selected outcomes for a round of roulette include "a primary roulette outcome" (*e.g.*, the position into which the ball lands) and "at least one ancillary roulette outcome" that "may be generated utilizing a random number generator (*e.g.*, operated by a control circuit)." *Id.*, ¶¶[0008], [0039], [0041], [0059], [0104].

Baron further describes that a player is eligible to receive a payout if the player's predicted roulette outcome matches one or more of the randomly generated roulette outcomes. *Id.*, ¶¶[0042]-[0043], [0045]. The payout amount "increase[s] nonlinearly as a number of roulette outcomes matching the predicted roulette outcome increases[.]" *Id.*, ¶[0045]. For example, Baron discloses an embodiment having three

randomly selected outcomes for a single spin of the wheel. *Id.*; *see also* ¶[0028]. A payout for a bet matching one, two, or all three of the randomly selected outcomes is: 7:1, 100:1, and "an entire amount of [a] progressive pot," respectively. *Id.*

2. Independent Claims 1, 9, And 17

(a) Preamble

To the extent limiting, Baron discloses the preambles of claims 1, 9, and 17. EX1003, ¶¶[0443]-[0445], [0521], [0536]; EX1020. Figure 6 of Baron shows a table 400 with multiple player stations 412, where "[e]ach player station 412 may include a separate player interface 416, which may be used for accepting wagers and displaying game information." EX1008, ¶[0080].

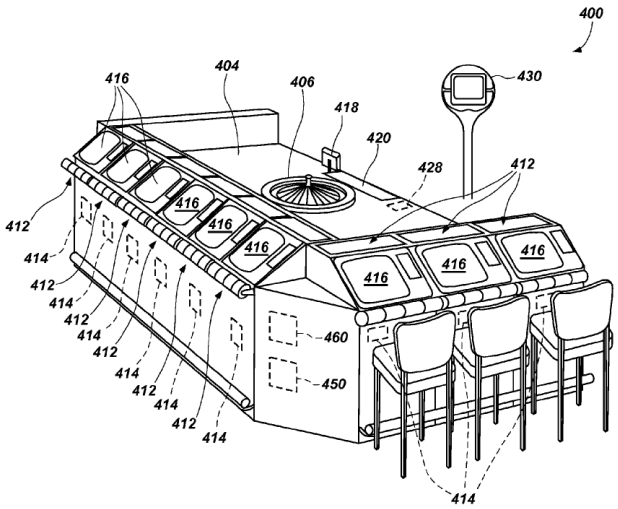


FIG. 6

Id., Fig. 6.

The table 400 is a "system for wagering," as claimed. *See also id.*, Abstract, ¶¶[0001], [0007].

Baron's title ("*Methods* of Administering Wagering Games of Roulette with Progressive Side Wagers") and the disclosure in Figure 1 (which is "a flowchart diagram of *a method* of administering a wagering game") shows that Baron discloses "a method for wagering," as recited in the preamble of claim 9. *Id.*, Fig. 1, ¶[0011]; EX1003, ¶¶[0444], [0521].

Baron also discloses the "non-transitory computer-readable medium" recited in the preamble of claim 17. EX1003, ¶[0536]. Figure 6 of Baron discloses local game processors 414 and central game processor 428 that "may be operably coupled to memory including one or more programs related to the rules of game play." EX1008, ¶[0080]. The memory in Baron is a computer-readable medium containing instructions to perform a method for wagering. EX1003, ¶[0536].

(b) Element 1

Baron discloses element 1 of claim 1. EX1003, ¶[0446]; EX1020. Baron's table 400 includes a roulette wheel 406: "The table 400 may include a playing surface 404, which may be, for example, a felt surface or an electronic display with a roulette wheel 406 mounted into the surface 404." EX1008, ¶[0078]; *see also id.*, ¶¶[0027], [0040], Figs. 4, 7.

(c) Element 2

Baron discloses element 2 of claim 1. EX1003, ¶[0447]; EX1020. Baron's roulette wheel 406 is configured to receive a ball: "For embodiments using physical

roulette wheels 406, the table 400 may further include a spinning, physical roulette wheel 406 that may be configured to receive a ball or other indicator, which may come to rest in individual, separate sections with numbers …." EX1008, ¶[0082]; *see also id.*, ¶¶[0027] (introducing of a ball "into a spinning, physical roulette wheel, and permitting the ball to come to rest on a roulette outcome"), [0040], [0068].

(d) Element 3

Baron discloses element 3 of claim 1. EX1003, ¶¶[0448]-[0449]; EX1020. Baron's table 400 includes a central game processor 428, and each player station 412 includes its own local game processor 414. EX1008, ¶[0080]. The central game processor 428 and local game processors 414 disclose the claimed "at least one hardware processor." EX1003, ¶[0448]. The game processors 414, 428 are collectively configured to implement each of the steps of claims 1, 9, and 17, as explained below. *Id.*, ¶¶[0448]-[0449]; *see also* Fig. 11, a "simplified block diagram showing elements of [a] computing device[]" with "one or more processors 642." EX1008, ¶¶[0120]-[0122], [0073], [0087], [0088], [0090].

(e) Elements 4 And 5

Baron discloses (i) elements 4 and 5 of claim 1; and (ii) elements 1 and 2 of claims 9 and 17. EX1003, ¶¶[0450]-[0454], [0522]-[0523], [0537]-[0538]; EX1020. As explained above, Figure 6 of Baron discloses a table 400 with multiple player

stations 412, and the player stations 412 disclose the claimed first and second player devices:

> Each player station 412 may include a separate player interface 416, which may be used for accepting wagers and displaying game information (e.g., game instructions, input options, wager information including virtual chips, game outcomes, etc.). The player interface 416 may include, for example, a display screen in the form of a touchscreen, which may be at least substantially flush with, or raised up from, the playing surface 404 in some embodiments.

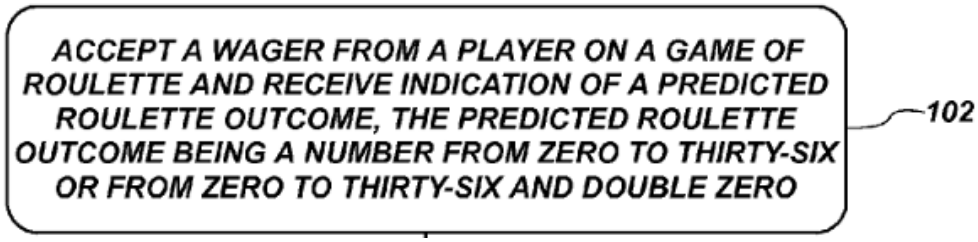
EX1008, ¶[0080], Fig. 6.

