

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LIGHT & WONDER, INC.,
Petitioner,

v.

EVOLUTION MALTA LIMITED,
Patent Owner.

IPR2025-01072

**PATENT OWNER EVOLUTION MALTA LIMITED'S
RESPONSE**

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2003	Evolution Interim Report, January to June 2025
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2005	Evolution's Lightning Roulette Voted GOTY At EGR (Oct. 30, 1018) https://lcb.org/news/evolution-s-lightning-roulette-voted-goty-at-egr
2006	Global Gaming Awards, Vegas 2018 Winners https://www.globalgamingawards.com/vegas/2018/
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2009	2022 American Gambling Awards Nominations https://www.gambling.com/us/awards/winners/2022
2010	Lightning Roulette U.S. from Evolution is the American Gambling Awards Gaming Product of the Year (Nov. 18, 2022) https://www.businesswire.com/news/home/20221118005067/en/Lightning-Roulette-U.S.-from-Evolution-is-the-American-Gambling-Awards-Gaming-Product-of-the-Year
2011	Lightning Roulette Product Page https://games.evolution.com/live-casino/live-roulette/lightning-roulette/
2012	Press Release re: FanDuel Extension (Nov. 14, 2024)

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2014	March 29, 2021 License Agreement between Evolution and L&W
2015	Evolution's February 28, 2022 Letter to L&W
2016	L&W's March 17, 2022 Letter to Evolution
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2025	Dkt. No. 157, Order Granting Joint Stipulation to Stay Discovery (Aug. 11, 2025)
2026	L&W's July 22, 2025 Letter to Evolution
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2029	S. Bourie, <i>Understanding Roulette Odds and Payouts</i> , American Casino Guide Book https://www.americancasino guidebook.com/roulette/understanding-roulette-odds-and-payouts.html
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2031	Bets, Odds, and Payouts: A list of all the bets on the roulette table, RouletteStar*

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2032	A guide to understanding roulette odds, Casino.org https://www.casino.org/roulette/odds/
2033	G. Pelayes, <i>Roulette Table Payout: Maximizing Your Potential Wins</i> , Vegas Aces (Aug. 1, 2024) https://www.vegas-aces.com/articles/roulette-table-payout-maximize-wins/
2034	NJ Regulations N.J. Admin. Code § 13:69F-5.2 – Roulette: payout odds
2035	L&W’s Responses and Objections to Evolution’s First Set of Interrogatories (Oct. 25, 2024) (excerpts)
2036	Lightning Roulette Game on Evolution’s Website https://www.evolution.com/games/lightning-roulette/
2037	Evolution Gaming Wins Product Innovation of the Year at G2E, Real Money Action (Oct. 12, 2018)
2038	<i>The 2018 Global Gaming Awards Las Vegas Categories</i> https://stargambling.net/news/global-gaming-awards-2018-vegas.html (last visited Sep. 23, 2025).
2039	<i>Evolution and Scientific Games Strike Land-based Lightning Roulette Deal</i> , PR NEWswire (May 27, 2021), https://www.prnewswire.com/news-releases/evolution-and-scientific-games-strike-land-based-lightning-roulette-deal-301300565.html
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2041 [NEW]	Casey Decl. re: ’014 patent
2042 [NEW]	[RESERVED]
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2044 [NEW]	D. Lubin, <i>The Essentials of Casino Game Design</i> (2016)
2045 [NEW]	Friedman Dep. Tr.

I. Introduction

Patent Owner Evolution Malta Limited (“Evolution” or “Patent Owner”) is the leading provider of live casino games around the world. Live casino games are a form of online gaming where the games are facilitated in real-time by a human dealer, and players place wagers and participate online. One of Evolution’s leading games is Lightning Roulette, which is enormously popular amongst players. The online version of Lightning Roulette was so successful that Evolution created a table version that can be played in person at casinos. Even Petitioner Light and Wonder (“L&W” or “Petitioner”) has praised the game, calling it “truly unique” and stating that, with its “big-win multipliers, Lightning Roulette is sure to be one of the most visually engaging and entertaining live table games ever offered.” EX2008.

U.S. Patent No. 11,011,014 (“the ’014 patent”) is one of a number of patents that protect Evolution’s Lightning Roulette game. The patent is directed to an electronic gaming system that provides an improved, more exciting version of traditional roulette. In traditional roulette, straight up bets (bets on a single number) have a fixed payout: 35:1 (35-to-1). The invention modifies the fixed payout to include per-spin variability, which is a highly engaging and attractive feature to players. After betting is closed, the game selects one or more numbers as lucky numbers and dynamically determines an increased payout for each, such

as 49:1 or 499:1. If the player bet on a number that is selected to have a new payout, excitement builds because the player will recognize the possibility of winning an increased payout that round. Even if the player does not win, the experience from the dynamically determined payouts adds depth to the game and keeps players engaged by adding excitement while watching the ball spin and waiting for it to fall.

Lightning Roulette's immense success proves that the patented game is novel. Prior to its release, the industry widely recognized that roulette was highly "resistant to add-ons" and that modifications to the game "have been little more than attempts to fix what isn't broken." EX2044(Lubin), 157. After Lightning Roulette was released, the industry heaped praise on the game. For example, two organizations named Lightning Roulette the "Product Innovation of the Year" in 2018. That praise is objective evidence showing that the innovations covered by the '014 patent claims were novel and nonobvious in 2018. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1538 (Fed. Cir. 1983) (objective indicia are often the "most probative and cogent evidence of nonobviousness in the record").

L&W's grounds are based on art that is fundamentally different than the '014 patent.

L&W's Grounds 1 and 2 are based on the Kido reference, which is directed to adding a progressive jackpot feature to roulette. A progressive jackpot is

fundamentally different than the invention of the '014 patent. Progressive jackpots grow slowly over time, and do not offer per-spin excitement like the claimed invention. In game design, the purpose of a progressive jackpot is to provide a large pot that can be advertised to players to entice them to play. If a player wins the jackpot, the player wins the entire amount irrespective of how much was wagered. After the jackpot is won, the enticement it offers is significantly diminished. In contrast, the invention of the '014 patent adds a variable reward feature where payouts are dynamically determined each spin, and the amount won is dependent on the amount wagered. This feature keeps players engaged with the game, incentivizes higher wagers, and adds much more excitement to each round of play.

In the context of the '014 patent, which describes improving the traditional roulette game, a “payout” is the amount a player will win in relation to the amount wagered for each round of play. A roulette payout typically “is written in odds format and represents the coefficient to multiply the stake of a won bet” such as 35-to-1 or 35:1. EX2028, 10. Notably, even L&W’s own expert agrees that “*table games almost always specify payouts as N-to-1.*” EX2045(FriedmanTr), 46:16-18. Throughout his declaration and deposition testimony, Mr. Friedman repeatedly confirmed that roulette payouts are specified in odds format such as N-to-1 or N-for-1. *E.g.*, EX1003, ¶¶77, 77 n.5, 97; Tr., 58:21-59:4. Countless sources show

that roulette payouts are ratios such as “35:1” meaning a player wins \$35 for each \$1 wagered. *E.g.*, EX2028, 11; EX2029, 2; EX2030, 1 (“35:1”); EX1014, 007 (“35 to 1”). Consistent with its ordinary meaning, the ’014 patent describes “payouts” as the amount the player will win based on the amount wagered, such as 29:1, 49:1, and 499:1. EX1001, 5:17-32.

Kido’s progressive jackpot does not meet the claimed “payout.” Unlike a roulette payout, Kido’s progressive jackpot is not defined as 35:1 or 49:1 or 500:1; it is simply the total amount a player would receive (*e.g.*, ¥8,850,019) regardless of the wager. EX1007, [0226], Fig.5. If a player wins Kido’s progressive jackpot, the entire jackpot is received no matter how much was wagered. EX1007, [0230]. Thus, the progressive jackpot is not an amount a player will win in relation to the amount wagered. And it does not provide incentive for a player to wager more for each round of play.

Kido also does not disclose determining any payouts while the ball and roulette wheel are spinning. The claims require that the payouts be determined before the ball falls into an outcome position on the wheel. This is so the increased payout can provide excitement to players while the ball is spinning. It would be highly suspicious for a game to determine a payout after the ball has fallen into a position because player would suspect the game is rigged.

L&W has also failed to show that it would have been obvious to modify Kido to meet dependent claims 5, 13, and 21, which require randomly selecting a “second selected position” to have an increased payout. Unlike in Lightning Roulette, which has a per-spin variable pay feature, adding a second selected position does not make sense in Kido’s progressive jackpot system. L&W’s proposed modification would make Kido’s game immensely unprofitable for the game operator (*e.g.*, a casino) such that the operator would likely lose a significant amount of money merely by offering the game. A POSA would not have modified Kido in way that would have made the game unbalanced and too favorable to players because it would make the game worthless as casinos would have no incentive to offer such a game.

For Grounds 3 and 4, L&W relies on Baron, but Baron’s game requires spinning three different roulette wheels and using the outcomes of all three spins to determine the game result. Baron is fundamentally different than the claims, which require multiple game operations to be done for “a spin of the roulette wheel,” which as the Board found, means one spin of one roulette wheel. *Inst. Dec.*, 9. Baron requires multiple spins of roulette wheels, and thus, it neither anticipates nor renders obvious the claims.

L&W has failed to show any claims is unpatentable, and the claims should be confirmed.

II. Factual Background

A. Evolution

Evolution is a global gaming company, and a leading provider of fully-integrated software casino solutions to online gaming operators and land-based casinos. Evolution was founded in 2006 as one of the first providers of B2B live casino solutions in Europe. Live casinos are a form of online gaming where the games are facilitated in real-time by a human dealer and players participate online by watching, placing wagers, and optionally chatting with other players or the dealer. Live casinos have become immensely popular among players because they replicate online the environment of a land-based casino. Due to its industry-leading solutions, Evolution has been named Live Casino Supplier of the Year at the EGR B2B Awards, which reward the best service providers in the online gaming industry, 12 years in a row. EX2004.

B. The Game of Roulette

Roulette is a popular table game played in casinos (and online) by spinning a roulette wheel, “spinning” a ball by rolling it around the outside of the wheel, and wagering on where the ball will fall. Wagers (bets) are made by placing chips on a roulette board. Images of an American roulette wheel and board are below.



	1st 12			2nd 12			3rd 12						
0 00	3	6	9	12	15	18	21	24	27	30	33	36	
1	2	5	8	11	14	17	20	23	26	29	32	35	
1 to 18	EVEN			◆			◆			ODD			19 to 36
										2 to 1			2 to 1

Typically, an American roulette wheel has 38 positions, numbered 0, 00, and 1-36.¹ EX1001, 2:60-3:3. There are 18 odd numbers, 18 even numbers, and 0 and 00 are considered to be neither even nor odd. Each position is given a color: 18 numbers are red, 18 are black, and 0 and 00 are green. *See generally*, EX2028, 9; EX1014, 003-004.

Roulette has different types of bets, and each type has a different payout. Players can make a “straight up” bet on a single number on the wheel by placing a chip on the corresponding number on the board. Players also can bet on groups of numbers such as by placing a chip on the line between two numbers (“split”) or on a corner where found numbers meet (“corner”), and each of those types of bets pays out differently. These bets are made by placing chips on the numbered

¹ European roulette wheels typically have 37 positions, numbered 0 and 1-36.

portion of the roulette board and are called “inside bets.” *See generally*, EX2028, 10-12; EX2031; EX1014, 005-007.

Players can also make “outside” bets, which correspond to the boxes around the outside of the grid of roulette numbers. For example, players can bet on whether the ball will land on a red or a black number. They also can bet on whether the ball will land on an even or odd number. These bets are made by placing chips on the corresponding box.

Only straight up bets correspond to a single position on the roulette wheel.

C. Evolution’s Lightning Roulette Product that Is Covered by the ’024, ’014, and ’371 Patents

A key driver of Evolution’s success is its commitment to innovation and product excellence, allowing it to create new and exciting games that players love. Evolution’s investments have led to a number of novel and successful products, including Lightning Roulette, which launched in 2018. To protect its innovations, Evolution applied for and obtained multiple patents that cover the game, including the ’014 patent.

