

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

INTERACTIVE COMMUNICATIONS INTERNATIONAL, INC.,

Petitioner,

v.

BLACKHAWK NETWORK INC.,

PO.

Case No. IPR2024-00465

U.S. Patent No. 11,488,451

PETITIONER'S REPLY

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EXHIBIT LIST

Ex.	Description
1001	U.S. Patent No. 11,488,451 (“’451 patent”)
1002	File History for U.S. Patent No. 11,488,451
1003	Declaration of Michael Hutton
1004	<i>Curriculum Vitae</i> of Michael Hutton
1005	U.S. Patent No 7,627,497 (Szrek)
1006	U.S. Pat. Pub. No. 2013/0441768 (Llach)
1007	<i>Interactive Communications International, Inc., v. Blackhawk Network Inc.</i> , PGR2020-00084, Paper 2 (Petition for Post-Grant Review of U.S. Patent 10,769,894)
1008	<i>Interactive Communications International, Inc., v. Blackhawk Network Inc.</i> , PGR2020-00084, Paper 47 (Final Written Decision)
1009	<i>Blackhawk Network, Inc. v. Interactive Communications International, Inc.</i> , 2022-1650, Dkt. 43 (Fed. Cir. June 7, 2023)
1010	U.S. Patent No. 5,511,114 (Stimson-I)
1011	U.S. Patent No. 5,577,109 (Stimson-II)
1012	U.S. Patent No. 5,777,305 (Smith-I)
1013	U.S. Patent No. 6,000,608 (Dorf)
1014	U.S. Patent No. 6,454,165 (Dawson)
1015	U.S. Patent Publication No. WO 01/059597 (Tidball)
1016	U.S. Patent No. 7,024,807 (Street)
1017	U.S. Patent No. 8,706,630 (Graves)
1018	U.S. Patent No. 7,093,761 (Smith-II)

1019	U.S. Patent No. 7,344,067 (Beck)
1020	U.S. Patent No. 8,083,133 (Seifert)
1021	U.S. Patent Publication No. US 2010/0051691 (Brooks)
1022	U.S. Patent No. 8,862,504 (Sobek)
1023	U.S. Patent No. 8,424,758 (Esslinger)
1024	U.S. Patent Publication No. 2004/0193464 (Szrek Publication)
1025	U.S. Patent No. 10,296,895 (Llach)
1026	U.S. Patent No. 6,899,621 (Behm)
1027	U.S. Patent No. 6,267,670 (Walker)
1028	U.S. Patent Publication No. 2009/0163263 (Herndon)
1029	U.S. Patent Publication No. 2005/0233797 (Gilmore)
1030	U.S. Patent No. 9,405,984 (Irwin)
1031	Turk & Pentland, "Eigenfaces for Recognition," Journal of Cognitive Neuroscience, Vol. 3, No. 1 (1991)
1032	<i>Interactive Communications International, Inc., v. Blackhawk Network Inc.</i> , PGR2020-00084, Paper 30 (Petitioner's Reply to PO's Response)
1033	File History for U.S. Patent No. 10,769,894
1034	Viola & Jones, "Rapid Object Detection using a Boosted Cascade of Simple Features," Conference on Computer Vision and Pattern Recognition 2001
1035	<i>Blackhawk Network Inc. v. SL Card Company d/b/a Linq3</i> , Superior Court of the State of Arizona (Complaint)
1036	Supplemental Declaration of Mr. Hutton

1037	Transcript of Deposition of Jeffrey Miller, Ph.D., taken January 14, 2025
1038	South Carolina Lottery, "Glossary of Lottery Terms," available at https://www.sceducationlottery.com/FAQ/Glossary
1039	Alejandra Boto, "A New Legislative Framework for Online Gaming in Spain," UNLV Gaming Law Journal, Vol. 4:11 (April 30, 2013)
1040	U.S. Pat. App. Pub. No. 2013/0204777

I. INTRODUCTION

The '451 patent is similar to the invalidated '894 patent, except that it claims a third-party transaction processor; a limitation undisputedly taught by Irwin and Llach. PO's Response argues that the claims should be narrowly construed, but does so without intrinsic or extrinsic support. Indeed, PO's expert, Dr. Miller, has **no** experience with lottery systems or card activation networks and does not meet the definition of a POSITA.

PO construes a “random draw” lottery narrowly to exclude Irwin's passive lotteries, such as raffles. PO provides no legal framework for its construction, does not acknowledge the term's ordinary meaning, nor allege lexicography or disclaimer—and all of the intrinsic and extrinsic evidence support Petitioner's position.

As for Irwin's “quick-pick card,” PO argues that it is not a lottery ticket because it is discarded after use. But Irwin expressly calls it a lottery ticket that is used for redeeming a winning ticket.

Finally, PO does not dispute that the combination of Szrek and Llach discloses the challenged claims. Instead, PO argues lack of motivation to combine. Yet PO does not dispute that Llach's teachings provide numerous benefits—PO instead argues Szrek already provides such benefits, which is not true.

II. DR. MILLER IS NOT A POSITA

PO's expert Dr. Jeffrey Miller has no experience with lottery systems and minimal experience with POS activation systems. Accordingly, he does not meet the definition of a POSITA and his opinions are entitled to no weight. *Kyocera Senco Indus. Tools Inc. v. ITC*, 22 F.4th 1369, 1376-77 (Fed. Cir. 2022); *Avail Medsystems, Inc. v. Teladoc Health, Inc.*, IPR2022-00444, Paper 10 (July 21, 2022).

A POSITA has “a ***working knowledge of POS activation systems and lottery systems that was gained through a mixture of training and work experience*** in the relevant field,” such as having a degree and some years of experience Pet. 2-3. PO agrees with this definition. POR 19.