In view of this disclosure, a POSA would have understood that Baron's player interfaces 416 present GUIs on respective player stations 412. EX1003, ¶[0450]. Each GUI is generated by the central game processor 428, a local game processor 414, or a combination thereof. EX1008, ¶[0080].

(f) Elements 6 And 7

Baron discloses (i) elements 6 and 7 of claim 1; and (ii) elements 3 and 4 of claims 9 and 17. EX1003, ¶[0455]-[0462], [0524]-[0525], [0539]-[0540]; EX1020. As discussed above for Elements 4 and 5, Baron discloses multiple player stations 412, each of which includes a player interface 416 though which a player can place wagers via a touchscreen, including wagers on only a single position of the roulette wheel. EX1008, ¶[0078]; *see also* ¶¶[0080], [0008], Figs. 2, 4, 6-7. Figure 1 of Baron "is a flowchart diagram of a method of administering a wagering game," and step 102

states that a player's wager is on a predicted roulette outcome that is "a number from zero to thirty-six or from zero to thirty-six and double zero" (*id.*, ¶¶[0011], [0028]), *i.e.*, "only a single … position on the roulette wheel" :



Id., Fig. 1 (excerpted); *id.*, ¶[0028].

Regarding the second bet information, a POSA would have understood that a second player using one of the many player interfaces 416 shown in Figure 6 of Baron could place a second bet on any of the numbers on a roulette wheel (*i.e.*, zero to thirty-six), including a single second position that is different from the bet placed on the single first position by the first player. EX1003, ¶¶[0459]-[0460].

To the extent Patent Owner argues that Baron's wagers eligible for increased payouts are additional bets made on top of a conventional roulette bet—such that Baron requires more than one bet to receive an increased payout, *see* EX1010, 35—Patent Owner is incorrect. While Baron discloses placing multiple types of wagers (*e.g.*, a conventional wager not eligible for an increased payout and bonus/progressive wagers that are eligible for increased payouts), Baron indicates that the "other [conventional] wager may be optional" EX1008, ¶[0038]. There is no requirement

in Baron that the player place both a conventional and non-conventional wager eligible for an increased payout. EX1003, ¶[0461].

The first and second bet information are for "a spin of the roulette wheel." EX1003, ¶[0457]. Baron explains that the table 400 in Figure 6 can include "a spinning, physical roulette wheel 406" that receives a ball in a numbered section, thus generating a random outcome for a round of roulette. EX1008, ¶[0082]. This roulette outcome is generated during a single round of roulette and is compared to the player's predicted roulette outcome to determine whether the player will receive a payout. *Id.*, ¶¶[0028], [0039], [0042]. The comparison and payout step is the final step disclosed in Baron's Figure 1, signaling the end of a single round of the method of administering a wagering game. *Id.* Fig. 1, ¶[0011]. Accordingly, the first and second bets are "on a spin of the roulette wheel."

(g) Element 8

Baron discloses (i) element 8 of claim 1; and (ii) element 5 of claims 9 and 17. EX1003, ¶¶[0463]-[0470], [0526], [0541]; EX1020. Baron describes how a ball is introduced onto a spinning roulette wheel and eventually comes to rest in a pocket on the wheel, *i.e.*, determining a "roulette outcome." EX1008, ¶[0040]. Baron then describes how these roulette outcomes can be "automatically detected (e.g., using one or more sensors) and conveyed to a control circuit." *Id.* The ability to automatically detect "roulette outcomes" as disclosed in Baron would necessarily include using the

one or more processors (*i.e.*, central game processor 428, local game processors 414) to determine that the roulette wheel and the ball have been spun. EX1003, ¶[0463]-[0467]. The one or more processors would not be able to automatically detect where the ball lands on a spin if it had not already determined that the wheel and ball had been spun. *Id.*

Baron also discloses that its processor can "interpret a random game outcome" using "sensors in the physical roulette wheel 406 or using imaging sensors configured to capture information from the physical roulette wheel 406." EX1008, ¶¶[0088], [0116]. Baron's disclosure of sensors is consistent with the '014 Patent, which describes a "wheel sensor 104 [that] can detect the spinning of the wheel and the position in which the ball falls. The sensor can be implemented in any suitable manner." EX1001, 3:11-13.

A POSA would have understood the sensors in Baron as being able to determine that the wheel and ball have been spun, just like the sensor of the '014 Patent. EX1008, ¶¶[0040], [0042]; EX1003, ¶[0464]. At minimum, it would have been obvious to use Baron's sensor to detect the spinning of the wheel and ball, as is well known in the art. Mr. Friedman explains in his expert declaration that a POSA would have been motivated to use Baron's sensors to provide a variety of functions—*e.g.*, detecting the spinning of the wheel and ball and then determining the position

into which the ball lands—thereby avoiding the costs of unnecessary, duplicative components. EX1003, ¶[0467].

In Baron, the determination that the roulette wheel and the ball have been spun is "for the spin of the roulette wheel," as claimed. As explained above for elements 6 and 7, comparing the predicted roulette outcome to the randomly generated roulette outcome(s) and providing a payout if there is a match requires only a single spin of the roulette wheel. EX1008, ¶¶[0028], [0039]; EX1003, ¶[0468]. Accordingly, the step of determining whether the ball and wheel have been spun in Baron is "for [a] spin of the roulette wheel."

(h) Element 9

Baron discloses (i) element 9 of claim 1; and (ii) element 6 of claims 9 and 17. EX1003, ¶¶[0471]-[0478], [0527], [0542]; EX1020. In embodiments of Baron, for a given round of roulette, "[a] plurality of roulette outcomes may be generated, and each roulette outcome may be randomized independently from the other roulette outcomes." *Id.*, ¶¶[0039], [0028]. These randomly generated numbers can be "a number from zero to thirty-six or from zero to thirty-six and double zero," which represent the numbers on a roulette wheel. *Id.*, ¶[0041]; EX1003, ¶[0471]. One of the randomly generated outcomes may be a "primary roulette outcome" generated by "introducing a [ball] into a physical, spinning roulette wheel and permitting the [ball] to come to rest on a roulette outcome." *Id.*, ¶¶[0039]-[0040]. Another one of the

randomly generated outcomes "may be generated utilizing a random number generator (e.g., operated by a control circuit)." *Id.*, ¶[0041]. Figure 3 of Baron, which is a display layout for a "method of administering a wagering game," (*id.*, ¶[0013]), contains an outcome display area 124 that shows one primary outcome (24) and two ancillary outcomes (also 24), all three of which are for a position on the roulette wheel (24). *Id.*, Fig. 3. Thus, Baron discloses "randomly select[ing] a first selected position" (*i.e.,* randomly generated roulette outcome) "on the roulette wheel." EX1003, ¶[0471].