Lightning Roulette was unlike any other roulette game that came before it. In traditional roulette, players can make straight-up bets by putting chips on a number on a physical game table. If the ball lands in that position on the roulette wheel with that number, the player receives a standard payout of 35:1. In Lightning Roulette, players place bets electronically by selecting the numbers and

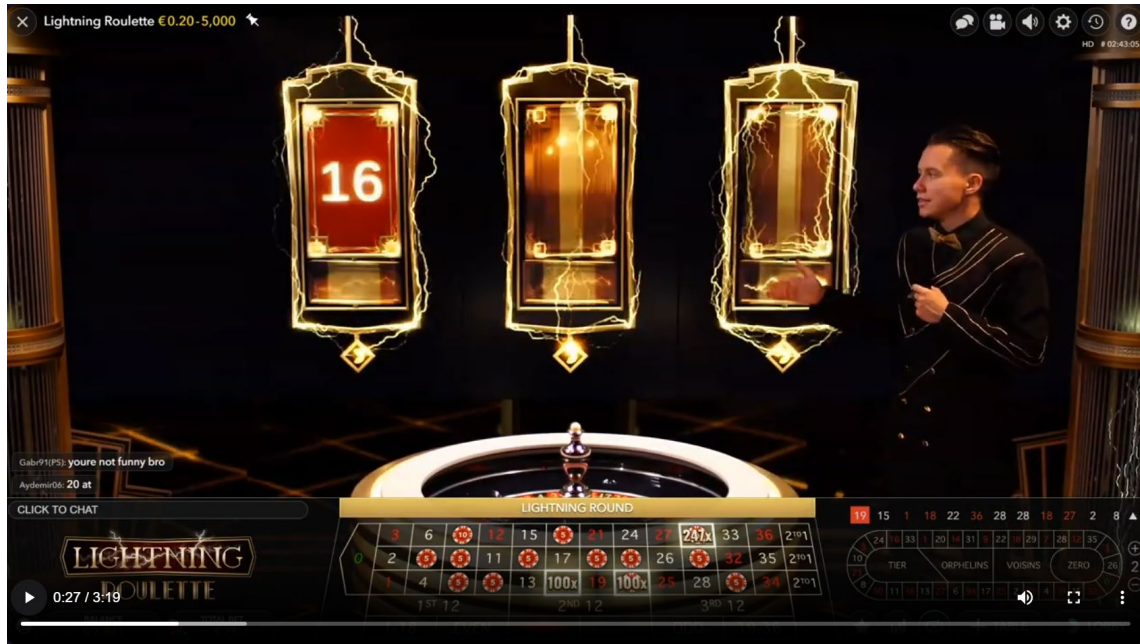
the amount to wager. The players can see a live video feed from a studio, where a host presents the game. An example user interface is shown below.²



After bets are closed each game, there is a “Lightning Round” where the Lightning Roulette software randomly selects one or more numbers as “Lucky Numbers” that are assigned an increased payout called a “Lucky Payout” or multiplier (e.g., between 50x and 500x). EX2011, 2. If the ball lands in one of the selected Lucky Numbers for that round, any player who bet on that number will

² Images taken from <https://games.evolution.com/live-casino/live-roulette/lightning-roulette/> Black and white images of Lightning Roulette also appear in Figures 3 to 5 of the '014 patent.

receive the assigned increased Lucky Payout. An example of the start of the Lightning Round is shown below. *See also* EX1001, Fig. 4.



To create excitement, Lightning Roulette selects the Lucky Numbers and Lucky Payouts after bets are closed but before the ball lands in a pocket on the roulette wheel. The Lucky Payouts can have a variety of increased values such as 49:1 (50x), 99:1 (100x), or 499:1 (500x). As the ball and wheel are still spinning, the player can see the selected Lucky Numbers and Lucky Payouts and whether the player has a bet on any of those numbers. These functions are covered by the '014 patent's claims. For example, the claims specify selecting at least one Lucky Number (“randomly select a first selected position on the roulette wheel for the spin of the roulette wheel prior to the ball falling into a position on the roulette wheel...”) as well selecting a Lucky Payout for each Lucky Number (“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”).

The dynamic selection of the Lucky Numbers and Lucky Payouts increases the game’s level of excitement. For example, the image below shows that the ball is still circling the wheel, that both 22 and 30 were selected as Lucky Numbers, and that 22 has a payout of 100x and 30 has a payout of 500x. As the ball spins and slows down, the player can see that two of the numbers he wagered on (both 22 and 30) were selected to an increased payout and that he could win 100x or 500x. Even if the player does not win, the player can feel excitement because two of his numbers received increased payouts.



The opportunity to win increased payouts for each round of play makes Lightning Roulette highly attractive to players. For example, a win on a \$5 bet with a typical roulette payout of 35:1 is \$180. But if a player wins a \$5 bet with a 500x multiplier, the player will get a \$2,500 payout. This is shown in the image below. *See also* EX1001, Fig. 5.



Due to its unique features and gameplay, Lightning Roulette has been hugely successful and is enjoyed by millions of players around the world. The game's novelty and success has been widely recognized in the gaming industry. After it was released in 2018, Lightning Roulette was awarded "Game of the Year" and "Product Innovation of the Year." EX2005; EX2006; EX2007; EX2009; EX2010.

III. Person of Ordinary Skill in the Art

A person of ordinary skill in the art (POSA) would have had a bachelor's degree in engineering, computer science, or math, and at least two years of experience in designing games (*e.g.*, table games, electronic games, slot machines). EX2041(Casey), ¶76. Substantial work experience could substitute for formal training.

Evolution's response is supported by the Declaration of Michael Casey, Ph.D., a game designer and mathematician with decades of experience in the gaming industry. EX2041(Casey), ¶¶2-11.

IV. Claim Construction

To construe the claims in a patent, the words are given their plain and ordinary meaning as they would have been understood by a POSA at the time of the alleged invention after reading the entire patent. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005); 37 C.F.R. § 42.100. A term needs to be construed only to the extent necessary to resolve the dispute. *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999).

Below, Evolution addresses three different claim construction issues: it proposes a construction for the term "payout," explains why it agrees with the Board's construction of "for a spin of the roulette wheel," and proposes construing the claim to require certain elements to be performed in sequence.

A. Payout

Every challenged claim specifies a “first payout for the first single position” and a “second payout for the single second position.” The term “payout,” in the context of the '014 patent, means the amount a player will win in relation to the amount wagered. The claims also specify that each payout is for a “single position,” which means the payout is for a bet made on a single number.

In the Institution Decision, the Board rejected Evolution’s proposed construction “on the current record.” Below, Evolution provides additional evidence supporting its position.

The '014 patent uses the term “payout” consistent with its ordinary meaning in roulette. It describes exemplary payouts in terms of the amount the player will win based on the amount wagered, such as 29:1 or between 49:1 and 499:1.

For example, in some embodiments, increased *payouts* for the selected numbers can range from *49:1 to 499:1*... For example, in some embodiments, the *payout* for the numbers not selected can be set to *29:1*.

EX1001, 5:15-30. The patent explains that a notation of “500x” can be used “to indicate an increased *payout* of *499:1* (499:1 plus the original bet return is 500×).”

EX1001, 6:10-12.

In roulette, the term “payout” refers to the amount a player will win in relation to the amount wagered and is typically written in odds format such as 35:1.

EX2028, 10 (“The payout is written in odds format and represents the coefficient to multiply the stake of a won bet.”). EX2029, 2 (“Roulette payouts are generally stated as ‘x-to-1’, which means that for every dollar you bet, you will win x dollars, plus you will get back your original bet.”); EX2041(Casey), ¶¶81-85.

L&W’s own expert and the evidence submitted with the petition confirms this conventional meaning of “payout” in roulette. L&W’s expert states that “in roulette, a straight up bet pays **35:1** regardless of the number.” EX1003, ¶97. He explained that explained that in roulette “Wagers that include the winning number are paid at **36-for-N** where N is the number of positions covered by the bet.” EX1003, ¶77 (emphasis added).³ At his deposition he confirmed that in his experience “table games almost always specify payouts as N-to-1.” EX2045, 46:16-18; see EX1003, ¶77 n.5. The only exception Mr. Friedman could identify was that certain outside bets can be said to pay “even” money. EX2045, 57:16-58:7.⁴ But Mr. Friedman admitted that pays “even” is another way to say 1-to-1.

³ “X-for-1” means the house gives the player \$X and keeps the \$1 bet (e.g., 36-for-1 means the house pays \$36 and keeps the \$1). 35-to-1 means the same thing as 36-for-1. EX2041(Casey), ¶36.

⁴ Attempting to avoid admitting how roulette payouts are known to work, Mr. Friedman also stated that he “can’t rule out the idea that anyone else has published

EX2045, 52:17-19. Mr. Friedman ultimately agreed that using the traditional rules of roulette, all payouts can be specified as N-to-1. EX2045, 58:21-59:4.

As Mr. Friedman admits, these “rules and payouts for roulette were well-known by 2018 and had been published for decades.” EX1003, ¶77. Mr. Friedman cited to two documents showing those traditional rules and payouts, and all roulette payouts in both documents are specified as N-to-1 or N-for-1. EX2045, 51:17-52:5, 53:9-18. For example, one document includes the following table with payout listed under “Odds”:

a rules for how to play roulette type brochure where the payouts weren’t specified as -- in some other way.” EX2045, 57:16-58:7. He did not, however, identify any such rules.

Roulette Betting Chart		
Outside Bets		
Example	Odds	Position on Layout
A. Even or odd	1 to 1	Any odd or even number
B. 1-18 or 19-36	1 to 1	Any number 1-18 or 19-36
C. Red or black	1 to 1	any red or black number
D. Any dozen	2 to 1	1-12 or same for second or third dozen
E. Column bet	2 to 1	Any number on that vertical column
Inside Bets		
(Individual numbers and Combinations)		
Example	Odds	Position on Layout
F. Straight up	35 to 1	Any one number
G. Two numbers	17 to 1	Wins on 11 or 12
H. Three numbers	11 to 1	Wins on 28, 29 & 30
I. Four numbers	8 to 1	Wins on 17, 18, 20 & 21
J. Five numbers	6 to 1	Wins on 0, 00, 1, 2, 3
K. Six numbers	5 to 1	Wins on 4, 5, 6, 7, 8, 9
L. Two numbers	17 to 1	Wins on 0 and 00

EX1033.

The Wizard of Odds website, which collects industry information and is generally considered to be accurate, (EX2045, 54:20-55:20), states that “*all casinos in the U.S.*” use the same payouts specified “on a ‘*to one*’ basis.” It states:

The following table displays the available bets, the win (*on a ‘to one’ basis*), and the probability of winning under U.S. rules. *All casinos in the U.S. follow these rules* except for in Atlantic City.^{5]}

Double-Zero Roulette

BET	PAYS	PROBABILITY WIN	HOUSE EDGE
Red	1	47.37%	5.26%
Black	1	47.37%	5.26%
Odd	1	47.37%	5.26%
Even	1	47.37%	5.26%
1 to 18	1	47.37%	5.26%
19 to 36	1	47.37%	5.26%
1 to 12	2	31.58%	5.26%
13 to 24	2	31.58%	5.26%
25 to 36	2	31.58%	5.26%
Six line (6 numbers)	5	15.79%	5.26%
First five (5 numbers)	6	13.16%	7.89%
Corner (4 numbers)	8	10.53%	5.26%
Street (3 numbers)	11	7.89%	5.26%
Split (2 numbers)	17	5.26%	5.26%
Any one number	35	2.63%	5.26%

EX1046, 002 (emphases added). These standard payouts show that for a straight up bet on a single position, the payout is 35-to-1.⁶

⁵ Atlantic City follows the rules, but has the additional rule that “[i]f the ball lands in 0 or 00, then the player will lose only half of any even money bet.” EX1046, 003.

⁶ Outside bets, such as red/black or even/odd, are bets corresponding to multiple positions on the roulette wheel (e.g., all 18 red numbers or all 18 odd numbers).

Countless additional sources define roulette payouts the same way (odds format) to have the same values. EX2028, 11; EX2029, 3; EX2030, 1; EX2031, 1; EX2032, 2; EX2033, 3; EX1014, 007; EX1032, 12; EX1033, 1; *see* EX2041(Casey), ¶85.

L&W has incorrectly asserted that amounts stated in odds format (*e.g.*, 35:1) are called “payout rates” not “payouts.” Prelim. Reply, 4. L&W is wrong. In roulette, terms like payout, payout rate, odds, and payout odds all refer to the same thing: a payout defined in odds format. EX2041(Casey), ¶85. Even if L&W were correct that amounts stated in odds format are called “payout rates,” the ’014 specification repeatedly and exclusively uses the word “payout” to refer to what L&W calls “payout rates” such as 49:1. The specification states “increased *payouts*... can range from **49:1 to 499:1**”; “a **49:1 payout**”; “a **499:1 payout**”; “the *payout*... can be set to **29:1**.” EX1001, 5:16-32; *see id.*, 6:8-12 (“an increased *payout of 499:1*”). Thus, where the ’014 specification states “Any suitable payouts can be used in some embodiments,” EX1001, 5:16-32, it means any suitable *payout rates* can be used. That is clear from the sentences that follow, which describe payouts from 29:1 all the way up to 499:1. EX1001, 5:16-32.