Dr. Miller lacks ***any*** experience in lottery systems. His 59-page *curriculum vitae* describes his career in meticulous detail, yet lacks even a passing mention of lottery systems. EX2053; EX1037, 8:6-10. Similarly, the “Qualifications” section of his declaration does not mention any experience with lottery systems. EX2052, ¶¶3-15. When asked at his deposition to discuss his experience, Dr. Miller did not any experience with lottery systems. EX1037, 7:17-20:21

Dr. Miller likewise has limited POS activation experience. His only experience amounts to eight months at a company he founded 20 years ago, a company that never developed a commercialized activation system. EX2053, 10; EX2052, ¶7. Notably, his system did not use activation networks, such as those

described in the '451 patent or the prior art. EX1037, 46:2-7. Indeed, Dr. Miller did not have familiarity with how gift card distribution networks generally worked. *Id.*, 24:23-25:8.

III. MR. HUTTON'S TESTIMONY SHOULD BE GIVEN PROPER WEIGHT

PO argues that Mr. Hutton's testimony should not be given any weight. POR 20-25. PO does not dispute Mr. Hutton has the requisite skill and experience to testify, rather, PO simply uses its disagreements with him as an attempt to discredit his testimony.

PO argues that it has "identifie[d] various elements that are not met by Irwin's disclosure," and therefore Mr. Hutton supposedly "fails to explain why a POSITA would regard Irwin's disclosure as meeting these claims' recitations." POR 20-21. Not so. As explained below, PO's assertions are wrong, and Mr. Hutton's declaration offers substantial support for his opinions.

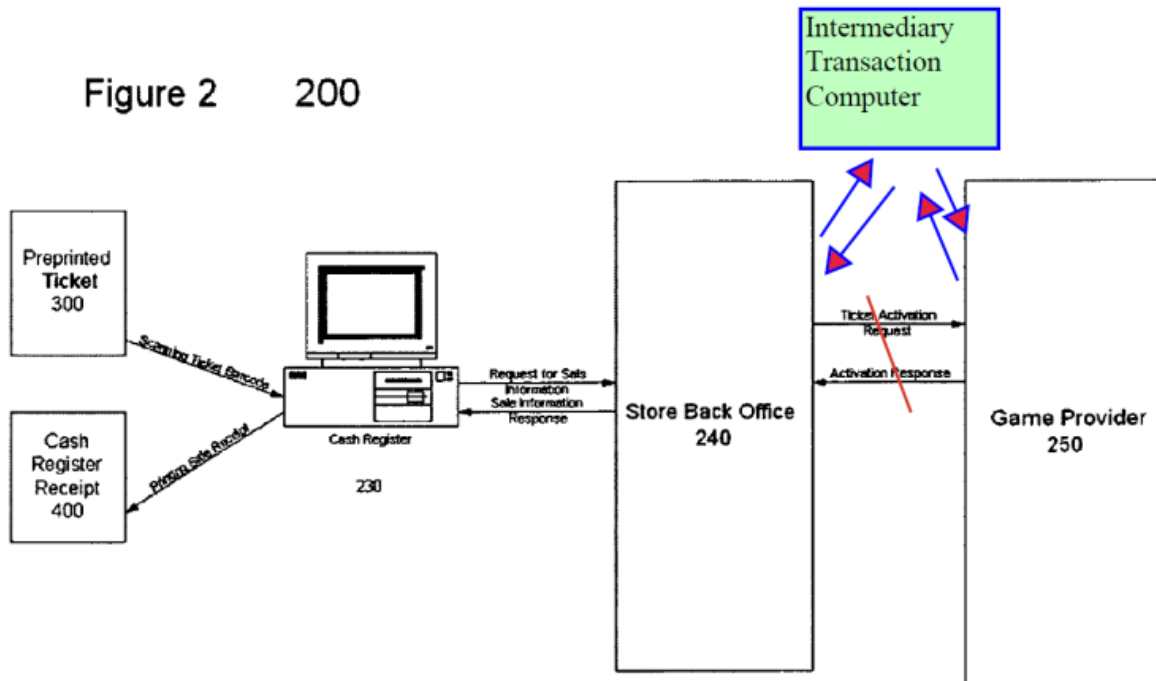
PO next argues that, with respect to the Szrek-Llach combination, Mr. Hutton has failed to explain "how the modification would occur." POR 21-22. This too is untrue—Mr. Hutton provided a lengthy rationale to combine the references. EX1003, ¶¶180-87.

PO next argues that Mr. Hutton "has no basis to opine on how Patent Owner entered the lottery activation business." POR 22 (citing EX1003, ¶183). Personal knowledge is not necessary to opine on matters relevant to his expertise. *Daubert v.*

Merrill Dow Pharmaceuticals, Inc., 509 U.S. 579, 592 (1993). Mr. Hutton has significant, decades-long experience in the lottery and gift card POS activation industry.

Finally, PO argues that Mr. Hutton “lacks credibility” because, when asked about a diagram drawn on-the-fly by PO’s counsel, Mr. Hutton initially testified that the diagram was not covered by his proposed combination of Szrek and Llach, but later corrected himself upon further review of Szrek. POR 22-25. There is nothing atypical about a witness refreshing their recollection following further review of a relevant document. A deposition is not a memory test.

PO also describes as “incongru[ous]” Mr. Hutton’s testimony that his Szrek-Llach combination covers a modification of Szrek as reflected in the below figure annotated by PO’s counsel. EX2049; POR 23-24.