The randomly generated outcomes in Baron are for a spin of the roulette wheel. EX1003, ¶[0472]. Baron explains that the plurality of roulette outcomes are "generated in a single round of the wagering game." EX1008, ¶¶[0039], [0028]. Baron's detailed discussion of Figure 3 states that the "randomized roulette outcomes [are] for the current round of play." *Id.*, ¶[0058]. And Figure 1 of Baron, which is a flowchart showing the method of administering the wagering game in Baron, discloses only one step (106) in which a plurality of roulette outcomes are generated. *Id.*, Fig. 1. The randomly generated outcomes in Baron are thus for "[a] spin of the roulette wheel."

Baron discloses that the randomly selected outcomes are selected prior to the ball falling into an outcome position on the roulette wheel. Baron explains that its processors "randomly generate one or more roulette outcomes … at the close of

wagering or at the beginning of a new round of play." *Id.*, ¶[0088]. In any of these sequences in Baron, the roulette outcomes are randomly generated prior to the ball falling into a position on the roulette wheel. EX1003, ¶¶[0473]-[0475]. While Baron's description of randomly selecting outcomes "at the close of wagering or at the beginning of a new round of play" is with respect to the table 470 of Figure 7 (and not the table 400 of Figure 6 referenced above), a POSA would have immediately envisaged applying this approach to the table 400 of Figure 6. EX1003, ¶[0477]; *see Kennametal*, 780 F.3d at 1382-83. A POSA would recognize this approach as having equal applicability to Figures 6 and 7 and therefore would have immediately envisaged using it with respect to Figure 6's table 400. EX1003, ¶[0477].

Further, a POSA would have been motivated to apply Baron's random-number-selection-before-the-ball-lands approach to the table 400. EX1003, ¶[0477]. *See Bos. Sci. Scimed, Inc. v. Cordis Corp*., 554 F.3d 982, 991 (Fed. Cir. 2009) ("Combining two embodiments disclosed adjacent to each other in a prior art patent does not require a leap of inventiveness"). Baron's background section explains that "players are generally open to, and sometimes specifically seek out, new and more interesting ways to play roulette" (EX1008, ¶[0002]), and a POSA would have recognized that using Baron's random-number-selection-before-the-ball-lands approach with Baron's table 400 of Figure 6 would be interesting to players: Selecting the random outcomes before the ball lands (as taught in Baron's ¶[0088]) would add an element of

randomness and excitement to enhance gameplay at the table 400. EX1003, ¶[0477]. Using this technique in the context of Figure 6's table 400 would have been well within a POSA's skill. *Id.*

Baron discloses that its randomly generated outcome, *i.e.*, the claimed "first selected position," is the same as the predicted roulette outcome, *i.e.*, the claimed "single first position." EX1003, ¶[0476]. The annotated version of Figure 3 from Baron shown below is instructive.

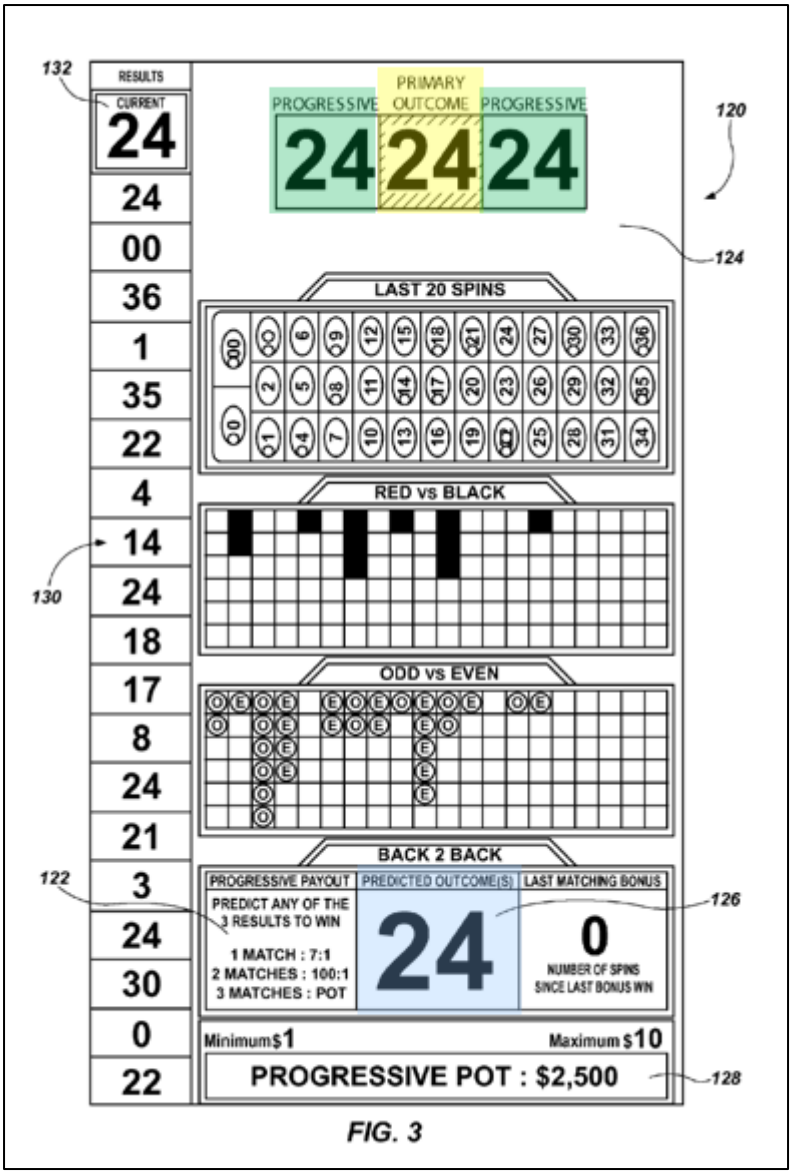


FIG. 3

EX1008, Fig. 3. At the top of Figure 3 are three randomly generated roulette outcomes, one primary outcome (highlighted in yellow) and two progressive (ancillary) outcomes (highlighted in green). *Id.* At the bottom of Figure 3, highlighted in blue, is the player's "predicted roulette outcome" for the number 24, which matches the randomly generated primary and progressive outcomes which are also 24. Baron

thus discloses a "first selected position [that] is the same as the single first position" as claimed.