Similarly, bets like corners and splits, are bets on multiple position on the roulette wheel.

Nowhere does the '014 patent suggest that a payout can be a jackpot or defined as an absolute amount that is won regardless of the wager. EX2041(Casey), ¶87.

In the Institution Decision, the Board found it persuasive that the Kido and Baron references state that a “payout” can be a progressive jackpot. Inst. Dec., 9. However, the Board overlooked that Kido and Baron both describe “payout” in the context of a progressive jackpot feature. In that context, the term payout can be used as a verb meaning paying the entire jackpot. EX2041(Casey), ¶95. However, the traditional game of roulette does not include a progressive jackpot, as even Mr. Friedman admitted. EX2045, 40:4-6 (“Q A traditional game of roulette does not include a progressive jackpot, correct? A Also fair.”). Kido’s and Baron’s use of the term “payout” merely shows that its meaning can be different in the context of a progressive jackpot system. Those references do not show that “payout” in roulette is something other than an amount won in relation to the amount wagered.

Even Kido recognizes traditional roulette payouts. Kido describes its progressive jackpot award as separate from and different than its roulette payout. It describes the roulette payout as the award for winning by betting on the number the ball fell into. EX1007, [0231], Fig. 12 (A12). When Kido discusses the roulette payouts, it defines them in odds format. EX1007, Fig. 8 (showing odds ranging from 1:1 to 71:1), [0036], [0172]. The progressive jackpot is awarded as a “privilege” if the player won on a special game value award mark (star mark).

EX1007, [0082], [0108], Fig. 12 (A11). The award of the roulette payout and of the progressive jackpot (the “game value accumulated in every roulette game”) are completely separate steps of the Prog Routine. EX1007, [0033]-[0037]; *see* EX1003, ¶366.

L&W has cited to no evidence showing that payouts in roulette were commonly understood to include jackpots. Every document L&W cited in its Preliminary Reply (most which are not exhibits or in the record) showing a different use of the word “payout” describes progressive jackpots, not roulette. Prelim. Reply, 3.

The ’014 patent does not disclose a progressive jackpot or suggest including one. A POSA reading the ’014 patent would understand that the term “payout” is used consistent with its ordinary usage in the traditional game of roulette. EX2041(Casey), ¶¶81, 95. As Dr. Casey explains, progressive jackpots are fundamentally different than the payouts claimed in the ’014 patent. EX2041(Casey), ¶¶88-95.

B. “A Spin of the Roulette Wheel”

The Board found that the term “a spin of the roulette wheel” means one spin of one roulette wheel. Inst. Dec., 9. Evolution agrees with the Board’s construction, for the reasons that follow.

The term “a spin of the roulette wheel” appears in many elements of the independent claims. The claim specifies that a number of operations be performed “for *the* spin of the roulette wheel,” meaning the same spin of the same wheel. The claim language is consistent with the specification, which discloses a game that has one roulette wheel and where all of the claimed operations relate to the same spin of that wheel. *See, e.g.*, EX1001, Figs. 2-5; *see* EX2041(Casey), ¶¶97-99.

Evolution added the “spin of the roulette wheel” limitations during prosecution of the parent '024 patent to distinguish the Yee reference. The Examiner rejected pending claims based on Yee, relying on two different spins of Yee’s roulette wheel to disclose the claim elements. In Yee, a player could win a higher amount if the ball landed on the same number in two back-to-back spins of the roulette wheel. EX1009, 10:15-18, 10:48-51. Yee states that “[t]he wager may be resolved by determining whether the randomly generated number is identical to a randomly generated number from an immediately preceding round.” EX1009, 10:15-18.

The Examiner found that a first spin of Yee’s roulette wheel disclosed randomly selecting a first selected position of the roulette wheel, and then a second spin of the roulette wheel disclosed that the ball had fallen into the first position. EX1006, 061, 079-080. In response, Evolution traversed the Examiner’s reliance

on two spins of the roulette wheel by amending the claims to specify that the claimed operations occurred “for the spin of the roulette wheel” and that the selection of a first position occurred “prior to the ball falling into a position on the roulette wheel.” EX1006, 072-073, 079-080. The Examiner agreed with this distinction and allowed the claims. EX1006, 093. Thus, Evolution expressly distinguished systems and processes that use multiple spins of a roulette wheel, and limited the claims to systems and processes that use *a single spin* of the roulette wheel to determine a first payout for a first position that is higher than a second payout for a second position.

C. Sequence of Elements

The independent claims all specify a hardware processor configured to perform a series of steps. Several of these steps must occur in the sequence in which they are listed both because “the claim language, as a matter of logic or grammar, requires that the steps be performed in the order written” and because “the specification directly or implicitly requires an order of steps.” *Mformation Techs. v. Research in Motion Ltd.*, 764 F. 3d 1392, 1398-99 (Fed. Cir. 2014) (quotation omitted).

The following claim elements must occur in the order listed:⁷

- [i] determine that the roulette wheel and the ball have been spun for the spin of the roulette wheel;
- [ii] 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;
- [iii] 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; and
- [iv] determine that the ball has fallen in the single first position for the spin of the roulette wheel;
- [v] indicate that the first player is to be paid at the first payout for the spin of the roulette wheel.

As a matter of logic, these claim limitations must occur in sequence.

- Step [i] the wheel is spun “for the spin of the roulette wheel.”
- Step [ii] specifies randomly selecting a first selected position “prior to the ball falling into an outcome position.” For the ball to be able to fall into a position, the ball must have been spun first.
- In Step [iii], a first and second payout are determined. Because the first payout is for the “first selected position,” this determination must

⁷ The language of claim 1 is used, but the analysis applies equally to claims 9 and 17.

occur after selecting that position in step [ii]. Logically, the determination of the first and second payouts must also occur before the ball falls into the “single first position” in step [iv], because it would be highly suspicious for a game to determine a second payout after the ball has fallen into a position. EX2041(Casey), ¶103.

- Step [iv] the ball falls into the single first position.
- Step [v] indicate that the player is to be paid at the first payout. This must happen after determining the payout and after the ball falls into a position.

This sequence of steps also is required by the specification. During prosecution of the parent '024 patent, Applicant added the for the spin of the roulette wheel elements to traverse the rejection over Yee. With respect to the “randomly select” element and the amended language overall, Applicant told the Office that “Generally speaking the ‘position’ being selected in this portion of claim 1 corresponds to the selection made in box 210 of FIG. 2 of the present application.” EX1006, 080.

Fig. 2 of the patent is shown below. Just as Step [ii] generally corresponds to box 210, Step [iii] generally corresponds to box 212 and Steps [iv] and [v] correspond to box 214.

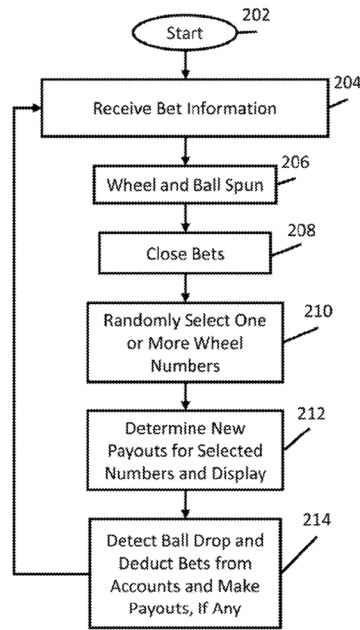


FIG. 2

Steps 210, 212, and 214 must occur in the sequence listed in Figure 2.

EX2041(Casey), ¶¶105-06. Step 210 must occur before Step 212 because Step 210 “randomly select[s] one or more wheel numbers” and Step 212 “determin[es] new payouts for [those] select numbers.” Step 212 must occur before Step 214 for several reasons. One reason for this is that Step 212 determines and “display[s]” the new payouts. A POSA would have understood that the determination and display of new payouts for selected numbers builds excitement for players who are waiting for the ball to drop. EX2041(Casey), ¶105. Another reason Step 212 must occur first is that payouts must be determined in Step 212 before payouts are made in Step 214. Thus, steps [i] to [v] must occur in the sequence they are listed.

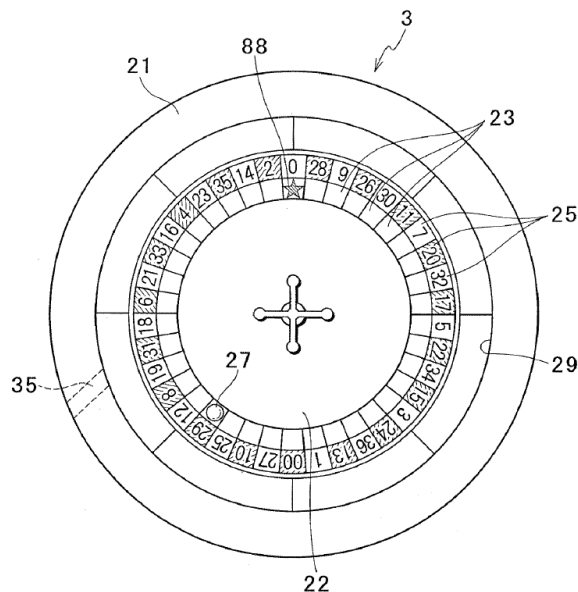
V. Argument

A. L&W Has Failed to Show that Kido Anticipates or Renders Obvious Any Claim (Ground 1)

1. Summary of Kido

Kido discloses a gaming machine for playing roulette. EX1007, [0080]. A roulette wheel is in the center of the machine, and 12 player stations surround it. EX1007, [0114]. The game is machine-operated, thus there is no croupier. *Id.*, [0114].

The roulette game includes several game modes that can award players what Kido calls a “privilege.” EX1007, [0015]-[0016], [0082]-[0083], [0195], [0209], [0220], [0235]. In these game modes, the game labels one number on the roulette wheel with a “special game value award mark,” such as by putting a “star mark” next to the number. EX1007, [0082]. An example of the star mark is shown in Figure 4 (mark 88).



In Kido's main embodiment, the star mark is set in advance, before a game starts. EX1007, [0195], [0209], [0221], [0235]. Kido has an alternative where the star mark is set during play. If the ball falls into the pocket that was given the star mark and the player wagered on that number, the player is awarded a privilege. EX1007, [0082]-[0083].

Kido has four different privilege routines: Special Rate Award, Second Special Rate Award, Prog Bonus, and Free Spot. EX1007, [0185]. For three of the routines (Special Rate Award, Second Special Rate Award, and Free Spot), the awarded privilege applies to the next spin of the roulette wheel and does not confer the player with any benefit for the current spin of the roulette wheel. EX1007, [0203]-[0204], [0217], [0243]. Only the Prog Bonus routine provides a privilege in a single game. When the Prog Routine is used, the game withholds 0.5% of all credits that are bet and puts them in a progressive jackpot that players can win. *Id.*, [0129], Fig. 3. For all of the privilege routines, Kido discloses that the roulette payout for every position on the roulette wheel is the same on any single spin of the wheel (*e.g.*, winning on any of 0, 00, and 1-36 pays the same). *E.g.*, EX1007, Fig. 8, [0083]; *see* EX2041(Casey), ¶112.

2. Kido Does Not “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 does not disclose at least three aspects of this claim element,⁸ which appears in every challenged claim.

a) Kido Does Not “Determine a First Payout for the First Single Position” that Meets the Claims

Kido does not disclose “a first payout for the first single position” that is “higher than the second payout” for a single second position. L&W incorrectly asserts that the progressive jackpot and the standard roulette award made by Kido’s Prog Routine meet the “first payout” element. Pet., 32-35. Neither does.

First, Kido’s basic roulette payout is the same for every position on the roulette wheel, and thus, Kido does not disclose a “first payout for a first single position” that “is higher than a second payout for the single second position.” EX2041(Casey), ¶122. Kido explains that if a player places a bet on a “mark” (e.g., a number) on the roulette wheel, and the ball lands on that mark, the player receives the *standard roulette payout* that is “*based on the game value placed as a bet and a rate corresponding to the mark bet on.*” EX1007, [0083]; *see id.*, [0036], [0172]. By “rate” Kido means the “Base Odds” listed in Figure 8, which

⁸ In the ’014 patent, these correspond to L&W’s element 10 of claim 1, and element 7 of claims 9 and 17.

provide that straight up bets payout at “35:1” and which are always used in the Prog Routine.⁹ EX1007, Fig. 8, [0232]; EX2041(Casey), ¶122. Even L&W’s expert Dr. Friedman explains “the payout for the winner ‘is calculated using the base odds’ according to Fig. 8 (e.g., 35:1 for a straight up bet.)” EX1003, ¶365. No matter what position of the wheel a player bets on, the payout for winning a straight up bet is 35:1. EX1007, Fig. 8; EX2041(Casey), ¶122. Thus, Kido’s standard roulette payout cannot be a “first payout” that “is higher than the second payout.”