Yet the above diagram is plainly consistent with Mr. Hutton's proposed combination where Llach's "intemediary transaction computer [is] **between** Szrek's cash register and game provider system." EX1003, ¶180.

IV. CLAIM CONSTRUCTION

PO takes diametrically opposed positions on claim construction. On the one hand, PO argues the terms should be given their "plain and ordinary meaning in this POR" (POR 20). Yet, when applying the terms to the prior art, PO seeks to narrowly construe the term "random draw." Importantly, PO asks the Board to do so with **no basis**—PO fails to provide any legal framework for narrowing this term and does not provide any construction analysis. This is, of course, improper. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005); *Thorner v. Sony Computer Entertainment America LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012).

A. “random draw”

PO construes a “random draw” lottery as one in which “numbers are randomly selected during the draw event and compared to numbers on a player’s ticket.” POR 41. PO’s construction is contrived to include “lotto-type” games while excluding other types of “random draw” games such as passive games. POR 40-41. “Passive” games are akin to raffles, where “tickets are drawn to win designated prizes,” and of course, the draw is *random*. POR 40-41; EX1030, 16:44-45 (“Drawings are subsequently held picking the identifiers that correspond to specific prizes.”). PO’s primary distinction between these two types of random games is that in a passive game, “the drawing always yields a winner,” whereas in a lotto-based game, the draw sometimes yields no winner. POR 41.

PO’s narrow construction is improper. As an initial matter, PO fails to perform the requisite analysis outlined by *Phillips*. Neither PO nor its expert offers or even acknowledges the plain meaning of “random draw,” or refer to *any* intrinsic evidence. Nor does PO assert that “random draw” was defined by lexicography or that PO disavowed its scope. *Thorner*, 669 F.3d at 1365 (“There are only two exceptions to this general rule: 1) when a patentee sets out a definition and acts as his own lexicographer, or 2) when the patentee disavows the full scope of a claim term either in the specification or during prosecution.”).

The plain meaning of “random draw” includes any **random draw-based** game, including passive games like raffles, because, as PO readily admits, passive games involve the **random drawing** of eligible tickets. POR 41; EX1036, ¶¶5-9. The words “random” and “draw” have widely-understood meanings, and there is nothing about the plain meaning of the phrase “random draw” to limit the term to the specific type of draw proposed by PO, *i.e.* generating random numbers where there may not be a winner. EX1036, ¶5.

This understanding is confirmed by the intrinsic evidence. Indeed, the specification clearly states the patent is directed to “**draw based** lottery tickets.” EX1001, 1:18-21. The specification explains that “[b]roadly there are two types of lotteries”: (1) “instant win lotteries” and (2) “**draw-based** lotter[ies] or ‘online’ lotter[ies], **where a player makes a wager on a subsequently occurring event,**” *i.e.* a **draw**. EX1001, 1:26-33. An “instant win lottery” includes scratch-off tickets, where a customer “instantly” knows if the ticket is a winner and where no subsequent drawing takes place. EX1001, 1:28-31; EX1036, ¶10. Thus, the specification’s description categorizes games into two types: those that involve a draw (draw-based lotteries) and those that do not (instant win lotteries). A passive lottery game squarely fits into the description of draw-based lotteries, not instant win lotteries. EX2052, ¶124 (“[P]assive game tickets are entered in a **drawing** from which tickets

are **drawn** for prizes”); EX1037, 45:7-10 (“A passive lottery game is also not an instant lottery game.”); EX1036, ¶11.

Indeed, the specification goes on to provide two examples of draw-based games: one where “the numbers are drawn ... by the lottery organization” and one where the numbers are instead “generated.” EX1001, 1:37-41. A POSITA would understand that the former example would include a **raffle** where “numbers are drawn” from a pool of eligible tickets, and the latter example is a **lotto-based game** where “numbers are ... generated” randomly by a computer. EX1036, ¶12. It is axiomatic that a claim interpretation that excludes embodiments in the specification “requires strong support,” which is not present here. *Wanker v. United States*, 152 Fed. Cl. 219, 241 (Fed. Cir. 2021) (“[E]xcluding embodiments from a claim construction is not a matter of course and requires strong support.”).

The prosecution history is consistent. In successfully distinguishing the Sandvick reference, the applicant argued that Sandvick is limited to “instant-winner lottery games,” which are distinguishable from the application’s “claimed **draw-based** games.” EX1002, 660. The applicant then argued that “the present claims are specifically drawn to **non-instant winner games and methods, i.e., ‘random-draw’** games and methods.” *Id.*, 662. In other words, consistent with the specification, the applicant explained that “random draw” games are **draw-based games** and broadly include **any** non-instant winner game. This would undoubtedly

include passive games like raffles, since they are draw-based games, not instant winner games. EX1036, ¶13.

Extrinsic evidence also supports the plain meaning of “random draw.” For example, a “Glossary of Lottery Terms” provided by the South Carolina Lottery defines a “[p]assive game” as a “**lottery game** similar to a **raffle** where a player buys a ticket with preprinted numbers” and “[t]he lottery later **randomly draws** numbers that are compared to the players’ tickets to determine the outcomes.” EX1038. Note that the glossary distinguishes between the passive game’s “randomly draw[n] numbers,” and the lotto-based game’s “randomly selected” numbers. *Id.*; EX1036, ¶14.

Another example is Spain’s National Lottery, which is one of the longest-running passive lottery games in the world. For the yearly Christmas draw, “winning tickets are selected using two huge lottery wheels,” where “[t]ickets are **randomly drawn** with one wheel while a second wheel gives the value of the prize to be awarded.” EX1039, 14; EX1036, ¶15.