(i) Element 10

Baron discloses (i) element 10 of claim 1; and (ii) element 7 of claims 9 and 17. EX1003, ¶¶[0479]-[0486], [0528], [0543]; EX1020. Baron discloses that a player can receive an increased payout as the number of randomly generated roulette outcomes matching the predicted roulette outcome increases. EX1008, ¶[0045], Fig. 3. With respect to Figure 3, the predicted roulette outcome (*i.e.*, the player's bet) is 24, and the three randomly generated roulette outcomes (the two progressive (ancillary) outcomes and the one primary outcome) are also all 24. *Id.*, Fig 3. Accordingly, the player who placed a bet on 24 has matched all three randomly generated roulette outcomes and will receive the payout of "POT." *Id.* Had the player's predicted roulette outcome matched only one of the randomly generated roulette outcomes, the player would have received a payout of 7:1. *Id.*, Fig. 3, ¶[0045]. Had the player's predicted roulette outcome matched two of the randomly generated roulette outcomes, the player would have received a payout of 100:1. *Id.*, Fig. 3, ¶[0045]. Baron thus discloses "determin[ing] a first payout for the first single position."

Baron also discloses determining a second payout for the single second position. Per claim element 7, the single second position is different from the first single position. Referring again to the example in Figure 3, the single second position

cannot be 24, and thus cannot receive the 7:1, 100:1, or POT payout because the single second position does not match any of the three randomly generated roulette outcomes. EX1008, ¶[0045], Fig. 3. In this situation, the first payout would necessarily be higher than the second payout. EX1003, ¶¶[0480]-[0481].

Determining the first and second payouts in Baron is "for the spin of the roulette wheel." Baron discloses that a plurality of roulette outcomes can be generated "in a single round of the wagering game." EX1008, ¶¶[0039], [0028]. Those random numbers can be generated via a "a spinning, physical roulette wheel 406" that receives a ball in a numbered section as disclosed in table 400 in Figure 6 (*id.*, ¶[0082, Fig. 6), or they can be generated via a random number generator (*id.*, ¶[0041]). Regardless of which way they are generated, they are generated for a "single round" of roulette (*id.*, ¶¶[0028], [0039]-[0040]), *i.e.*, a single spin of the roulette wheel. These roulette outcomes are then compared to the player's predicted roulette outcome to determine whether the player is awarded a first or second payout. *Id.*, ¶¶[0028], [0039], [0042]. Accordingly, the first and second payout are for "[a] spin of the roulette wheel." EX1003, ¶[0482].

In the related litigation, Patent Owner argues that Baron does not disclose a first payout that is different from a second payout, and instead "all payouts for single positions on the roulette wheel are the same." EX1010, 36. Patent Owner is wrong. Figure 3 shows that a payout for a predicted roulette outcome of 24 (payout for the

first single position) would be higher than a payout for any other predicted roulette outcome (a payout for a single second position) because the primary and progressive outcomes all match the predicted roulette outcome of 24 and, therefore, cannot match any other number. EX1008, Fig. 3, ¶[0045].

To the extent Patent Owner argues that the progressive payout in Baron is not encompassed by claims of the '014 Patent, Patent Owner is wrong. Nothing in claim 1 excludes the use of a progressive payout. EX1003, ¶[0486]. Instead, claim 1 requires only that the "first payout for the first single position" "is higher than the second payout" for the single second position. EX1001, 8:36-39. Further, while the progressive payout may be funded by multiple rounds of roulette, *i.e.*, multiple spins of a roulette wheel, it is paid out following only a single spin of a roulette wheel, for example, when the player's predicted roulette outcome matches the all the plurality of generated roulette outcomes. EX1008, ¶[0045], Fig. 3 ("3 Matches: POT"). Baron does not require multiple spins to pay out the progressive pot. EX1003, ¶[0486].

(j) Element 11

Baron discloses (i) element 11 of claim 1; and (ii) element 8 of claims 9 and 17. EX1003, ¶¶[0487]-[0489], [0529], [0544]; EX1020. Baron discloses generating roulette outcomes by introducing a physical ball into a physical spinning roulette wheel and letting the ball come to rest on a roulette outcome, which is "automatically detected and conveyed to a control circuit." EX1008, ¶[0040].

The processor's determination occurs "for the spin of the roulette wheel." In Baron, determining that the ball has fallen into a pocket on the wheel is a prerequisite to determining that a player has placed a winning bet (*i.e.*, the predicted outcome matches the randomly generated outcome). EX1008, ¶¶[0039], [0042]. The roulette outcomes are generated "in a single round of the wagering game." *Id.*, ¶¶ [0039], [0028]. Thus, determining that the ball has fallen into the "single first position" occurs for a single round of a wagering game, *i.e.*, for each spin of the roulette wheel.

(k) Element 12

Baron discloses (i) element 12 of claim 1; and (ii) element 9 of claims 9 and 17. EX1003, ¶¶[0490]-[0495], [0530], [0545]; EX1020. Baron discloses an "electronic display" which can "include a progressive pay table area 122, which may be, for example, a section of a display electronically showing the potential payouts from the bonus wager." EX1008, ¶[0058], Fig. 3; *see also* ¶¶[0059]-[0060], [0067], [0069].

Baron explains that the first player is to be paid at the first payout "for the spin of the roulette wheel." In Baron, the payout is made if the predicted roulette outcome matches at least one randomly generated roulette outcome, the latter of which is randomly generated in a single round of the game, *i.e.*, for a spin of the roulette wheel. *Id.*, ¶¶[0028], [0039], [0042], [0048].