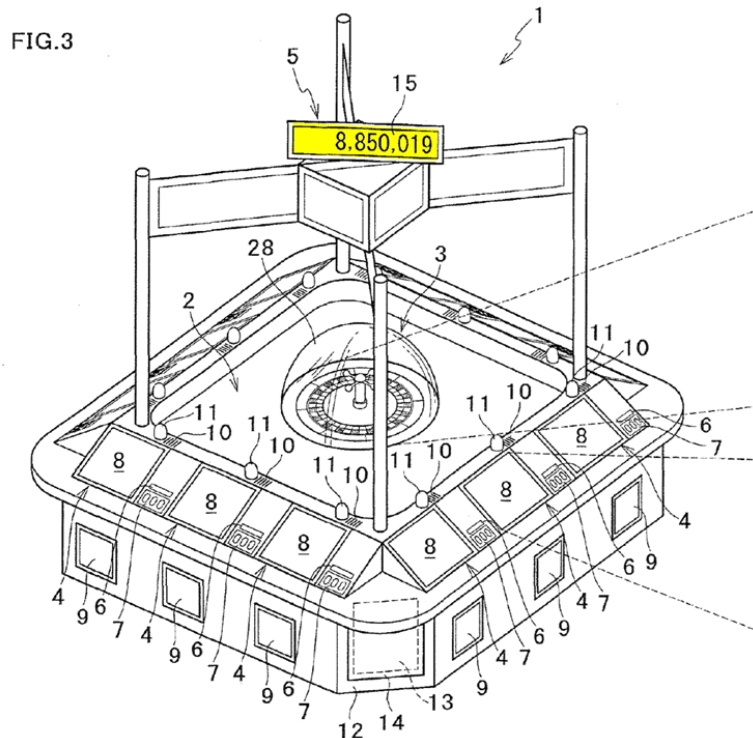
Second, Kido’s progressive jackpot is not a “payout.” As explained in § IV.A above, in roulette, a “payout” refers to the amount a player will win in relation to the amount wagered on, such as 35:1. Kido’s progressive jackpot is different: it is simply the total amount that can be won regardless of the wager. EX2041(Casey), ¶121. The jackpot does not vary based on how much the player wagered that round. Whether the player wagered \$1, \$10, or \$100, the jackpot is

⁹ The “Odds of a Star Bonus” apply only during the Special Rate Routines. As explained below, not only do those routines require multiple spins of the roulette wheel, but also, during any given spin, all positions have the same payout. See § V.A.2.b., below.

the same. It is different than the variable payout feature in the claimed invention.

Id.

Kido shows that its device includes a sign that displays the progressive jackpot (highlighted below) to potential players.



Unlike roulette payouts, the progressive jackpot is not defined as 35:1 or 100:1 or 500:1; it is simply the total amount of the jackpot. EX1007, [0226]. A player that wins Kido's progressive jackpot receives the entire jackpot no matter how much was bet. EX1007, [0230]. The ability to win a high dollar amount, even though it is unlikely to happen, is what makes progressive jackpots attractive to players. EX2045, 30:15-31:14; EX2041(Casey), ¶¶125-26. The draw of progressives is similar to the lottery in that respect. EX2045, 30:15-31:14. And once a jackpot is

won, the next rounds of play are far less attractive to players because the jackpot amount is significantly depleted. EX2041(Casey), ¶125.

A progressive jackpot does not provide the same kind of excitement that the '014 patent's per-spin higher payouts do. EX2041(Casey), ¶¶124-27. Kido's progressive jackpot grows slowly each time a bet is made and its value is fixed for that round. EX2041(Casey), ¶125. Kido's device puts 0.5% of the amount wagered into the jackpot, and the jackpot is simply the total accumulated over the prior games. EX1007, [0226]. The progressive jackpot's total amount incentivizes players to play the game, and once someone wins, the incentive to play the next rounds of the game is significantly diminished. EX2041(Casey), ¶125. Kido's progressive jackpot is fundamentally different than the payouts claimed in the '014 patent. EX2041(Casey), ¶127. The claimed invention generates excitement by determining the value of the payout for each spin of the roulette wheel and setting it to a value that is higher than another payout. *Id.* It provides a variable reward with each spin which re-engages and rewards the player each time the wheel is spun. EX2041(Casey), ¶127.

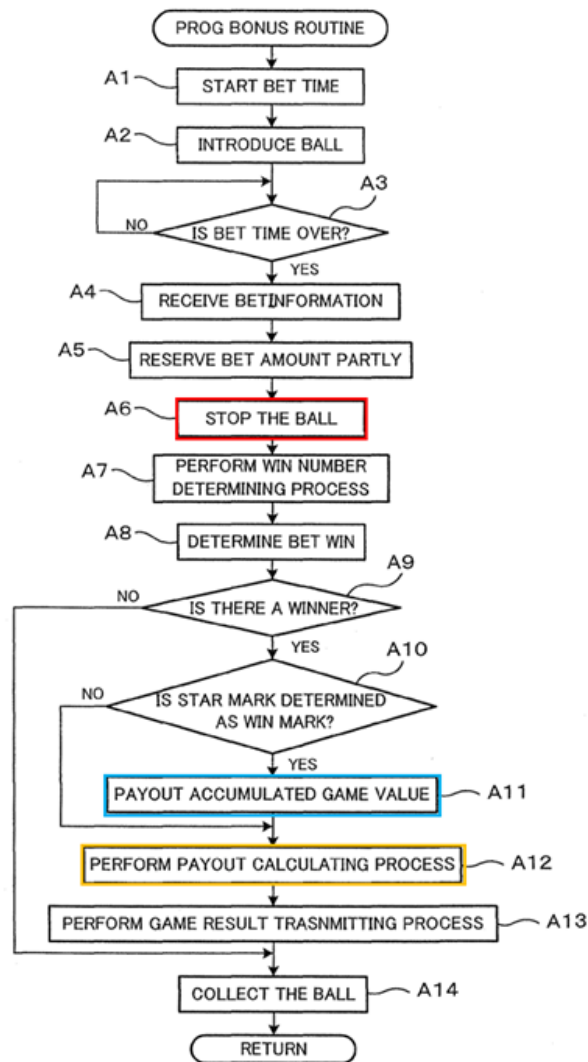
Kido's progressive jackpot is different from a roulette payout, and it is not a "payout" within the meaning of the claims.

b) Kido Does Not “Determine... a Second Payout for the Single Second Position For the Spin of the Roulette Wheel”

Kido does not disclose that its Prog Routine “determine[s]... a second payout” for a “single second position.” L&W points to A11 and A12 in Figure 12 as allegedly determining the first and second payouts. Pet., 33-35. But the Prog Bonus routine does not perform steps A11 and A12 until *after* the ball has fallen into a position on the roulette wheel. Thus, in steps A11 and A12, Kido determines the award for *only one position* on the roulette wheel: the position the ball fell into. Kido does not disclose determining a payout for any non-winning positions. EX2041(Casey), ¶123.

In all four of Kido’s privilege routines, it spins one ball that then falls into *one position* on the wheel, and thus, there is just *one winning number* in any game. EX2041(Casey), ¶123. Figure 12 (below) shows the roulette wheel and ball are spun (A2), the ball falls into a position (A6), and then the winning number is determined (A7 to A9). If there is a winner, the routine proceeds to step A10 and determines if the winning number had the star mark. If so, in step A11 the progressive jackpot is awarded. Then in step A12, the normal roulette payout is made to players. Thus, the only time Kido determines the award amount for a position on the wheel is in steps A11 and A12 where it determines the award *only* for the winning number. EX2041(Casey), ¶¶114-20, 123.

FIG. 12



There would be no reason to configure Kido to determine the award amounts for any non-winning numbers in steps A11 and A12 because those values are always the same. EX2041(Casey), ¶123. Kido's roulette payout for winning a straight up bet is always 35:1 during the Prog Bonus routine; it does not vary. EX2041(Casey), ¶122. Steps A11 and A12 happen only after a winning number has been selected and there is no excitement to be provided by determining payouts for non-winning numbers. EX2041(Casey), ¶123. In contrast, the '014 patent's

payouts for selected numbers are dynamically determined each spin, which provides players with excitement while they wait for the ball to fall into an outcome position. EX2041(Casey), ¶124.

In the Institution Decision, the Board found that Kido's "bet win determining unit 111 determines payouts based on the payout rate relative to the bet type for all positions bet." Inst. Dec., 15 (citing EX1007, [0114]). But in [0114], Kido discloses calculating the payout for *only* the winning number. Kido explains that bet win determining unit 111 first compares the winning number (determined by unit 1110) with the bet, and if they match (*i.e.*, meaning the player bet on the winning number), only then is the payout calculated:

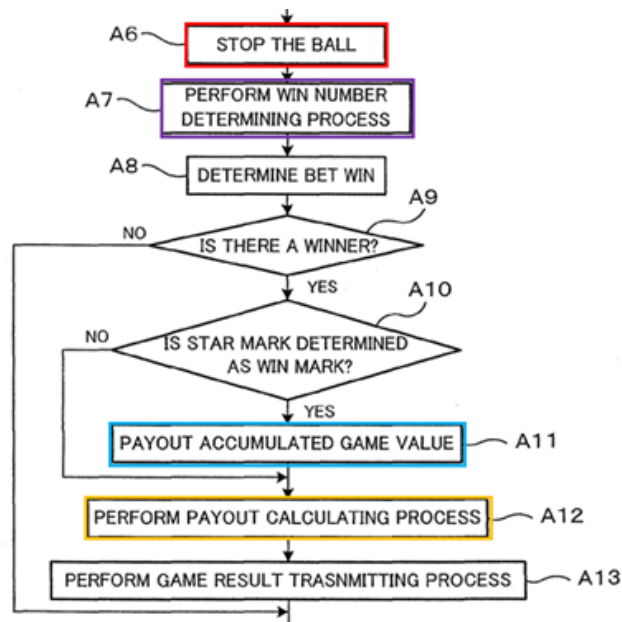
[T]he bet win determining unit 111 determines whether the number determined in *the win number* determining unit 1110 *matches with the bet* area stored in the memory 107. *When it is yes*, the payout calculating unit 114 *calculates a payout* corresponding to the bet area bet, based on the payout rate relative to the bet type."

EX1007, [0114] (emphases added). Nothing in this passage suggests that the payout calculating unit determines a payout for a non-winning number. Kido discloses that "when it is yes"—meaning unit 111 has determined the player bet on the winning number—then a payout is calculated. Thus, it calculates a payout for one position only. No payout calculation is performed when unit 111 determines the player did not bet on the winning number.

c) Kido Does Not “Determine a First Payout... and a Second Payout” Before the Ball Lands in a Position

As explained in § IV.C, above, the claims require the step of “determin[ing] a first payout... and a second payout” before the ball falls into the outcome position.

In Kido’s Prog Bonus routine, the steps **A11** and **A12** occur after the ball falls into the outcome position (**A6**) and the winning number determined (**A7**).



Therefore, Kido does not meet the claims. EX2041(Casey), ¶123.

3. Kido Does Not Teach Claims 5, 13, and 21

Claims 5, 13, and 21 further limit claims 1, 9, and 17, respectively. They each specify that the hardware processor further perform the steps of:

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.

L&W admits that Kido does not disclose these two elements, and instead argues it would have been obvious to modify Kido to include them based on a POSA's knowledge alone. Pet., 43. As explained below, L&W's arguments fail.

a) Game Design Principles

Several game design principles are pertinent to the analysis of Kido.

When modifying traditional games to add a new game element, game designers offset an advantage provided to the player with an advantage provided to the casino or game operator ("house") to balance the house edge. EX2044(Lubin), 15; EX2041(Casey), ¶¶55, 138. Any gift to players that reduces the house advantage must be paid for with "a rule or ploy that counter-balances the edge percentage [] given away – and conceal it from the gambler's view" so the gambler focuses on the benefit and not the loss. EX2044(Lubin), 15; EX1003, ¶739 (Friedman admitting the house edge must "remain[] suitable"). As L&W's expert Mr. Friedman recognizes, a game designer needs to "make sure that the casino has the ability to operate the game profitably." EX2045(FriedmanTr.), 9:10-20; *see* EX1003, ¶¶96, 742-43.