PO does not cite to **any** intrinsic evidence in support of its construction. POR 41-42. And besides Dr. Miller’s declaration, PO does not cite to any extrinsic evidence discussing how ordinary artisans understand the meaning of “random draw.” Yet Dr. Miller has no experience with lottery systems, and he is not a

POSITA. His testimony therefore is entitled to no weight with respect to a POSITA's understanding of the term "random draw."

PO also appears to construe "lottery game" to exclude passive games. POR 43 ("Irwin ... function[s] essentially as *raffle tickets, not lottery tickets*."). PO, however, does not cite to any support for this proposition. Indeed, PO's own expert admitted that passive games are lottery games. EX1037, 45:7-10 ("A passive lottery game is also not an instant lottery game."). The specification's description of "draw-based lottery" plainly includes raffles, as did applicant's description of "random draw" games as any "non-instant winner game[]." EX1002, 662. Moreover, the extrinsic evidence clearly describes that passive games are lottery games. EX1038; EX1039, 14; EX1030, 16:41-46 ("In yet another embodiment, a comparable method can be used to sell passive game tickets by street vendors. ... Unsold tickets for a particular drawing must be returned to the *lottery*"); EX1036, ¶¶16-17.

For these reasons, the Board should construe "random draw" lottery games to be any draw-based lottery game, including passive lottery games.

V. GROUND 1: IRWIN ALONE RENDERS THE CLAIMS OBVIOUS

Petitioner's Ground 1 presented two theories based on Irwin alone, one based on Irwin's "preprinted passive tickets" and one based on Irwin's "quick-pick card."

A. Irwin's "preprinted passive tickets" embodiment renders the claims obvious

PO first argues that passive games are not a "random draw lottery." POR 40-41. As discussed above, PO's argument relies on a narrow construction of "random draw" that is not supported by the intrinsic or extrinsic evidence—to the contrary, the intrinsic and extrinsic evidence clearly establish that "random draw" lottery games include passive games like raffles.

PO next argues that the "preprinted passive tickets" are not "selected by a customer prior to initiation of a check-out processor and [] presented by the customer for activation during the check-out process." POR 41-46

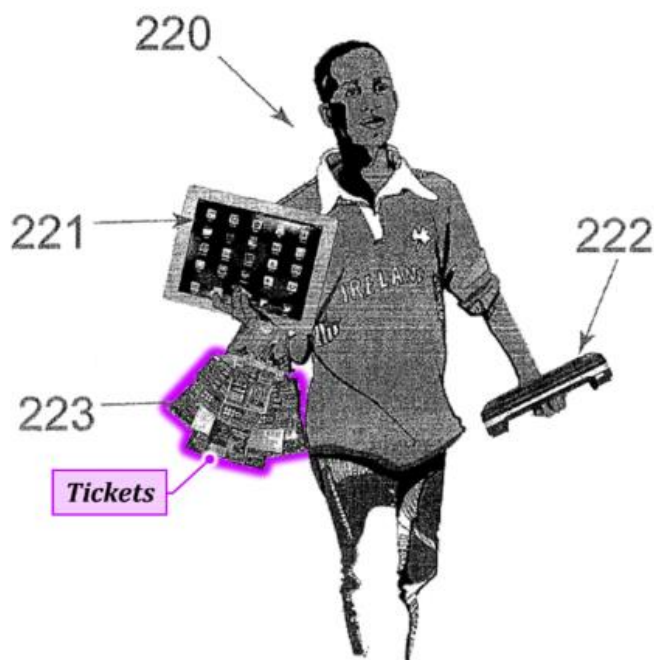
PO's citations to Irwin are inapposite, as they relate specifically to a street vendor's sale of "instant tickets" in a prior art environment, not Irwin's inventive sale of passive tickets. For example, PO misleadingly quotes that street vendors conduct sales "on the spot" without providing the entire quote: "***Traditionally***, these street vendors would roam with a limited inventory of ***instant tickets*** literally conducting street sales and ***paying small prizes on the spot.***" EX1030, 12:44-52. PO argues that "on the spot" sales apply to passive tickets and do not involve "any check-out process." POR 42-43. But this disclosure is with respect to "[t]raditional" prior art systems where there is a "lack of connectivity to a lottery central site," not to the sale of passive tickets. EX1030, 12:52-58. Moreover, unlike the passive tickets described in Irwin, instant tickets do not require activation by a central

system, hence their name and why redemption can be performed “on the spot.”
EX1036, ¶10.

By contrast, Irwin discloses that passive tickets are “scanned and recorded in a central site database *at the time of sale*,” i.e. the *check-out process*. Indeed, the ’451 patent confirms that the first step of the “checkout process” is when “the pre-printed ticket is *scanned by the cashier*.” EX1001, 4:24-26. PO is simply wrong that sales occur “on the spot” without a check-out process.

As the Petition and Mr. Hutton explained, it would have been obvious that the street vendor “allow[s] a customer to select and present the preprinted passive tickets [prior to check-out], because that would allow the customer to choose which ticket to purchase, especially when the vendor may have different types of lottery tickets for sale.” EX1003, ¶104. Indeed, Irwin teaches that the street vendor may have instant tickets, on-line tickets *and* preprinted passive tickets for sale, and there may be different types passive tickets. EX1030, 13:40-42, 16:41-42, Figs. 20 and 21 (depicting different types of preprinted passive tickets). And Dr. Miller admitted that allowing customers to select a card and present it prior to check-out was well-known. EX1037, 26:7-17. Thus, allowing the customer to pick up the preprinted passive ticket from the vendor’s stand and present it to the street vendor prior to the scanning of the ticket would have been obvious and desirable.