3. Claims 2, 10, And 18

Baron discloses the limitations of claims 2, 10, and 18. EX1003, ¶¶[0496]-[0499], [0531], [0546]; EX1021. Each player interface 416 in Baron includes a "display screen in the form of a touchscreen" that is adjacent to the roulette wheel, and Baron's system also includes an "upright common display 430" adjacent to the roulette wheel (EX1008, ¶¶[0080], [0083]):

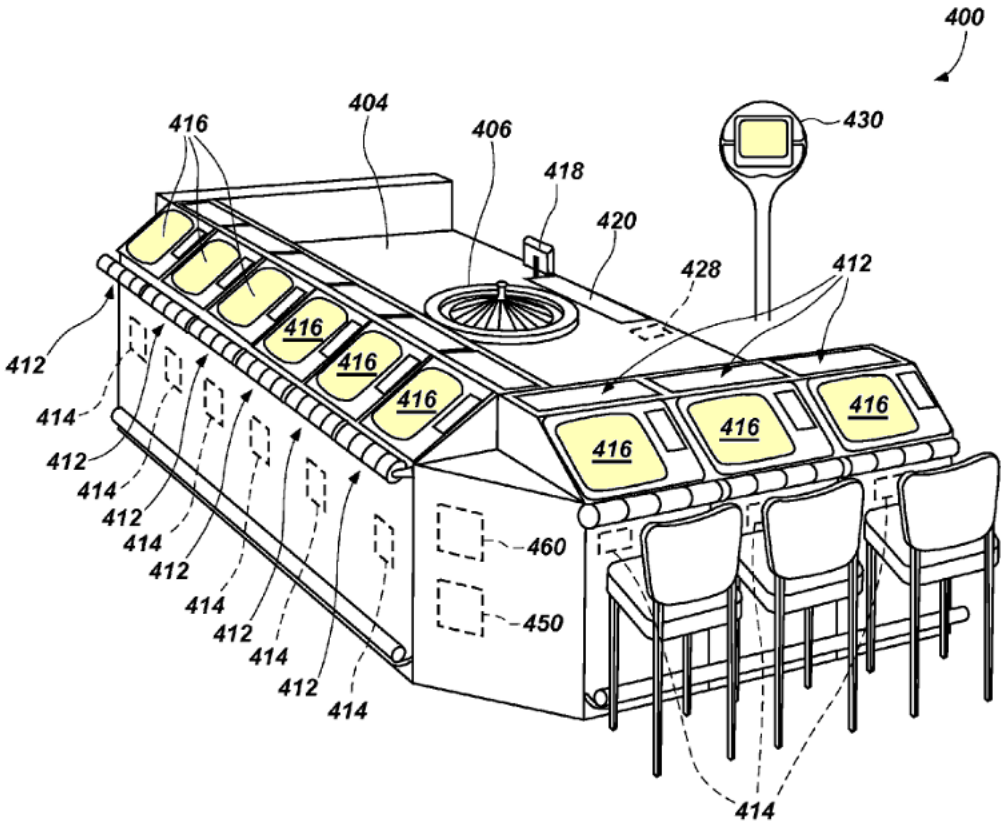


FIG. 6

Id., Fig. 6.

The player interfaces 416 and the common display 430 are configured to display game information, including an indication of the first selected position. *Id.*,

¶¶[0080], [0083], [0088]. Baron states that game information includes "the information described previously in connection with FIGS. 2 and 3 and a wide variety of other information considered useful to the players" (*id.*, ¶[0083]), and the game information shown in Figure 3 includes a position of the first selected position:

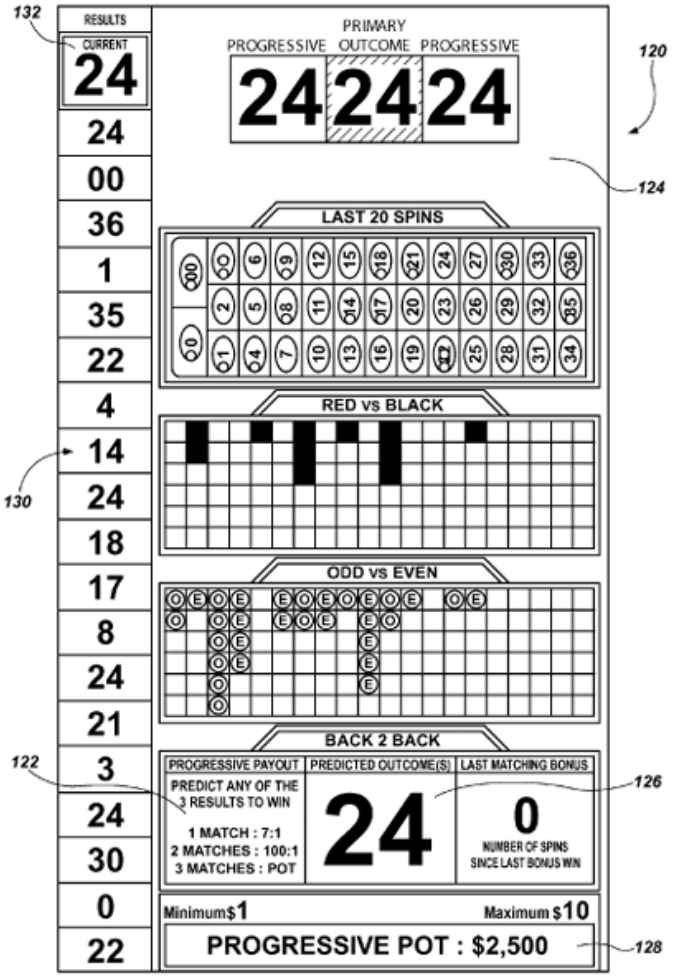


FIG. 3

Id., Fig. 3; ¶[0058] (in "outcome display area 124," the "three, independently randomized roulette outcomes for the current round of play may be displayed").

4. Claims 3, 11, And 19

Claims 3, 11, and 19 are anticipated by and obvious over Baron for the same reasons as respective claims 2, 10, and 18 because the language added in claims 3, 11, and 19 is non-limiting printed matter. *See* Section A.4 above.

Further, Baron renders obvious the limitations added in claims 3, 11, and 19. EX1003, ¶¶[0500]-[0506], [0532], [0547]; EX1021. Baron discloses player interfaces 416 and the common display 430 that can display game information, which includes "a wide variety of other information considered useful to the players." EX1008, ¶¶[0083], [0080]. Further, as explained above for claims 2, 10, and 18, Baron discloses an "outcome display area 124," where the "three, independently randomized roulette outcomes for the current round of play may be displayed." *Id.*, Fig. 3; ¶[0058]. It would have been an obvious, elementary design choice to display a lightning visual effect in conjunction with the displayed randomized outcomes. EX1003, ¶[0502]. The prior art is replete with disclosure of visual effects for identifying randomly selected roulette positions, and it would have been obvious to a POSA to use a lightning visual effect or another visual indicator to make the game more exciting for players. *See*, *e.g.*, EX1016 (Miltenberger), 11:19-45; EX1017 (Hsu), 3:59-61.