With respect to progressive jackpots, that feature is added to games because players find large jackpots expressed as a dollar amount that "in many cases can be hundreds of thousands or millions of dollars" to be attractive.

EX2045(FriedmanTr), 30:15-31:14. Games that have progressives typically

display the jackpot amount as an advertisement to draw players to the game.

EX2041(Casey), ¶¶141, 150; EX1007(Kido), Fig. 3 (advertising jackpot amount at top of the game). Progressive jackpots are regulated, and most jurisdictions have tighter rules and accounting requirements for progressive jackpots than for other games. EX2041(Casey), ¶49. Thus, gaming operators have extra overhead on games that offer progressive jackpots.

Progressive jackpots typically are seeded with an initial award amount so they do not start at \$0. EX2041(Casey), ¶142; EX2045(FriedmanTr.), 37:5-8 (agreeing that “progressives typically have a seed or reset amount”). If they are not seeded, then after a win the jackpot is \$0 which does not provide an incentive to play the game. EX2041(Casey), ¶142. In fact, most jurisdictions by law require seeding a progressive jackpot. *Id.* Common seed amounts for progressive jackpots are \$2,000 to \$25,000. EX2044(Lubin), 181.

**b) L&W’s Modification to Kido Does Not Disclose
“Randomly Selecting a Second Selected Position”**

L&W’s theory starts with Kido’s Prog Bonus routine, which selects one position to have the star mark (L&W mapped this to the “first selected position”) to signifies the position is eligible for the progressive jackpot. Pet., 43. L&W argues that it would have been obvious to modify Kido to select a second position to receive a second star mark, but it provides no Kido-specific explanation for why a POSA would have done so. Pet., 43-44. Instead, L&W makes the general

assertion that selecting two of something instead of one of that thing is a non-obvious difference. Pet., 44. L&W is wrong.

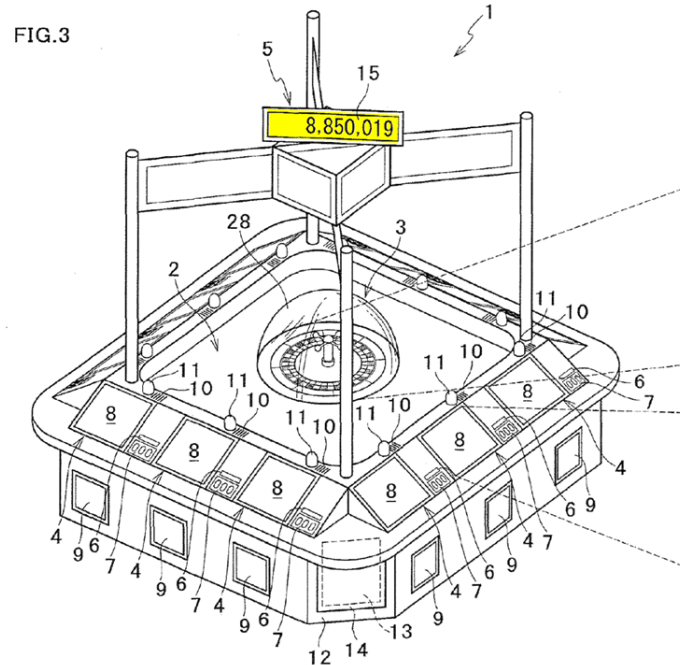
L&W's explanation "is generic and bears no relation to any specific combination of prior art elements," which is insufficient to show obviousness. *ActiveVideo Networks v. Verizon Communications*, 694 F.3d 1312, 1328 (Fed. Cir. 2012).¹⁰ L&W did not identify any problem with Kido's Prog Bonus routine, nor did it explain how adding a second star mark would have improved that routine. L&W's explanation is generic and provides no a reason for why a POSA would have sought to modify Kido's Prog Bonus routine at all.

L&W overlooks that Kido's Prog Bonus routine is unprofitable with one star mark, and L&W's proposal to add a second mark makes that problem even worse. A POSA would not have wanted to modify Kido as L&W alleges because it would create a game that not only prevents the house from making money, but that ensures it loses money. No rational casino would buy such a game.

¹⁰ L&W cites *In re Harza*, 274 F.2d 669 (CCPA 1960), but it does not apply because claims 5, 13, and 21 do not simply duplicate parts. For example, these claims require the payout for the second selected position to be different than the payout for the first selected position, thus, the elements are different.

First, even with one star mark, Kido's Prog Bonus routine is unprofitable because it fails to balance the benefit to players with an offsetting benefit to the house to keep the house margin stable. EX2041(Casey), ¶¶138, 143, 158; *see* EX2045(FriedmanTr.), 9:10-20 (game designer needs to "make sure that the casino has the ability to operate the game profitably"); EX1003, ¶¶742-73. For wins that are not made on the star mark, Kido applies the traditional rules and payouts of roulette where the house margin should be either 2.7% (European roulette) or 5.26% (American roulette). EX2041(Casey), ¶139. The Prog Bonus routine, however, diverts 0.5% of every wager into the progressive jackpot. That reduces the house margin by 18.5% (European) or 9.5% (American). *Id.*

In practice, Kido's Prog Bonus routine would not just decrease the house margin, but it likely would result in the house losing money due to the seed amount. Even though Kido does not specifically disclose seeding the jackpot, a POSA would have known doing so was typical and often required by law. EX2041(Casey), ¶¶140-42. As explained above (§V.A.3.a), seeding a jackpot is necessary so it does not start at \$0 and that common seed amounts range from \$2,000 to \$25,000. EX2044(Lubin), 181. Kido's exemplary jackpot amount is consistent with Kido having a seed amount. EX2041(Casey), ¶142. The jackpot is prominently displayed at the top of Kido's game with an exemplary value of ¥8,850,019 (approximately \$75,000). EX1007(Kido), Fig. 3.



Kido plainly contemplated that the Prog Bonus would provide large, compelling progressive jackpots and seeding the jackpot would be consistent with that.

EX2041(Casey), ¶¶141-42.

Each time Kido's progressive jackpot is won and paid, the game operator would need to re-seed the jackpot with an initial deposit. EX2041(Casey), ¶¶142-43. A seed amount of \$2,000 is proportional with a progressive jackpot size of \$75,000. EX2041(Casey), ¶142. Even at \$2,000, such a seed value would greatly exceed the gaming operator's expected profit from Kido's game given the probability of hitting the progressive condition. EX2041(Casey), ¶143.

Second, adding a second star mark to the Prog Bonus routine would make Kido's unprofitability even worse because doing so would double the probability that a player would win the progressive. EX2041(Casey), ¶¶134, 143, 150. If

Kido's jackpot is hit more frequently, that would increase the number of times that game operators would need to pay the seed amount. EX2041(Casey), ¶143. That would substantially increase costs for game operators, making the game even less profitable. *Id.*

L&W's theory ignores that the condition for winning the progressive jackpot—the ball landing on the star mark—will occur relatively frequently. EX2041(Casey), ¶145. With one star mark on an American roulette wheel, there is a 1 in 38 chance the ball will land on the star mark each spin of the wheel. *Id.* There is a 50% chance this happens within 26 spins and a 75% chance within 52 spins. Only 5% of the time will it exceed 112 spins. *Id.* If a second star mark was added, there is a 50% chance the ball will land on the star mark within 13 spins and a 75% chance within 26 spins. Only 5% of the time will it exceed 56 spins. *Id.*

There are multiple scenarios where it is likely that all of the numbers will have been bet on by at least one player. For example, Kido's gaming device allows 12 players to play simultaneously. It is common for roulette players to wager on multiple numbers each round. If each player on average bets on 5 numbers, it is highly likely that every number on the board will have at least one wager placed on it. EX2041(Casey), ¶¶144-46. As another example, a player may wager on every number to maximize his chances to win the progressive jackpot.

In both scenarios, every time the ball lands on the star mark, a player will win the progressive jackpot. *Id.*

With 12 players, if each player wagered \$20 per spin, \$240 total would be wagered by the table per spin. With a house edge of 4.76% (5.26% minus 0.5% progressive deposit), the average profit is \$11.42 per spin. With a \$2,000 seed value, Kido's game would need to be played over 175 times without a player hitting the progressive jackpot just to break even. That is incredibly unlikely to occur. *See* EX2041(Casey), ¶144. A POSA would have recognized that Kido's Prog Bonus routine is not likely to be profitable to operate with even just one star mark. A POSA would not have been motivated to double the occurrence rate of the Prog Bonus by adding a second star mark, to further reduce profitability. EX2041(Casey), ¶150.

L&W may argue that Kido does not have a seed amount. Even without a seed amount, a POSA would not have wanted to double the probability of the Prog Bonus. EX2041(Casey), ¶¶144-49. Kido allocates only 0.5% of the wagered amount to the jackpot. EX1007, [0129]. Given the expected frequency of the ball landing on the star mark, without a seed amount, the 0.5% allocation is insufficient to create an attractive progressive jackpot. EX2041(Casey), ¶¶149-51. Dr. Casey analyzes multiple betting scenarios, and shows that without a seed amount the progressive jackpot will on average be less than 20% of the payout for a straight up

bet. EX2041(Casey), ¶¶146-48. By adding a second star mark, the jackpot on average would be less than 10% of the payout for a straight up bet. *Id.* Because the jackpot will be triggered too frequently, it is extremely unlikely that Kido's modified progressive jackpot will ever reach into the thousands of dollars as Kido intended. EX2041(Casey), ¶150; EX1007, Fig. 3 (advertising \$75,000 jackpot). Without a seed amount, Kido's jackpots are too small to be compelling to players, and operators would not want to offer them, particularly given the extra overhead associated with progressive jackpots. EX2041(Casey), ¶151.

**c) L&W's Modification to Kido Does Not Disclose
"Determine a Payout for the Second Selected Position
that Is Different Than the Payout for the Single First
Position"**

Kido's Prog Bonus routine has one star mark and winning on that star mark means the player wins the entire progressive jackpot. L&W argues that when adding a second star mark, it would have been obvious to choose a payout for the second star mark to be different than the payout for the first star market because there are only two choices for the payout: it could either be the same or different. Pet., 44. L&W's cursory rationale fails for several reasons.

First, even if there was motivation—and there is none—for a POSA to modify the Prog Routine to include a second star mark, L&W has not provided any reason why the amount of the award for each star mark would be different. Again, an explanation that "is generic and bears no relation to any specific combination of

prior art elements” is insufficient to show obviousness. *ActiveVideo*, 694 F.3d at 1328. L&W’s theory bears no relation to Kido’s actual Prog Bonus routine.

Kido has one progressive jackpot, and a player that wins on the star mark receives the entire jackpot. L&W does not explain why a POSA would have configured Kido’s Prog Bonus routine specifically to offer two different progressive awards or what the amounts of each of them would be.

L&W generically asserts that providing a different award amount would be more “exciting” for the player, but again, its argument bears no connection to Kido’s Prog Bonus routine which provides players with a progressive jackpot. Progressive jackpots provide player excitement by growing to large amounts. EX2045(FriedmanTr), 30:15-31:14; EX2041(Casey), ¶150. L&W provides no explanation of how including a second jackpot of a different value fits into Kido’s design or of how having two different jackpot amounts would be more exciting *for Kido’s Prog Bonus routine*. An explanation is insufficient if it “fails to explain why a person of ordinary skill in the art would have combined elements from specific references *in the way the claimed invention does.*” *ActiveVideo*, 694 F.3d at 1328 (emphasis in original).

Second, as explained in § V.A.2.b above, Kido’s Prog Bonus routine does not determine any payout or jackpot until after the winning number has been determined. *See* EX1007, Fig. 12 (A11 & A12). As a result, the routine

determines a payout for only one position on the wheel: the winning position. Kido does not disclose determining a hypothetical payout for any of the non-winning positions on the roulette wheel as there is no reason to do so given Kido's design. L&W merely alleges that a POSA would have added a second star mark, but does not propose how a POSA would have made this modification, *e.g.*, modifying Steps A11 and A12 of the Prog Bonus routine or adding in another step where a second payout would be determined. In any case, as previously discussed, there is no reason to make any of those modifications. EX2041(Casey), ¶¶150. Consequently, L&W's proposed modification to Kido does not disclose the limitation of "determine a payout for the second selected position."

d) L&W Has Not Shown a POSA Would Have Combined Kido's Privilege Routines

L&W does not argue, but merely cites to testimony from its expert Dr. Friedman where he alleges that a POSA would have been motivated to combine Kido's privilege routines and offer two different privileges during each game. EX1003, ¶390; Pet., 43. Because that argument was not made in the petition, it should not be considered. *Cisco Sys., Inc. v. C-Cation Techs., LLC*, IPR2014-00454, Paper 12 at 10 (PTAB Aug. 29, 2014) (informative).