In fact, the street vendor in Figure 16 would likely have difficulty selecting and presenting the ticket to the customer, since his hands are otherwise preoccupied. EX1030, Fig. 16 (reproduced below as annotated by PO). Hence, a POSITA would understand and find it desirable that the customer selects and presents the ticket. EX1003, ¶104; EX1036, ¶¶18-19.



Irwin (EX1030), FIG. 16 (annotated)

PO does not dispute the obvious benefit of allowing the customer to select and present the ticket as described by Mr. Hutton. Instead, PO argues that this obviousness argument is “contradicted directly by Irwin’s disclosure that street vendors carry printed tickets on their person and they conduct sales with consumers ‘on the spot,’ which “teaches that all interaction between a customer and a street vendor occurs in a single transaction.” POR 46. PO continues to misquote the “on

the spot” teaching, and regardless, nothing about the tickets being carried by the street vendor or sold “on the spot” precludes the obvious possibility of the customer selecting and presenting the ticket before it is scanned, *i.e. prior to the check-out process*. EX1036, ¶20.

B. Irwin’s “quick-pick card” embodiment renders the claims obvious

As discussed in the Petition and by Mr. Hutton, Irwin discloses a manufactured, pre-printed “plastic hanging card” or “quick-pick card” that is a ticket for quick-pick lotteries. Pet. 13-14; EX1003, ¶100; Fig. 12 (reproduced below).

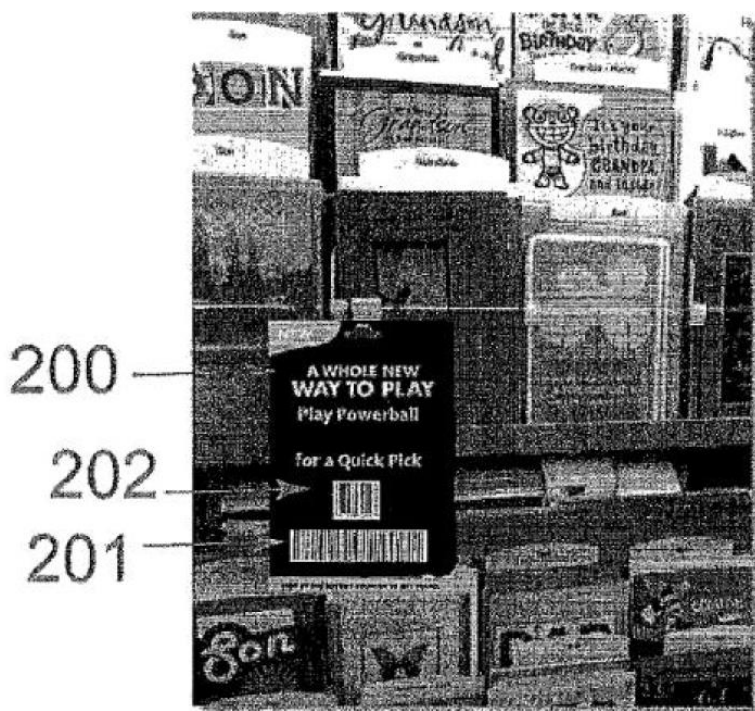


FIG 12

PO argues that Irwin’s “quick-pick card” is not a “lottery ticket” because it is instead “used to create a separate ... ‘on-line ticket’” which “[a] POSITA would

regard ... as the lottery ticket.” POR 28-29. But PO provides no support for its conclusion—nor can PO rely on the testimony of its expert, who is not a POSITA.

Indeed, Irwin refers to these cards as “lottery tickets.” Irwin describes the card as a “quick-pick card,” which is “a quick-pick for a given on-line game,” *i.e. lottery games*. EX1030, 9:51-56.

Moreover, Irwin’s published application (which was published over a year before the earliest filing date of the ’451 patent), as well as Irwin itself, recites a claim where “**lottery tickets** sold by the vendor are **preprinted and registered** at the time of sale for a future drawing by the vendor scanning an **interchange compatible barcode** containing the BIN.” EX1040, cl. 7; EX1030, cl. 5. The only embodiment in Irwin that is preprinted and has an “interchange compatible barcode” is the quick-pick card. EX1030, 9:50-65; EX1036, ¶23.

Moreover, as the Petition pointed out, Irwin is directed to “processing of **lottery ... tickets**.” EX1030, Abstract. For the “quick-pick card” embodiment, the resulting “on-line ticket” is not created until **after** the check-out processing has completed. EX1030, 10:5-13 (“The lottery’s central site ... would then decode the quick-pick request ... and transmit a print command documenting the quick-pick and the assigned serial number to be printed on the merchant’s printer”). Thus, the only “processing” that occurs is of the “quick-pick **card**,” which the Abstract describes as the “processing of lottery ... **tickets**.” EX1030, Abstract; EX1036, ¶24.

PO also argues Irwin's "quick-pick card" is not activated because "[o]nce the plastic hanging card 200 is scanned ..., the plastic hanging card 200 has no other role in Irwin's system." POR 29, 33. But Irwin's published application recites a claim where "sale or **redemption** of lottery tickets ... is initiated by the vendor **scanning a card** having a barcode." EX1040, cl. 13. The "quick-pick card" is used to both sell and **redeem** the on-line ticket. Accordingly, once the check-out process completes for the quick-pick card, it has been **activated** for use in redeeming the on-line ticket, if it is a winner. EX1036, ¶25.