5. Claims 5, 13, And 21

Baron discloses the limitations of claims 5, 13, and 21. EX1003, ¶¶[0507]-[0509], [0533], [0548]; EX1021. Baron discloses that a random number generator can generate "one or more of the plurality of roulette outcomes." EX1008, ¶¶[0039]-[0041]. Figure 3 discloses three randomly generated roulette outcomes, two progressive and one primary. *Id.*, Fig. 3. While all three show the same number 24, Baron explains that the roulette outcomes could be any number from zero to thirty-six. *Id.*, ¶[0041].

In Baron, the payout increases nonlinearly as the number of roulette outcomes matching the predicted roulette outcome increases, *i.e.,* for one match the payout is 7:1, but for two matches the payout is 100:1. *Id.*, ¶[0045]. Using Figure 3 as an example, if one of the three randomly generated outcomes was 10 instead of 24, and one player had placed a bet on 10 while another placed a bet on 24, the player who placed a bet on 10 would receive a payout of 7:1, while the player who placed a bet on 24 would receive a payout of 100:1. *Id.*, Fig. 3, ¶[0045].

6. Claims 6, 14, And 22

Baron discloses the limitations of claims 6, 14, and 22. EX1003, ¶¶[0510]-[0512], [0534], [0549]; EX1021. Baron discloses that "actions performed in connection with administering a wagering game … may be accomplished automatically by one or more processors 480, which may occur in response to

croupier input or may occur automatically in response to other game events." EX1008, ¶[0088]; *see also id.*, ¶[0068]. A POSA would have understood that the "actions" to be performed automatically for administering a wagering game using the table 400 of Figure 6 would include causing the ball and roulette wheel to spin. EX1003, ¶[0510]. Further, a POSA would have been motivated to use Baron's one or more hardware processors to achieve these automatic actions because causing the ball and wheel to spin is a fundamental step of playing roulette meaning a POSA would have immediately envisioned having a processor perform this action. EX1003, ¶¶[0510]-[0511].

7. Claims 7, 15, And 23

Baron discloses the limitations of claims 7, 15, and 23. EX1003, ¶¶[0513]-[0520], [0535], [0550]; EX1021.

Baron states that "[w]hen an electronic display is provided … the display may include a touchscreen and may be used for display of, and in some embodiments, interaction with, information regarding the wagering game (e.g., wagers accepted, historical information, current round information, etc., as described previously in connection with FIGS. 2 and 3)" (EX1008, ¶[0079]):

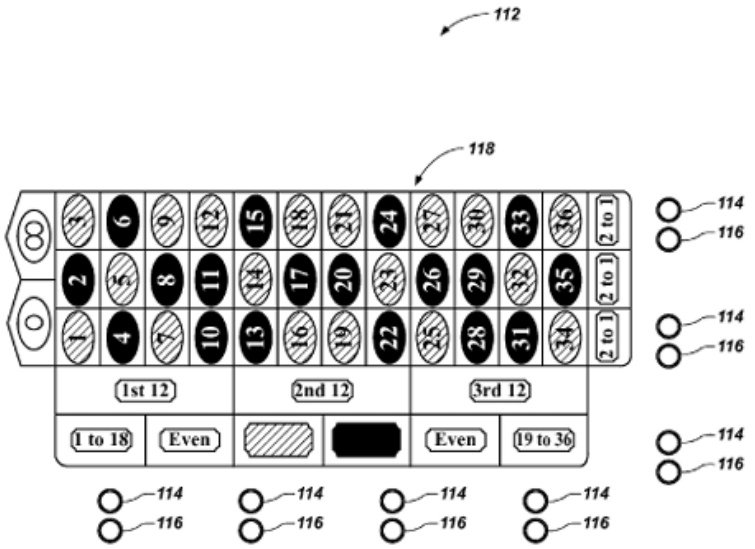


FIG. 2

Id., Fig. 2.

Figure 2 shows a playing surface 112 with wagering area 118 "configured for acceptance of bonus, odds, evens, red, black, split, box, specific number and color, and other roulette bets,…. In some embodiments, the playing surface 112 may include an area for electronically showing the outcome of randomly generated roulette outcomes." *Id.*, ¶[0056].

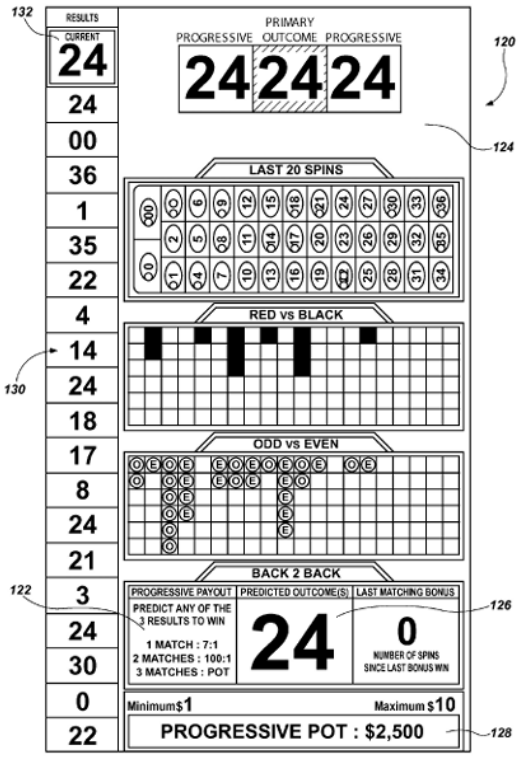


FIG. 3

Id., Fig. 3.

Figure 3 "is a display layout 120 that may be used in connection with" the playing surface 112 of Figure 2 "for implementation of a method of administering a wagering game." *Id.*, ¶[0057].

The wagering area 118 of Figure 2—used in connection with the display layout 120 of Figure 3—is a "roulette board," as claimed. EX1003, ¶[0516]. Baron states that the information of Figure 2 is provided on an "electronic display" but does not explicitly state that it is presented on a player interface 416. EX1008, ¶[0079]. A POSA would have found this obvious, however, because Baron discloses that the player interfaces 416 are "used for accepting wagers and displaying game

information (e.g., game instructions, input options, wager information including virtual chips, game outcomes, etc.)," and the wagering area 118 is "configured for acceptance of … roulette bets." *Id.*, ¶¶[0080], [0056]; EX1003, ¶[0516].