More fundamentally, Dr. Friedman's testimony overlooks that Kido's other privilege routines have significant problems. Therefore, a POSA would not have

been motivated to combine Kido's Prog Bonus with those routines.

EX2041(Casey), ¶134.

For example, Kido's two Special Rate routines are inherently flawed and exploitable by players such that a player can be guaranteed to win money (and the casino to lose money). EX2041(Casey), ¶¶135-36; EX2045(FriedmanTr), 38:21-39:20 (game designers consider the "exploitability" of games). When a player wins on a star mark and receives the special rate privilege, a second game is executed where the payout on a straight up bet is 71:1. EX1007, Fig. 9 (B12 "execute another game"), Fig. 11 (C12 "set next winning odds to special rate"), Fig. 8 (special rate). When the special rate is triggered, if a player places a bet on all 38 numbers, the player is guaranteed to win 72 times the bet amount.

EX2041(Casey), ¶135. For example, betting \$10 on each number would cost \$380 but the player is guaranteed to win \$720, for a profit of \$340. *Id.* Because the Special Rate routines are easily exploitable, a POSA would not have combined either of those routines with the Prog Bonus routine. *Id.*, ¶136.

A POSA also would not have combined the Prog Routine with the Free Spot routine. EX2041(Casey), ¶¶152-56. The Free Spot routine provides players with an advantage, but it does not provide for a corresponding offset to the house, reducing the house margin. *Id.* A POSA would not have been motivated to provide players with two potential benefits each time a game is played without a

corresponding offset to allow the house to make money. EX2041(Casey), ¶¶156-58.

Dr. Friedman's proposed modification also does not satisfy the claim elements which all pertain to the same spin of the roulette wheel. The Special Rate routines and the Free Spot routine all require a second spin of the roulette wheel. EX2041(Casey), ¶161. Combining these privileges with the Prog Bonus routine means any privilege award would require two spins of the roulette wheel; combining them would not result in it being possible to win two payouts different payouts on a single spin of the wheel. *Id.*

Thus, L&W has failed to show these claims are obvious.

4. Claims 2-3, 6-7, 10-11, 14-15, 18-19, and 22-23

These claims all depend from one of claim 1, 9, or 17, and are not anticipated or obvious based on Kido for the same reasons as the independent claims.

B. Kido and Yee Do Not Teach Claims 8, 16, and 24 (Ground 2)

L&W asserts that Claims 8, 16, and 24 of the '014 patent would have been obvious based on the combination of Kido and Yee. These claims further limit claims 1, 9, and 17, respectively, and specify "indicating '500x' at the first selected position on a roulette board in the first graphical user interface." L&W admits Kido does not disclose a system that provides such an indication, and argues that a

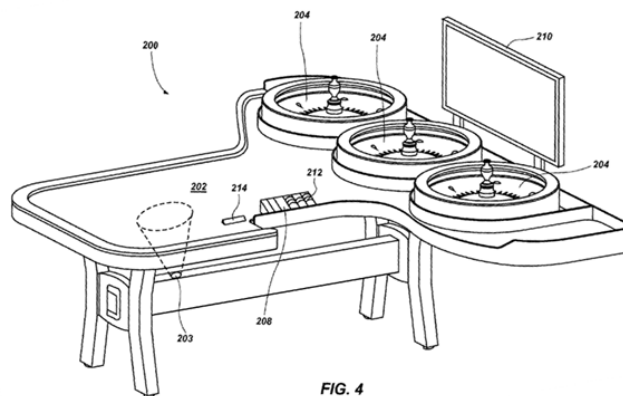
POSA would have found it obvious to modify Kido to display “500x” instead of the star mark. Pet., 51.

L&W’s obviousness rationale ignores how the Prog Bonus routine works. To meet the “first selected position” claim element, L&W relied on the Prog Bonus routine, where winning on a star mark means the player wins the entire progressive jackpot. The progressive jackpot amount is prominently displayed on a sign above the game. For example, Figure 3 shows a jackpot of ¥8,850,019 (approximately \$75,000). That amount slowly increases with every game played where there is no jackpot winner. The amount does not depend on the amount wagered. It would not make sense to display “500x” when the jackpot is ¥8,850,019 and steadily increasing from game to game. EX2041(Casey), ¶166. L&W also has not explained why a POSA would have modified the Prog Bonus routine to offer an award of 500x instead of the progressive jackpot. As L&W’s expert admitted, players may find “an award of a progressive jackpot to be more attractive than a potential top award of 500 to 1.” EX2045, 31:11-14. L&W’s rationale is completely disconnected from what Kido actually discloses, and is insufficient to show obviousness. *ActiveVideo*, 694 F.3d at 1328 (an explanation that “is generic and bears no relation to any specific combination of prior art elements” is insufficient to show obviousness).

C. L&W Has Failed to Show that Baron Anticipates or Renders Obvious Any Claim (Ground 3)

1. Summary of Baron

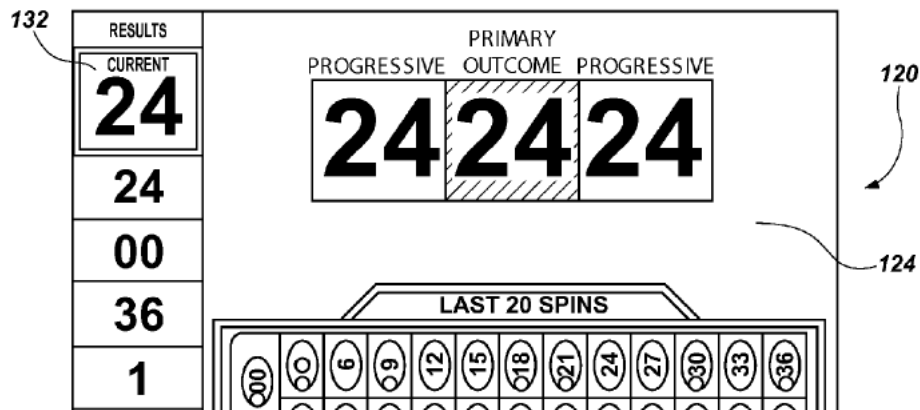
Baron discloses a system for providing a roulette game that allows players an opportunity to win a progressive jackpot. EX1008, [0001]. Baron discloses that its system spins three roulette wheels each time a game is played. *Id.*, [0028]. Each wheel is independent of the others. *Id.*, [0038]. An example of a table for Baron's game is below.



A player can win if any of the three spins lands on the number the player wagered on. *Id.*, [0043]-[0044]. In some embodiments, if two or more spins land on the same number, players can win increased awards. *Id.*, [0045]. In other words, Baron discloses a roulette game that spins **three** roulette wheels (*i.e.*, **three** spins) during a single game and determines the outcome of the game using all three spins. Baron discloses that the game can be played with physical wheels and an in-person croupier as shown in Figure 4. *Id.*, [0040], [0082]. It also discloses the

game can be played using virtual roulette wheels and a virtual croupier. *Id.*, [0027], [0082], [0089].

The results of all three spins are presented to users, and all three are used to resolve the game outcome. An example is shown in the top of Figure 3, below (showing that for all three spins, the ball landed on 24).



2. Baron’s Game Requires Multiple Spins of Roulette Wheels and Does Not Disclose the “For a Spin of the Roulette Wheel” Claim Elements

Baron’s wagering game does not disclose any of the claim elements¹¹ that pertain to “a spin of the roulette wheel.” The Board construed this term’s plain and ordinary meaning to be one spin of one roulette wheel. Inst. Dec., 9. In contrast to the claims, Baron executes three spins, one on each of three roulette wheels, for

¹¹ In the ’014 patent, these correspond to L&W’s elements 6-12 of claim 1, and elements 3-9 of claims 9 and 17.

each game played on its device. *See* EX1008, [0039] (a “plurality of roulette outcomes may be generated in a single round of the wagering game”); § IV.B, above. As a result, Baron does not meet multiple claim elements, as explained below.

a) **L&W Failed to Show that Baron Discloses “Randomly Select a First Selected Position on the Roulette Wheel For the Spin of the Roulette Wheel” and “Determine that the Ball Has Fallen in the Single First Position For the Spin of the Roulette Wheel”**

L&W has not shown that Baron meets these two claim elements,¹² which are required to be performed for the same spin of a roulette wheel. Claim 1 of the '014 patent, in relevant part, requires a processor configured to:

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;

* * *

determine that the ball has fallen in the single first position for the spin of the roulette wheel;

¹² In the '014 patent, these correspond to L&W's elements 9 and 11 of claim 1, and elements 6 and 8 of claims 9 and 17.

In these elements, the claim recites two distinct operations: selecting a first single position then determining that the ball has fallen into that position for the same spin of the roulette wheel. L&W's argument fails for multiple reasons.

First, each of these claim elements specifies that the operation occur “for the spin of the roulette wheel.” Baron cannot meet that limitation because Baron's game requires three spins of a roulette wheel: one for each of its three wheels. Although Baron discloses its system may use physical roulette wheels or virtual roulette wheels, EX1008, [0027], that does not change the fact that the game requires three spins. EX2041(Casey), ¶¶177-78. L&W's argument relies on rewriting the claims to replace “*the spin* of the roulette wheel” with “in a single *round*.” That is improper.

Second, to meet the “randomly select a first selected position,” L&W relies on the spin of one of Baron's three roulette wheels (though L&W does not identify which one). Pet. 60. Baron discloses that each of the three roulette wheels, whether physical or virtual, generates a “roulette outcome.” EX1008, [0027], [0039], [0088]; EX1003, ¶471. And a player can win if any of the three roulette wheel land on the number he bet on. EX1008, [0043], [0045], [0062]; EX1003, ¶488. L&W does not explain how a ball landing in an “outcome position” on one of the roulette wheels, EX1008, [0039], meets “randomly select a first selected

position.” Baron does not disclose that any of the roulette wheels “select” a position for an increased payout. EX2041(Casey), ¶¶179-80.

Third, L&W fails to explain how Baron selects the first selected position “prior to the ball falling into a position on the roulette wheel.” According to L&W, Baron selects the position *when* a ball falls into a position on a wheel, and *not prior* to it. Because all three of Baron’s roulette wheels generate a “roulette outcome” by a ball falling into a position on the roulette wheel, EX1008, [0039], none can select a position “prior to a ball falling into an outcome position” on a roulette wheel. EX2041(Casey), ¶180.

Finally, L&W argues that it would have been obvious to modify Baron so that it “randomly selects a first selected position” prior to the ball falling into position on the wheel. This would have been obvious according to L&W because Baron describes “generating one or more roulette outcomes... at the close of wagering or at the beginning of a new round of play (e.g., after a timer has expired)” with respect to Figure 7. EX1008, [0088]; Pet., 61-63. L&W appears to be arguing that Baron’s two progressive wheels can be spun before the primary wheel. But the timing of when Baron’s device can generate each of the three roulette outcomes is irrelevant. Each outcome is generated by a ball falling into a position on a roulette wheel, and thus, none happens before a ball falls into an outcome position. EX2041(Casey), ¶180.

b) Baron Does Not Disclose “Determine a First Payout... and a Second Payout... For the Spin of the Roulette Wheel, Wherein the First Payout Is Higher Than the Second Payout”

Baron does not disclose this element.¹³

L&W argues that Baron shows a first payout higher than a second payout because a player can win more if multiple roulette wheels land on the number the player wagered on. Pet., 65 (citing EX1008, [0045]). L&W’s argument relies on rewriting the claims to replace “*the spin* of the roulette wheel” with “in a single *round*” that requires three spins. That argument is inconsistent with the Board’s construction requiring one spin of one roulette wheel.

Baron does not disclose this claim element, when properly interpreted. For any one spin of a roulette wheel, Baron’s payouts are the same. If the player wagers on a number, and the ball lands on that number on one roulette wheel, the player wins a payout of 7:1. EX1008, [0045]. The payout does not vary depending on which number the player wagered on. For any one spin of one roulette wheel, the payout for a first position on that wheel and a second position on that wheel is the same. EX2041(Casey), ¶¶182-83. Thus, Baron does not

¹³ This corresponds to L&W’s element 10 of claim 1 and element 7 of claims 9 and 17.

determine a first payout and second payout where the first is higher than the second.