These disclosures in Irwin are entirely consistent with the '451 patent's description of a "lottery ticket," the plain meaning of which is a substrate that allows a customer to play and redeem a lottery. EX1036, ¶22. Nothing in the specification narrowly defines "lottery ticket" to preclude a substrate that is scanned and activated to generate an "on-line ticket" for a lottery. Nor did applicant make any statements in prosecution disclaiming the scope of "lottery ticket." During prosecution, applicant distinguished two references: Sandvick, which is discussed above and discloses instant tickets, and Gilmore. In Gilmore, a "'dummy' token" is used to print an on-line ticket. EX1029, ¶51. However, unlike Irwin's quick-pick card, Gilmore's "dummy token" is "discarded" after it is scanned. *Id.*, ¶54; EX1036, ¶26.

For these reasons, Irwin's "quick-pick card" is a "lottery ticket" that is activated.

C. Irwin renders obvious claim 11 and 12's providing "randomly determined lottery numbers"

PO claims that the Petition "makes no effort to identify where or how Irwin purportedly discloses lottery numbers being provided to the lottery central site 160 under either claim [11 or 12]." POR 47. Not true.

For claim 11, Petitioner argued that it would be obvious to generate the lottery numbers at the retailer POS, and quoted to Irwin's disclosure of the lottery central site transmitting "the quick-pick [number] and the assigned serial number to be printed on the merchant's printer." Pet. 36; Pet. 28 (quoting EX1030, 10:5-12). Thus it would be both necessary and desirable for lottery numbers to be provided to the lottery central site to give effect to Irwin's teaching that the lottery central site provides the lottery numbers. EX1036, ¶¶27-28. Because the lottery central site must record the numbers in order to determine whether a ticket is a winner, a POSITA would again understand it is both necessary and desirable to provide such numbers to the lottery central site. *Id.*

PO argues that Petitioner's motivation for generating the numbers at the POS "finds no support in Irwin's disclosure" because "Irwin never describes the lottery central site 160 as being resource-constrained." POR 48. Petitioner's motivation does not require that the server be "resource-constrained," only that there is a motivation to distribute some of the processing to the retailers' POS systems. And there is a benefit in distributing processing costs (such as energy consumption) that

to the retailers. E1036, ¶29; *Intel Corp. v. PACT XPP Schweiz AG*, 61 F.4th 1373, 1380 (Fed. Cir. 2023) (“[I]t’s not necessary to show that a combination is the *best* option, only that it be a *suitable* option.”) (emphasis in original). Moreover, PO does not dispute that it would be desirable to generate the numbers at the POS to allow the customer to confirm them.

For claim 12, Petitioner mapped the pre-printed lottery tickets’ “unique identifiers” as the “lottery numbers.” Pet. 37-38. Petitioner also cited to Irwin transmitting the “unique identifiers” to the lottery central site. Pet. 30 (“For pre-printed passive lottery tickets, the POS sends ‘unique identifiers’”). Petitioner also argued that it would be obvious to apply such teachings to quick-pick tickets. Pet. 38; EX1003, ¶157.

PO argues that “Irwin’s lottery central site 160 possesses its own random number generator.” POR 47. That does not address Petitioner’s obviousness theories, including the benefits of generating random numbers at the POS for claim 11.

As for claim 12, PO does not dispute Petitioner’s assertion that Irwin’s passive tickets embodiment sends the “unique identifiers” to the lottery central site, or that the “unique identifiers” are lottery numbers. PO also does not dispute that it would be obvious to apply such teachings to the quick-pick tickets.

VI. GROUND 2

PO does not dispute Ground 2 beyond what it says for Ground 1.

VII. GROUNDS 3 AND 4: A POSITA WOULD BE MOTIVATED TO COMBINE SZREK AND LLACH

PO argues only that a POSITA would not have been motivated to combine Szrek and Llach. PO does not dispute that Llach's third-party processor had well-known benefits. PO instead argues that those benefits were already present in Szrek and that the combination would add complexity. Neither argument is accurate or legally sufficient to rebut Petitioner's rationale.

A. PO is wrong that Llach would not improve Szrek

As explained in the Petition and by Mr. Hutton, a POSITA would have been motivated to combine Szrek and Llach at least because (1) it allows Szrek's system to use "a centralized system for activating lottery tickets from different retailers and different locations," (2) it allows "support for different game providers, such as different lottery companies," "reduc[ing] implementation costs," (3) it allows Szrek's system to "communicate with individual card issuers' authorization systems 160 to effectuate activation or deactivation of the transaction cards" and "communicate with other entities that may provide useful services." Pet. 47-48. The Petition also noted that Szrek expressly taught that its lottery activation system "is similar to a model following selling phone cards," which is precisely what Llach

describes, and that the combination gives effect to Szrek's teaching of its POS terminals "indirectly" communicating with Llach's transaction processor. Pet. 48.

PO does not dispute that these were all desirable benefits. EX1036, ¶¶30-31. Instead, PO argues that some (but not all) of them were already present in Szrek. However, PO largely does not point to any disclosure in Szrek but instead relies on the knowledge of a POSITA as well as **Llach**. This upends the entire purpose of an obviousness combination, which is to supplement the teachings of a reference that lacks explicit disclosure.

First, PO claims that "Szrek's system already has a centralized system for activating lottery tickets" which "are distributed to different retailers and retail locations." POR 55-56. However, PO relies on Figure 1, which depicts a **commercial printer** distributing pre-printed tickets to various distributors. EX1005, Fig. 1 (annotated by PO). Neither the figure nor Szrek explicitly disclose that the game provider system supports different retailers in different locations. EX1036, ¶32. Llach provides an indisputably beneficial teaching that fills in this missing disclosure in Szrek, and is therefore "the mere application of a known technique to a piece of prior art ready for the improvement." *KSR Intern. Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1740 (2007); EX1036, ¶32.