Further, the at least one hardware processor is configured to highlight the first selected position in response to the first selected position being randomly selected. Baron's randomly selected outcomes are displayed on the display layout 120. EX1008, ¶[0058] ("The display layout 120 may further include an outcome display area 124 in which the three, independently randomized roulette outcomes for the current round of play may be displayed."). A POSA would have understood that the display of the randomly selected positions on the display layout 120 serves as a type of highlighting, thereby disclosing this limitation. EX1003, ¶[0517].

D. Ground 4: Claims 8, 16, And 24 Would Have Been Obvious In View Of Baron And Yee

1. Motivations To Combine

It would have been obvious to one of skill in the art at the time of the '014 Patent to modify the roulette gaming system of Baron to include features of Yee. EX1003, ¶¶[0552]-[0554].

Specifically, a POSA would have recognized the benefit to players of incorporating into Baron the display of the payout enhancement feature ("x1000 YOUR BET!" EX1009, Fig. 3, 13:52-56), from Yee. For example, a POSA would have understood that gambling players have significant financial interest in increased

payouts, so the benefit of broadcasting to the players the amount by which their payout may increase (*i.e.,* the disclosure in Yee) would have been readily apparent. EX1003, ¶[0554]. Similarly, Baron recognizes that roulette players "are generally open to, and sometimes seek out, new and more interesting ways to play roulette." EX1008, ¶[0002]. Displaying the potential for an enhanced payout of 500x would add excitement for players, such that a POSA would have been motivated to incorporate the concept from Yee into the game disclosed in Baron. EX1003, ¶[0554].

Moreover, Baron and Yee disclose very similar subject matter (multi-player roulette systems using computer processors to accept bet, display game information, and perform the functions associated with playing the game). *See, e.g.*, EX1008, ¶¶[0001], [0031]-[0032], [0080]-[0081], Figs. 1, 3; EX1009, 7:49-52, 14:42-50, 19:30-46, Figs. 1, 3. Indeed, a comparison of Figures 3 and 6 from Baron with Figures 3 and 5a from Yee shows how closely aligned the subject matter between the two is. EX1003, ¶[0552].

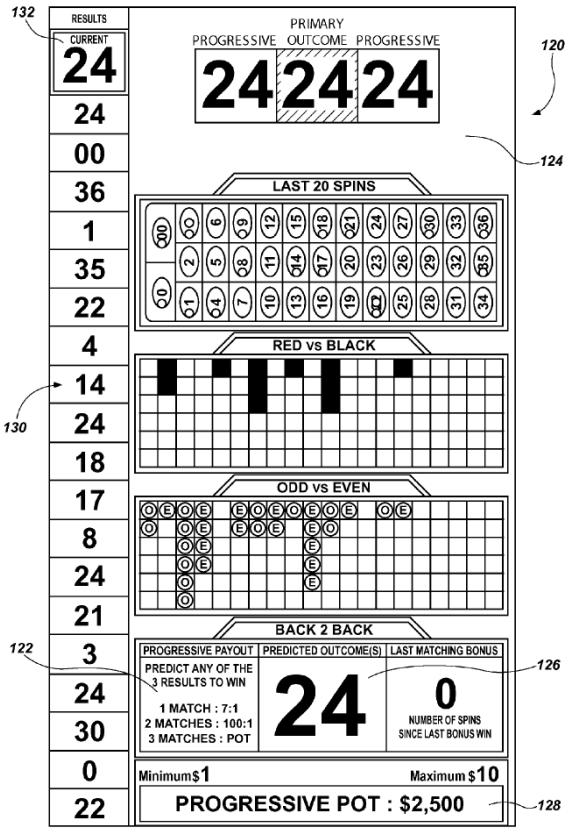


FIG. 3

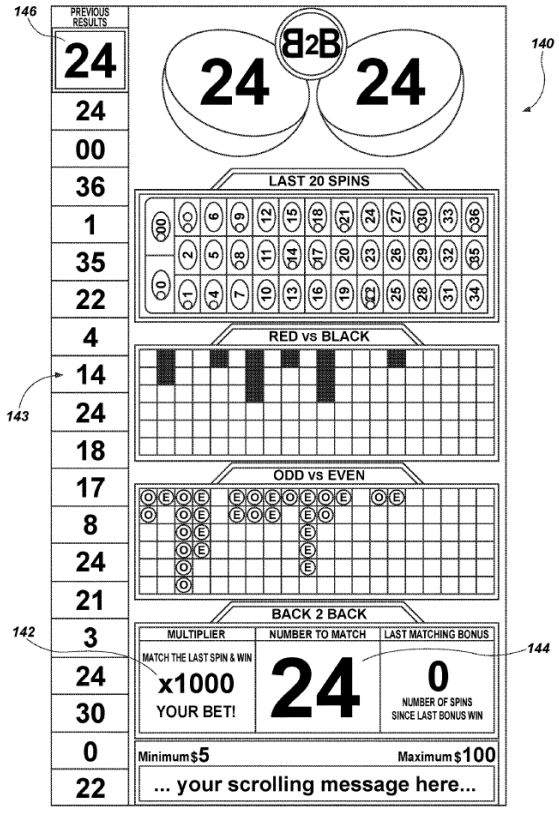


FIG. 3

EX1008, Fig. 3 (Baron on the left); EX1009, Fig. 3 (Yee on the right).