Baron discloses that the only way an increased payout can be won is based on the results from *two spins* of two roulette wheels. EX1008, [0045]; EX2041(Casey), ¶183. Two roulette wheels must have their ball land on the number the player wagered on for that player to win a payout of 100:1. Thus, such an increased payout is not available for “a spin of the roulette wheel.” In Baron there must be multiple spins of two wheels, which is different than the claims. *See* § IV.B., above.

Baron also discloses that, if all three wheels land on the same number, the player can win a progressive jackpot. EX1008, [0045]; EX2041(Casey), ¶184. Winning the progressive jackpot requires *three spins* of three roulette wheels, not “a spin of the roulette wheel.” *See* § IV.B., above. In addition, as explained in § IV.A., above, a progressive jackpot is not a “payout” within the meaning of the claims.

3. Baron Does Not Disclose Claims 5, 13, and 21

Claims 5, 13, and 21 further limit claims 1, 9, and 17, respectively. They each specify that the hardware processor further perform the steps of randomly selecting a second selected position and determining a payout for that position that is different than the first payout.

L&W completely fails to identify a “second selected position” in Baron. L&W asserts that Baron shows selecting a second selected position because the payout increases based on the number of wheels that match so “for one match the payout is 7:1, but for two matches the payout is 100:1.” Pet., 72. But L&W does not and cannot identify what the “second selected position” is.

Of Baron’s three wheels, L&W asserts that one is the “primary” wheel and two are “progressive” wheels. Pet., 72. To the extent L&W means to argue that the primary wheel generates the outcome position and each progressive wheel selects a “selected position,” Baron would not meet the claim. The progressive wheels both determine outcome positions. EX2041(Casey), ¶¶180, 188.

L&W provides an example where one player bets on 24, another player bets on 10, the primary wheel lands on 24, one progressive wheel lands on 10, and the other on 24. L&W argues that the progressive wheel that landed on 10 selects a second selected position because that player won 7:1. But the reason the player that bet on 10 receives the 7:1 payout is because the progressive wheel determined an outcome position. It did not “select a second selected position” for a different payout. L&W’s argument improperly collapses the steps of selecting a selected position and of determining an outcome position into the same event. Those are separately claimed steps and the step of selecting a selected position must happen before the ball falls into an outcome position, as explained in § IV.C., above.

Therefore, Baron does not disclose these claims.

4. Claims 2-3, 6-7, 10-11, 14-15, 18-19, and 22-23

These claims all depend from one of claim 1, 9, or 17, and are not anticipated or obvious based on Baron for the same reasons as the independent claims.

D. Baron and Yee Do Not Teach Claims 8, 16, and 24 (Ground 4)

L&W asserts that Claims 8, 16, and 24 of the '014 patent would have been obvious based on the combination of Baron and Yee. These claims further limit claims 1, 9, and 17, respectively, and specify “indicating ‘500x’ at the first selected position on a roulette board in the first graphical user interface.” Baron does not disclose a 500x payout nor such an indication. L&W argues that a POSA would have found it obvious to modify to Baron to add a 500x multiplier and to display “500x”. Pet., 76.

L&W’s obviousness rationale is disconnected from what Baron discloses. Baron discloses three awards: 7:1 if one roulette wheel lands on the number the player bet on, 100:1 if two roulette wheel land on that number, and the entire progressive jackpot if all three land on that number. L&W does not say which of those awards would be replaced with 500x. If L&W intends to replace the 100:1 award, L&W also does not explain how the game could remain balanced when the player award is increased 5 fold. EX2041(Casey), ¶191; EX1003, ¶739 (admitting

the house edge must “remain[] suitable”). If L&W intends to replace the progressive jackpot, that would change the nature of the game as players view progressive jackpots differently than fixed payouts. *Id.* As L&W’s expert admitted, players may find “an award of a progressive jackpot to be more attractive than a potential top award of 500 to 1.” EX2045, 31:11-14. L&W’s rationale is insufficient and it has failed to show the claims are obvious.

E. Substantial Objective Indicia Show the Claims Are Non-Obvious

L&W’s obviousness arguments also fail because there is overwhelming objective evidence of non-obviousness for Evolution’s claimed invention. This includes extensive industry praise, including from L&W itself, L&W’s copying of Lightning Roulette, and commercial success. As the Federal Circuit has consistently held, “objective indicia may often be *the most probative and cogent evidence* of nonobviousness... [and] are *essential safe-guards that protect against hindsight bias.*” *Liqwd, Inc. v. L’Oreal USA, Inc.*, 941 F.3d 1133, 1136-37 (Fed. Cir. 2019) (citations and quotation marks omitted).

1. Industry Praise: Lightning Roulette Has Received Extensive Industry Praise

Lightning Roulette was released in 2018, and the industry immediately recognized the product’s innovation. In 2018, and even years later in 2022, Lightning Roulette received multiple industry awards, including:

- “Product Innovation of the Year” at the 2018 Global Gaming Awards, which called Lightning Roulette “the most revolutionary product in the last 12 months.” EX2007. The award is “one of the most prestigious awards to win.” EX2038.
- “Product Innovation of the Year” award at the 2018 Global Gaming Expo (G2E), beating nine other shortlisted candidates. EX2037.
- Game of the Year at the EGR Operator Awards in 2018, recognizing the game as “making the biggest annual impact.” The EGR Operator Awards are considered the “Oscars of the egaming sector.” The Game of the Year winner is decided by votes by peer operators.
- 2022 Game of the Year at the American Gambling Awards shortly after being released in the U.S. EX2009, EX2010.

In addition to the industry at large, L&W itself has praised Lightning Roulette for its “unique[ness].” In a May 2021 press release, L&W’s then Senior Vice President of Global Systems and Table Games praised Lightning Roulette, stated:

We have watched *Lightning Roulette’s phenomenal success* in a live-dealer, online format and cannot wait to make it available on gaming floors of land-based casinos across North America and around the world. With its trademark lightning strikes and *big-win multipliers*, Lightning Roulette is sure to be one of the most visually engaging and entertaining live table games ever offered. It provides *a truly unique roulette experience* for players and we are confident that in its land-based form, scheduled for go-live in 2022, it will be *an absolute star attraction*.

EX2008 (emphases added); EX2039.

Lightning Roulette’s level of success was surprising and unexpected. It was widely recognized in the industry that roulette was highly “resistant to add-ons” and that modifications to the game “have been little more than attempts to fix what isn’t broken.” EX2044(Lubin), 157. Yet Lightning Roulette smashed that conventional knowledge.

2. Commercial Success and Licensing: L&W Recognized Lightning Roulette’s Success and Licensed the ’014 Patent

The ’014 patent has met with enormous commercial success, as shown by L&W’s own statements and actions. L&W’s executives have admitted that Lightning Roulette was a “phenomenal success.” EX2008.

In March 2021, Evolution and L&W entered into an agreement for L&W to develop a table version of Lightning Roulette that could be played in-person. EX2014, 4. As part of the agreement, L&W received an exclusive license to the ’014 patent, and to related pending applications, for the purpose of developing the game. EX2014, 6, 29. That Evolution licensed the ’014 patent to L&W shows the patent was commercially successful. *Ancora Techs., Inc. v. Roku, Inc.*, 140 F.4th 1351, 1362 (Fed. Cir. 2025) (explaining “[a]ctual licenses to the patented technology are highly probative” and “are, by their nature, directly tied to the patented technology”).

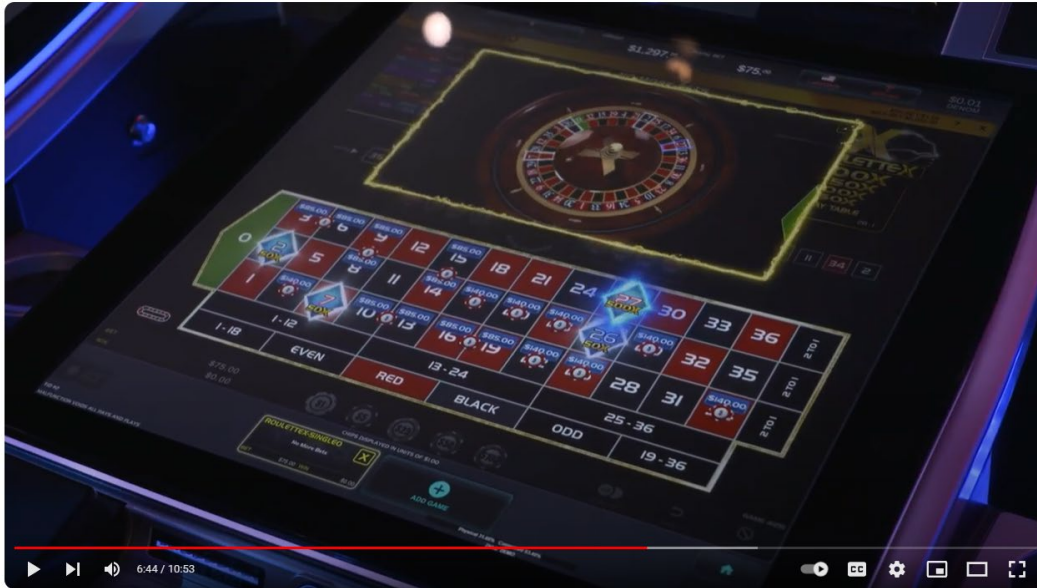
3. Copying: L&W Copied Lightning Roulette

Shortly after L&W signed the licensing agreement with Evolution, however, L&W abruptly sought to unilaterally terminate it. L&W then announced the launch of its own copycat game, RouletteX. EX1015, ¶¶17-23. Just like Lightning Roulette, L&W's RouletteX randomly adds multipliers to several roulette numbers each time the roulette wheel is spun such that, if one is hit, players are awarded various increased payouts. L&W has described the game as follows:

Description

Welcome to Roulette X, an exhilarating, supercharged bonus roulette experience that has already become a renowned brand in land-based casinos worldwide! A definite crowd-pleaser, Roulette X adds an exciting twist to the classic casino game. Players have the power to choose their own volatility or bonus level, unlocking the potential to win an incredible 1000x! With each spin of the wheel, the excitement builds as up to five numbers are randomly selected to bear multipliers of 50x, 100x, 250x, or an astounding 1000x - Which level will you choose?

An example of a user interface for RouletteX that was presented at the G2E industry event is below. Four numbers were selected as Lucky Numbers—three were assigned increased payouts of 50X, and one was assigned an increased payout of 500X.



G2E 2023 Light & Wonder - At-Booth Product Demos

L&W indisputably knew about Lightning Roulette and how the game was operated, not only due to Lightning Roulette's immense popularity but also due to its awareness of Evolution's '014 patent. L&W's RouletteX is a copy of Lightning Roulette, and its infringement of the '014 patent is being litigated in the parallel litigation. EX1015, ¶¶ 42-118. L&W's copying of Lightning Roulette shows that the '014 patent's claims are non-obvious.