Second, PO claims that "Szrek's cash register ... already communicates with activation systems for different products," such as "phone cards, random draw

lottery tickets, and instant win lottery tickets.” POR 57-58. However, Szrek only discloses that lottery tickets are activated by one game provider, not multiple game providers. By contrast, the combination allows support for “different game providers, such as different lottery companies,” resulting in “reduce[d] implementation costs.” EX1003, ¶181. The combination also allows Szrek’s system to add additional game providers seamlessly via a centralized controller. EX1036, ¶33. This would greatly reduce implementation costs because adding or removing supported game providers could be performed at one central location rather than at hundreds of different retailers. *Id.*; EX1003, ¶181.

Third, PO argues that, with respect to “other entities that may provide useful services,” a POSITA would understand that Szrek already provides such a benefit because “[i]t was well known at the time that cash registers 230 natively possess functionality to process financial instruments such as checks, credit cards and stored-value cards,” as well as “auditing.” POR 58. PO further claims that such functionality would typically be “provided by the store’s back office system.” *Id.* But Szrek does not explicitly disclose that its back office could process, for example, the activation of gift cards as taught by Llach. EX1036, ¶34. And PO provides no evidentiary support beyond the say-so of its expert who, as explained above, is neither a POSITA nor someone familiar with gift card activation networks. Indeed, it would not be possible for a local back-office to activate a different vendor’s

merchant gift card (*e.g.* VISA gift cards), as such cards require adding value following confirmation of payment by the issuer—hence the need for Llach's transaction processor for gift card activation. EX1036, ¶34; EX1006, ¶14. Indeed, as Irwin teaches, gift card activation networks forego the “need to have a separate location or additional staff to handle any additional products piggybacking on the gift debit card activation system.” EX1030, 2:9-14; *see also* 4:15-19.

Fourth, PO argues Szrek already has “the ability to communicate ‘with individual card issuers’ authorization systems 160 to effectuate activation or deactivation of the transaction cards.” POR 59 (quoting Pet. 48). But PO admits Szrek provides no such teaching and instead turns to **Llach** as evidence of the well-known capabilities of a POS terminal. Arguing that a POSITA would not combine Szrek with Llach because of what **Llach** informs about what was known in the art, turns the obviousness analysis on its head. Moreover, nothing in Llach suggests that Szrek's “cash register 230 and store back office 240” alone could activate Llach's “many types of stored value cards offered by numerous card issuers.” EX1006, ¶3. Indeed, Llach teaches that a card's issuer, which is the “entity that provides the financial backing and/or payment processing accessed via the stored value card,” is a different entity than the retailer. EX1006, ¶14. It is not possible for the issuer to confirm payment without the use of an activation network, not just the retailer's back

office—which Llach teaches is performed using a third-party processor. EX1036, ¶35.

Notably, PO does not address Szrek's teaching that the POS and game provider system communicate "indirectly" via an intermediary. EX1005, 3:15-17; Pet. 48. Indeed, Szrek discloses that its POS communicates with another "system ***on behalf of game provider system.***" *Id.*, 3:17-18. Szrek therefore teaches a third-party intermediary, but leaves out implementation details. EX1003, ¶182. And a POSITA would look to Llach to provide such implementation details for how Szrek's POS terminals activate lottery tickets using an intermediary. *Id.*; EX1036, ¶36.

PO further argues that "the Petition's motivation to combine arguments leverage none of the functionality that Llach proposes," namely that "Llach's transaction processor affords card issuers opportunities to distinguish their products from other stored value cards by 'adding value to a stored value card in excess of [its] purchase price.'" POR 60 (quoting EX1006, Abstract, ¶4). Not true. The Petition proposed using "Llach's known techniques ... to activate substrates," *e.g.* stored value cards. Pet. 49; EX1003, ¶184. This includes Llach's teachings of "adding value to a stored value card in excess of the purchase price." EX1006, Abstract. And as explained in the Petition, a POSITA would be motivated to do so because of the benefits described by Llach. POR 48; EX1003, ¶¶30, 32.

Finally, PO argues that Mr. Hutton “repudiat[ed] Petitioner’s proposed modification of Szrek.” POR 61. This is an blatant mischaracterization of Mr. Hutton’s testimony—as explained above, he testified that both of the annotated figures drawn on-the-fly by PO’s counsel were covered by his proposed combination, and it is plain on its face that both diagrams have the transaction processor “between Szrek’s cash register and game provider system.” EX1003, ¶180; EX2051, 112:2-113:24, 128:7-129:8.¹

For these reasons, it was obvious to combine Szrek and Llach

B. The combination does not increase complexity

PO alleges the combination would lead to disadvantages. However such arguments are not legally sufficient to rebut a motivation to combine. *Intel*, 61 F.4th at 1380 (“[I]t’s not necessary to show that a combination is the *best* option, only that it be a *suitable* option.”) (emphasis in original); *Honeywell International Inc. v. 3G Licensing, S.A.*, 124 F.4th 1345, 1355 (Fed. Cir. 2025) (“[O]bviousness does not require that a particular combination must be the preferred, or the most desirable, combination”); *Allied Erecting & Dismantling Co. v. Genesis Attachments, LLC*,

¹ Petitioner understands that Patent Owner will be requesting leave to file a corrected version of Exhibit 2051. This Reply cites to the page and line numbers of the corrected version.