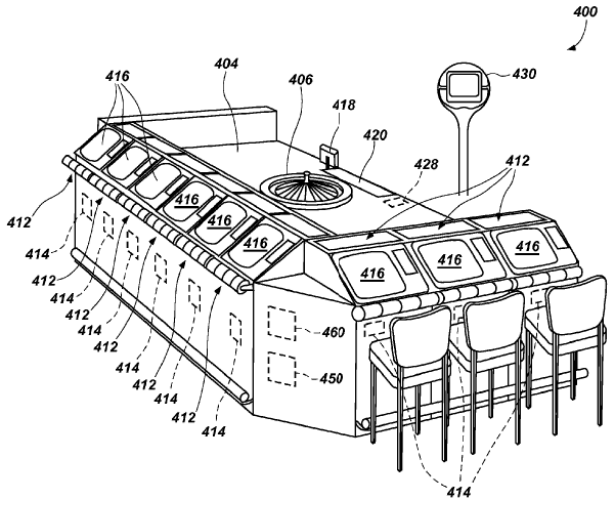


FIG. 6

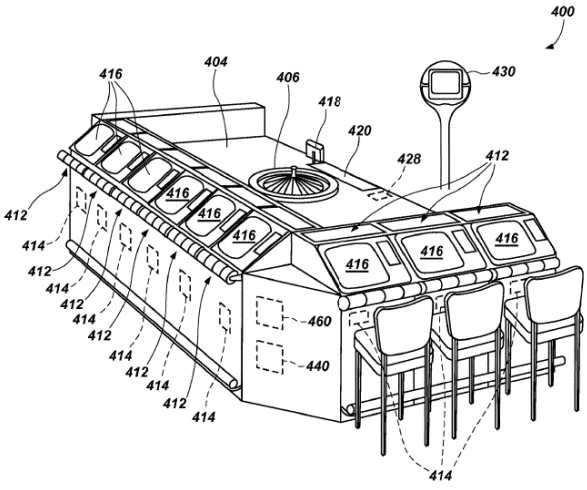


FIG. 5A

EX1008, Fig 6 (Baron on the left); EX1009, Fig. 5a (Yee on the right).

Baron and Yee were filed by the same applicant (Bally Gaming, Inc.), and there is overlap in inventorship between the two references. In addition, a POSA would have been motivated to modify Baron's roulette gaming system to use various features of Yee because the combination amounts to applying a known technique to yield predictable results. EX1003, ¶[0553].

2. Claims 8, 16, And 24

Claims 8, 16, and 24 are anticipated by and obvious over Baron for the same reasons as respective claims 1, 9, and 17, because the language added in claims 8, 16, and 24 is non-limiting printed matter. *See* Section B.3 above.

In any case, the combination of Baron and Yee renders obvious the limitations of claims 8, 16, and 24. EX1003, ¶¶[0555]-[0567]. Both Baron and Yee relate to roulette gaming systems in which a player can receive an enhanced payout based on a randomly selected number. In Baron, the player receives an enhanced payout when the player's bet matches one or more randomly generated roulette outcomes. EX1008, ¶¶[0041], [0045]. In Yee, "an amount of the payout [is] an amount of the wager multiplied by a randomly selected multiplier." EX1009, 1:9-16. Yee further discloses that such multipliers may be "10 times, 25 times, 50 times, 100 times, 250 times, 500 times, and 1,000 times for a payout." *Id.*, 2:15-20; *see also id.*, Fig. 3 (displaying the text "x1000 YOUR BET!").

Given these disclosures, a POSA would have understood that the enhanced payout to be used and displayed is an arbitrary design choice. As such, a game designer would, subject to business decisions, be motivated to use a 500x multiplier. EX1003, ¶¶[0555]-[0567]. As explained by Mr. Friedman, a POSA would have found it obvious to incorporate a 500x multiplier on a GUI to increase player excitement and interest. *Id.* Moreover, Yee expressly discloses that the multiplier can be "500 times" (EX1009, 2:15-20), and Mr. Friedman explains that a 500x multiplier was well-known in the art. EX1003, ¶[0558] Accordingly, a POSA would have found it obvious to add a 500x multiplier to Baron.

Further, it would have been obvious to display the 500x "at the first selected position on a roulette board in the first graphical user interface," as claimed. *Id.*, ¶¶[0562]-[0565]. As explained above for claims 7, 15, and 23, Baron discloses a roulette board, and a POSA would have found it obvious to display "500x" on the roulette board at the first selected position in the combination of Baron and Yee because this would advantageously perform two functions, *i.e.*, showing which position was randomly selected and informing players of the increased payout applicable for that position. *Id.*, ¶[0561].

V. CONCLUSION

Petitioner respectfully requests cancellation of the challenged claims.

VI. MANDATORY NOTICES PURSUANT TO 37 C.F.R. § 42.8(A)(1)

Pursuant to 37 C.F.R. § 42.8(a)(1), the mandatory notices identified in 37 C.F.R. § 42.8(b) are provided below as part of this petition.

A. 37 C.F.R. § 42.8(b)(1): Real Parties-In-Interest

The real parties-in-interest are Light & Wonder, Inc. and LNW Gaming, Inc.

B. 37 C.F.R. § 42.8(b)(2): Related Matters

Pursuant to 37 C.F.R. § 42.8(b)(2), Petitioner is aware of the following patent infringement lawsuit that involves the '014 Patent:

- *Evolution Malta Limited v. Light & Wonder, Inc.*, 2:24-cv-00993-CDS-NJK (D. Nev.)

Petitioner is also concurrently filing Petitions for *Inter Partes* Review of the '024 and '371 patents, which are related to the '014 Patent challenged herein.

C. 37 C.F.R. § 42.8(b)(3), (4): Lead And Back-Up Counsel And Service Information

Petitioner provides the following designation of counsel:

Lead Counsel	Back-up Counsel
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Pursuant to 37 C.F.R. § 42.10(b), a Power of Attorney for Petitioner accompanies this petition. Please address all correspondence to lead and back-up counsel at the addresses above. Petitioner also consents to electronic service by email at the email addresses listed above.

Dated: May 30, 2025

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing petition for *Inter Partes* Review of U.S. Patent No. 11,011,014, including all exhibits, was served on May 30, 2025 via Express Mail delivery directed to the attorney of record for the patent at the following address:

Byrne Poh LLP
Attn: Matthew Byrne
400 Rella Boulevard
Suite 165, #106
Suffern, NY 10901

In addition, a courtesy copy of the foregoing petition for *Inter Partes* Review of U.S. Patent No. 11,011,014, including all Exhibits, was served on litigation counsel for assignee Evolution Malta Limited at the following address:

Sidley Austin LLP
Attn: Ching-Lee Fukuda
787 Seventh Avenue
New York, NY 10019

Date: May 30, 2025

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CERTIFICATE OF WORD COUNT UNDER 37 C.F.R. § 42.24(a)

I, the undersigned, do hereby certify that the attached petition contains 13,963 words, as measured by the Word Count function of Microsoft Word. This is less than the limit of 14,000 words as specified by 37 C.F.R. § 42.24(a)(1)(i).

Date: May 30, 2025

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