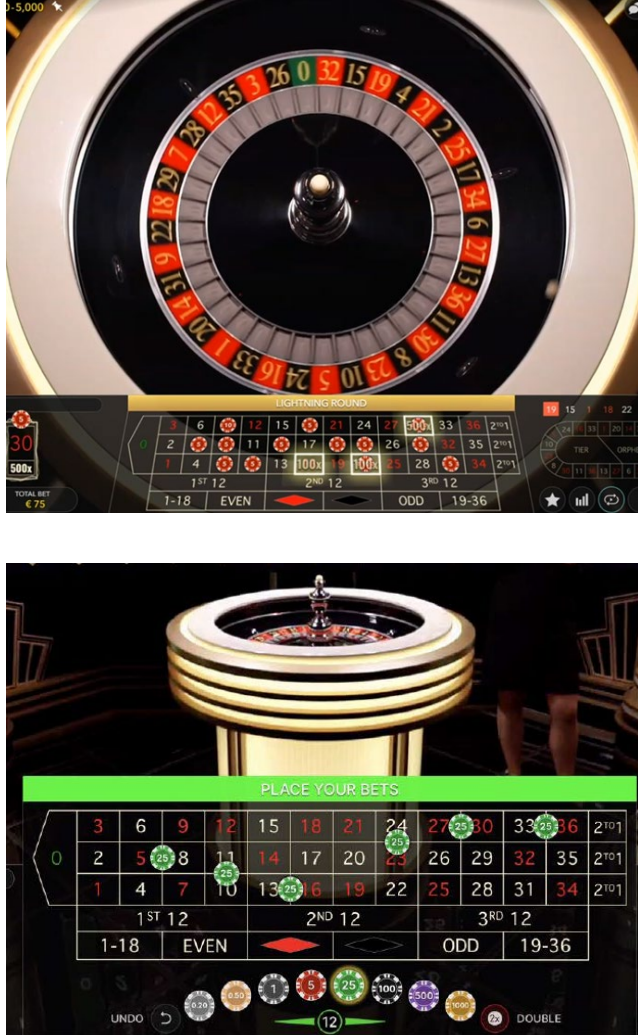
4. Lightning Roulette Has a Nexus with the Claims

Evolution's Lightning Roulette product practices and embodies claims of the '014 patent. For example, images of the Lightning Roulette game appear as Figures 3 to 5 of the patent. And, as shown in the chart below, Lightning Roulette practices at least claims 1, 2, 3, 5, and 8 of the '014 patent. For the same reasons, Lightning Roulette also practices the parallel method and computer-readable

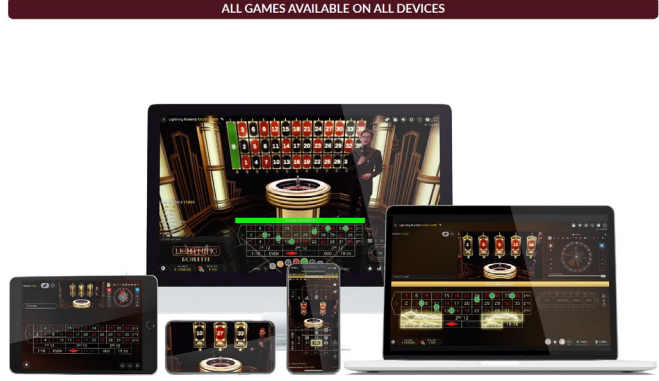
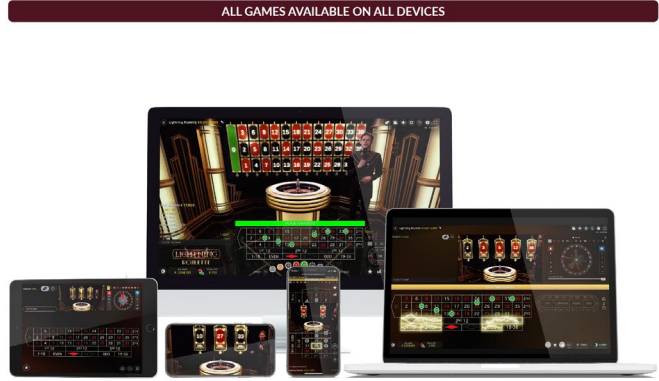

medium claims (9-11, 13, 16-19, 21, and 24). *See* EX1020; EX1021; Pet., 8; EX2041(Casey), ¶202.


For objective indicia about a commercial product, there is a rebuttable presumption of nexus with the claims if the commercial product “embodies the claimed features, and is co-extensive with them” *Henny Penny Corp. v. Frymaster LLC*, 938 F.3d 1324, 1332 (Fed. Cir. 2019) (citation omitted). Here, Lightning Roulette embodies the claimed features and is coextensive with them. Thus, there is a presumption of nexus between Evolution’s Lightning Roulette and the claimed invention.

<u>Claim Element</u>	<u>Lightning Roulette</u>
1[pre] A system for wagering, comprising:	“Lightning Roulette is a unique, ground-breaking extended Roulette game that combines Live Casino with a high-payout RNG (Random Number Generator) element to revolutionise your Live Casino.” EX2027, 1.
1[a] a roulette wheel;	“All the familiar elements of our world-class Live Roulette are here — <i>the live wheel</i> , the live dealer, the full line-up of Roulette bets.” EX2036.

	 <p>14</p>
<p>1[b] a ball configured to be used in the roulette wheel;</p>	<p>See 1[a], above.</p>
<p>1[c] at least one hardware processor configured to:</p>	<p>The game is run by a server, and is broadcast to player devices.</p>

¹⁴ See <https://games.evolution.com/wp-content/uploads/2023/01/Lightning-Roulette-Big-Win-Compilation.mp4>

	 <p>EX2027, 9.</p>
<p>1[d] generate a first graphical user interface for presentation on a first player device of a first player;</p>	<p>A user interface is provided on each player device.</p>  <p>EX2027, 9.</p>
<p>1[e] generate a second graphical user interface for presentation on a second player device of a second player;</p>	<p>See claim 1[d], above.</p>
<p>1[f] 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;</p>	<p>The game’s user interface allows each player to place bets from their own device (e.g., computer), including straight up bets.</p>  <p><i>“After all player bets are accepted, the amount of Lucky Numbers (one to five), the Lucky Numbers</i></p>

	<p>themselves and the amounts of the Lucky Payouts are randomly generated.” EX2036.</p> <p>The game receives bet information from every player. For example, the figure below shows that all winners and their winnings are announced.</p>  <p>EX2027, 3.</p>
<p>1[g] 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;</p>	<p>See 1[f], above.</p> <p>“Thanks to massive multiplayer scalability, Lightning Roulette can be played by <i>a virtually unlimited number of concurrent players.</i>” EX2036</p>
<p>1[h] determine that the roulette wheel and the ball have been spun for the spin of the roulette wheel;</p>	<p>“The ball is spun <i>automatically</i> by an Auto Roulette wheel and the game presenter will pull a lever to initiate the generating of Lucky Numbers after betting time has expired.” EX2027, 3.</p>
<p>1[i] randomly select a first selected position on the roulette wheel for the spin of the roulette wheel prior</p>	<p>“In every game round, <i>between one and five Lucky Numbers are generated at random</i> and struck by lightning. At the same time, each of the generated Lucky Numbers has a random multiplier applied to</p>

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;

it: 50x, 100x, 200x, 300x, 400x or 500x. Naturally, this creates considerable extra suspense and excitement as each round spins by.” EX2027, 2.

“Our unique Lightning Roulette is like no other Roulette game. Not only is it visually stunning, it also adds RNG Lucky Number wins to every game round.” EX2036

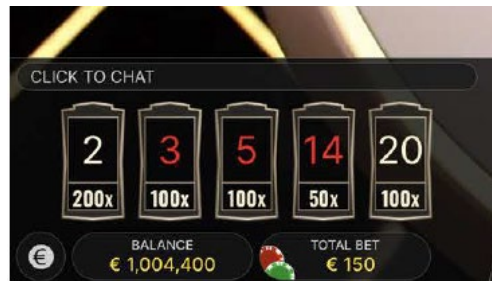
As shown in 1[k], below, the first selected position can be the same as the single first position the first player wagered on.


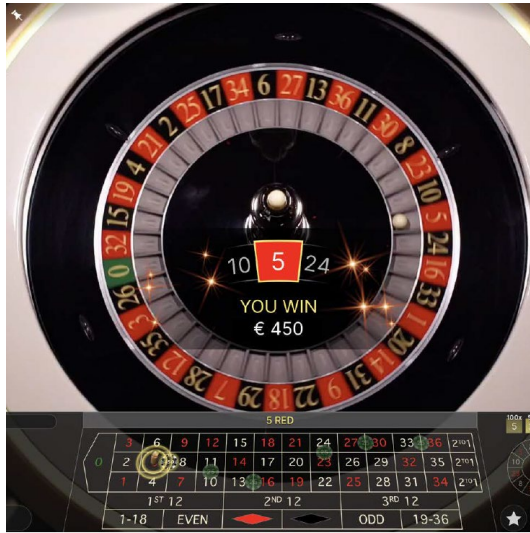
For example, in the image below, the player placed a \$5 wager on 30, and 30 was selected as a Lucky Number with a 500x payout. The ball (on the right side of the image) is still spinning and has not fallen into a position yet.





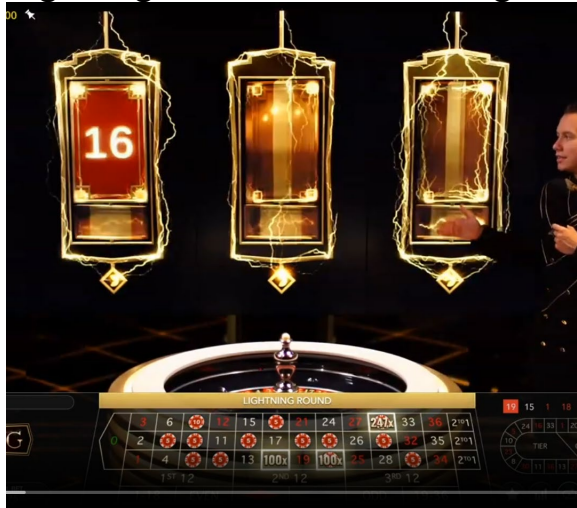
1[j] determine a first payout for the first single position and a second payout for the single second position for the spin of the roulette wheel, wherein the first payout is higher than the second payout;

The game determines payouts for multiple positions on the roulette wheel. For example, the image below shows that 2 has a 200x payout; 3, 5, and 20 have a 100x payout; 14 has a 50x payout, and all other numbers have a 30x payout.



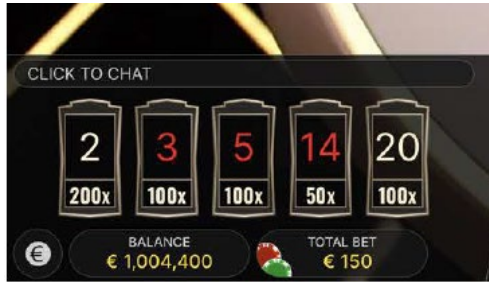
	<p>EX2027, 4.</p> <p>As another example, the image below shows that 16 and 22 have a 100x payout; 30 has a 500x payout, and all other numbers have a 30x payout.</p>  <p>The screenshot shows a roulette game interface. At the top, it says 'Aydemir06: 20 at' and 'CLICK TO CHAT'. Below that, three numbers are displayed in individual boxes: 16 with a 100x payout, 22 with a 100x payout, and 30 with a 500x payout. At the bottom, the player's balance is shown as €2,881 and the total bet as €75.</p>
<p>1[k] determine that the ball has fallen in the single first position for the spin of the roulette wheel; and</p>	<p>The game can determine that the player won on a Lucky Number with a Lucky Payout of 500x.</p>  <p>The screenshot shows a roulette wheel with the ball landing on the number 5. The text 'YOU WIN € 450' is displayed in the center of the wheel. Below the wheel, a betting table is visible with various betting options like '1-18', 'EVEN', 'ODD', and '19-36'.</p> <p>EX2027, 4.</p>

	
<p>1[l] indicating that the first player is to be paid at the first payout for the spin of the roulette wheel.</p>	<p>See 1[k], above</p>
<p>2. The system of claim 1, further comprising a display adjacent to the roulette wheel that indicates the first selected position.</p>	<p>A display for presenting the Lucky Numbers to players is adjacent to the roulette wheel, as shown below.</p>

	
<p>3. The system of claim 2, 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.</p>	<p>“In every game round, <i>between one and five Lucky Numbers are generated at random and struck by lightning.</i>” EX2027, 2.</p> <p>Lightning can be seen in the image below.</p> 
<p>5[pre] The system of claim 1, wherein the at least one hardware processor is further configured to:</p>	<p>See claim 1[c], above.</p>
<p>5[a] randomly select a second selected position on the roulette wheel; and</p>	<p>“In every game round, <i>between one and five Lucky Numbers are generated at random and struck by lightning.</i>” EX2027, 2.</p>

5[b] determine a payout for the second selected position that is different than the payout for the first position.

The game determines payouts for multiple positions on the roulette wheel. For example, the image below shows that 2 has a 200x payout; 3, 5, and 20 have a 100x payout; 14 has a 50x payout, and all other numbers have a 30x payout.



EX2027, 4.

As another example, the image below shows that 16 and 22 have a 100x payout; 30 has a 500x payout, and all other numbers have a 30x payout.



8. The system of claim 1, 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.



Lightning Roulette has a nexus with all three of the patents in this family:

the '024 patent, '014 patent, and '371 patent. “Multiple patents can share a

presumption of nexus with the same product,” which is commonly the case where, as here, the patents are in the same family. *Fox Factory, Inc. v. SRAM, LLC*, 944 F.3d 1366, 1377 (Fed. Cir. 2019); (collecting cases); *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1324-25 (Fed. Cir. 2016).

VI. Conclusion

Accordingly, the Board should confirm the patentability of all claims.

Dated: March 11, 2026

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE

I hereby certify that this brief complies with the type-volume limitations of 37 C.F.R. §42.24, because it contains 13,948 words (as determined by the Microsoft Word word-processing system used to prepare the brief).

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CERTIFICATE OF SERVICE

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