Trials@uspto.gov
571-272-7822

Paper 34
Entered: February 6, 2025

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

INTERACTIVE COMMUNICATIONS INTERNATIONAL, INC.,
Petitioner,

v.

BLACKHAWK NETWORK INC.,
Patent Owner.

IPR2023-01235
Patent 9,865,135 B2

Before LYNNE H. BROWNE, BART A. GERSTENBLITH, and ARTHUR M. PESLAK, *Administrative Patent Judges*.

GERSTENBLITH, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining No Challenged Claims Unpatentable
Dismissing as Moot Petitioner's Motion to Exclude
Granting in Part, Denying in Part, and Dismissing as Moot in Part
Patent Owner's Motion to Exclude
35 U.S.C. § 318(a)

I. INTRODUCTION

A. Background

Interactive Communications International, Inc. ("Petitioner") filed a Petition (Paper 2, "Pet.") requesting institution of *inter partes* review ("IPR") of claims 1–6 ("the Challenged Claims") of U.S. Patent No. 9,865,135 B2 (Ex. 1001, "the '135 patent"). Blackhawk Network, Inc. ("Patent Owner") filed a confidential Preliminary Response (Paper 6, "Prelim. Resp."), a redacted, public version of the Preliminary Response (Paper 7), and a combined Motion for Protective Order and Motion to Seal (Paper 8), which Petitioner did not oppose. Applying the standard set forth in 35 U.S.C. § 314(a), we instituted an *inter partes* review as to all claims and grounds set forth in the Petition. Paper 11 ("Inst. Dec."). Additionally, we granted Patent Owner's combined Motion for Protective Order and Motion to Seal. *Id.*

After institution, Patent Owner filed a Patent Owner Response (Paper 17, "PO Resp."), Petitioner filed a Reply (Paper 18, "Pet. Reply"), and Patent Owner filed a Sur-reply (Paper 20, "PO Sur-reply"). Additionally, each party filed a motion to exclude and related briefing. In particular, Petitioner filed a Motion to Exclude (Paper 24), Patent Owner filed an Opposition to Petitioner's Motion (Paper 26), and Petitioner filed a Reply to Patent Owner's Opposition (Paper 29). And Patent Owner filed a Motion to Exclude Evidence (Paper 25, "PO MTE"), Petitioner filed an Opposition to Patent Owner's Motion (Paper 27, "Pet. Opp." or "Petitioner's Opposition"), and Patent Owner filed a Reply in Support of Motion to Exclude Evidence (Paper 28, "PO MTE Reply"). An oral hearing was held on November 21, 2024, and the transcript is of record. Paper 33 ("Tr.").

During the oral hearing, Petitioner withdrew its Motion to Exclude. Tr. 38:1–7. Therefore, Petitioner's Motion to Exclude is dismissed as moot.

We have jurisdiction pursuant to 35 U.S.C. § 6. This Decision is a Final Written Decision under 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73 as to the patentability of the Challenged Claims. Petitioner bears the burden of proving unpatentability of the Challenged Claims. *Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015). To prevail, Petitioner must prove unpatentability by a preponderance of the evidence. *See* 35 U.S.C. § 316(e) (2018); 37 C.F.R. § 42.1(d) (2021). Having reviewed the arguments and the supporting evidence, we determine that Petitioner has not shown, by a preponderance of the evidence, that claims 1–6 of the '135 patent are unpatentable. Additionally, for the reasons explained below, we grant in part, deny in part, and dismiss as moot in part, Patent Owner's Motion to Exclude Evidence.

B. Related Proceedings

Petitioner identifies PGR2020-00084, PGR2020-00085, and *Blackhawk Network, Inc. v. Interactive Communications International, Inc.*, No. 2022-01650 (Fed. Cir.), as related matters. Pet. 74–75. In PGR2020-00084, Petitioner challenged several claims of U.S. Patent No. 10,769,894 B2 ("the '894 patent"), which issued from an application filed as a continuation of the application that issued as the '135 patent.[1] After trial, the Board held all challenged claims unpatentable (Ex. 1008

[1] During prosecution of the '894 patent, Patent Owner filed a terminal disclaimer to overcome a double patenting rejection in view of the '135 patent. Ex. 1033 ('894 patent file history), 154; *see also* Pet. 9 (discussing the prosecution history of the '894 patent).

(Final Written Decision)) and the United States Court of Appeals for the Federal Circuit ("Federal Circuit") affirmed in *Blackhawk Network* (Ex. 1009). In particular, the Federal Circuit determined that "[t]he Board properly construed Szrek's disclosure of the inter-operational characteristics of a store's back office, [point of sale (POS)] terminal, and lottery administration system" and that "the Board properly analyzed how a skilled artisan would have interpreted Szrek's teachings." *Blackhawk Network*, No. 2022-01650, 2023 WL 3861082, at *2 (Fed. Cir. June 7, 2023). In PGR2020-00085, the Board denied institution. Patent Owner correctly notes that the "PGR proceedings to which . . . Petitioner cites have concluded." Paper 4 (Patent Owner's Mandatory Notices), 1.