825 F.3d 1373, 1383 (Fed. Cir. 2016) (“A given course of action often has simultaneous advantages and disadvantages”).

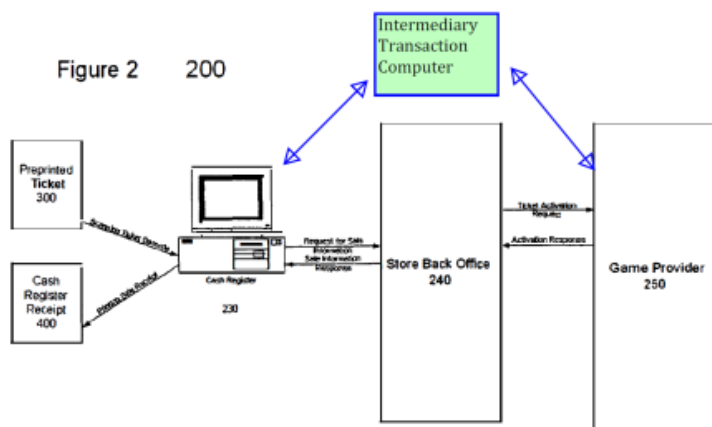
Regardless, PO is incorrect that the combination would lead to the alleged disadvantages.

PO argues that the combination “only adds delay, reduces efficiency, and creates implementation complexities by converting a simple, direct communication exchange into an exchange that traverses multiple systems.” POR 52. As explained by Mr. Hutton, this is incorrect. Computing systems and networks were generally imperceptibly fast by 2015. EX1036, ¶37. And a centralized intermediary greatly reduces complexity and implementation costs because modifications could be performed at one central location rather than at hundreds of different retailers. *Id.*

PO also argues that in the combination, Szrek’s “cash register 230 no longer can process scanned UPC codes uniformly and request product type and price information from the store back office 240,” because “the cash register ... must direct communications to different entities, the store back office 240 vs. Petitioner’s intermediary transaction computer.” POR 54. As an initial matter, Szrek already teaches that its system allows a cash register to forego the use of the back office to request product and price information. EX1005, 2:48-50 (“Phone card registration may happen by sending registration request directly from the cash register to the phone service provider or indirectly via the store back office.”); 3:15-16 (“[T]he cash

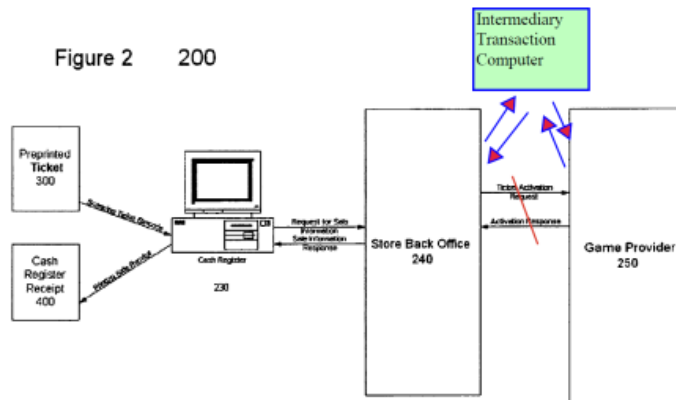
register is capable of communicating with the game provider system ... **directly**");
4:37-38 (“[W]here the preprinted ticket barcode is scanned by the cash register, price
information is retrieved ... from the game provider during ticket activation.”).

In addition, Petitioner's combination does not forego the back office for
retrieving product type and price information. EX1036, ¶38. As Mr. Hutton
testified, in the below Figure 2 that was annotated by PO's counsel, the “cash register
still communicate[s] with the back office to perform whatever function necessary by
the back office.” EX2051, 128:21-129:8.



Szrek (EX2050), FIG. 2
(first annotation developed during
expert deposition)

In addition, in the alternative arrangement in the below figure, the cash
register continues to use the back office as described by Szrek,. EX2051, 107:24-
109:7.



Szrek (EX2049), FIG. 2
(second annotation developed during
expert deposition)

Finally, PO argues that additional complexity is introduced because Szrek's audit processing would now have "three accountings" instead of two: one at the back office, one at the game provider, and now one at the intermediary transaction computer. POR 54-55. But neither PO nor its expert explain why the intermediary transaction computer would need to perform its own accounting of lottery ticket activations. In Petitioner's combination, Llach's third-party transaction processor is an "intermediary between the POS terminal and game provider system." EX1003, ¶186. The transaction processor need not record its own accounting for Szrek's POS terminal and game provider to ensure that their accountings of activations are consistent. EX2051, 79:9-80:6; EX1036, ¶39. Moreover, even if the transaction processor is keeping an accounting of lottery activation requests, neither PO nor its

expert explain the disadvantage of doing so, beyond a conclusory statement that it would add “complexity.” POR 55.

To the contrary, Llach describes that its transaction computer may have a “transaction log 170 [which] contains information about each transaction performed by stored value card transaction computer 150 and may be utilized by the reconciliation component 155 when reconciling accounts belonging to various vendors, merchants, card issuers and the stored value card transaction system administrator.” EX1006, ¶27. Thus, rather than add complexity, this teaching provides an additional motivation to combine Szrek and Llach. EX1036, ¶39.

Date: February 4, 2025

Respectfully submitted,

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**CERTIFICATE OF COMPLIANCE WITH
TYPE-VOLUME LIMITATION, TYPEFACE REQUIREMENTS,
AND TYPE STYLE REQUIREMENTS**

1. This Reply complies with the type-volume limitation of 5,600 words, comprising 5,598 words, as counted using the Microsoft Word software that was used to prepare this paper, excluding the parts exempted by 37 C.F.R. § 42.24(a).

2. This Petition complies with the general format requirements of 37 C.F.R. § 42.6(a) and has been prepared using Microsoft® Word 2016 in 14-point Times New Roman.

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on February 4, 2025, true and correct copies of the foregoing document and supporting materials were served in its entirety on the PO at the following email addresses:

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