Petitioner also identifies *Blackhawk Network, Inc. v. SL Card Company Inc.*, No. 2:21-cv-00813-PHX-MTL (Ariz. Superior Court), as a related matter ("Arizona state litigation"). Pet. 75. Petitioner explains that, in this proceeding, Patent Owner asserts a breach of contract claim against SL Card, "a company that an affiliate of Petitioner acquired on March 12, 2019." *Id.* The parties agree that the Arizona state litigation does not involve infringement or invalidity of any patent. *Id.*; Paper 4, 1.

C. Real Parties in Interest

Petitioner identifies Interactive Communications International, Inc. as a real party in interest. Pet. 74. Patent Owner identifies Blackhawk Network Inc. as a real party in interest (owner of all substantial interests in the '135 patent by assignment). Paper 4, 1.

In the Preliminary Response, Patent Owner asserts that Petitioner also should have identified "SL Card Company Inc. (often called 'Linq3')" as a

real party in interest. Prelim. Resp. 1–2, 32–34. In the Institution Decision, we stated:

> To the extent Patent Owner seeks to pursue its argument that Linq3 is a real party of interest to Petitioner, even though no time bar under 35 U.S.C. § 315(b) has been asserted, Patent Owner may raise the issue of real party in interest again in its Patent Owner Response and the parties may brief and argue the issue during trial.

Inst. Dec. 11. In its Patent Owner Response, Patent Owner did not raise the issue of challenging Petitioner's identified real party in interest. *See generally* PO Resp. Thus, we need not address this issue further because we find that Patent Owner has waived any challenge to Petitioner's identification of the real parties in interest in this proceeding. *See* Paper 12 (Scheduling Order), 9 ("**Patent Owner is cautioned that any arguments not raised in the response may be deemed waived.**").

D. The Asserted Grounds of Unpatentability and Declaration Evidence

Petitioner challenges the patentability of claims 1–6 of the '135 patent on the following grounds:

Claim(s) Challenged	35 U.S.C. §[2]	Reference(s)/Basis
1–6	103	Szrek[3]
1–6	103	Llach,[4] Szrek

Pet. 2. Petitioner supports its challenge with a Declaration of Michael Hutton (Ex. 1003) and a Supplemental Declaration of Michael Hutton (Ex. 1038). Patent Owner supports its arguments with a Declaration of James McDonald (Ex. 2034) and a Declaration of Jeffrey Miller, Ph.D. (Ex. 2038). Additionally, Patent Owner filed the deposition transcript of Mr. Hutton (Ex. 2044).

E. The '135 Patent

The '135 patent is directed to "[a] system and method of selling pre-printed lottery tickets for random draw lotteries through the retailers POS without the use of additional lottery hardware." Ex. 1001, code (57). The '135 patent teaches that, broadly speaking, there are two types of lotteries: (1) "instant win lotteries where a printed ticket provides all of the lottery information;" and (2) a "draw-based lottery or 'online' lottery, where a player makes a wager on a subsequently occurring event." *Id.* at 1:21–28. For the draw-based lotteries, the '135 patent teaches that the typical ticket is printed using a lottery-specific terminal and specialized printing device that

[2] The Leahy-Smith America Invents Act ("AIA") included revisions to 35 U.S.C. § 103 that became effective on March 16, 2013. Because the '135 patent has an effective filing date after March 16, 2013 (*see* Ex. 1001, codes (22), (60)), we apply the current version of § 103 here.

[3] U.S. Patent No. 7,627,497 B2, issued Dec. 1, 2009 (Ex. 1005, "Szrek").

[4] U.S. Patent Publication No. 2013/0041768 A1, published Feb. 14, 2013 (Ex. 1006, "Llach").

is wholly separate from the point of sale ("POS") terminal. *See id.* at 1:37–48.

The '135 patent teaches that, "[a]lthough the model of a single terminal and printer is effective for single checkout lane environments such as convenience stores and gas stations, it is not ideal for multi-lane environments such as grocery stores, discount and big box retailers." Ex. 1001, 1:48–52. A drawback of this system, according to the '135 patent, is that it requires a customer to wait in two separate lines (or at a minimum go to two separate locations) to purchase their goods and to purchase a lottery ticket, when in a multi-lane environment. *Id.* at 1:52–56. "This is extremely inconvenient for most customers who simply bypass the lottery counter." *Id.* at 1:56–58. Other drawbacks the '135 patent teaches are that "[i]nstalling an approved printer or any other piece of specialized [lottery] hardware at every point of payment within a retail environment is cost prohibitive and not an effective use of capital" because "not all points of payment are open at all times" and the use of specialized hardware increases the responsibility and training required for a cashier. *Id.* at 1:59–67.

As a result, the '135 patent states "[i]t would be desirable to enable customers to include a lottery draw ticket in their basket along with other goods and pay for that basket at any point of payment in a retail location" by using existing point of sale equipment and without requiring any additional specialized hardware. Ex. 1001, 2:5–14. And the '135 patent seeks to provide a "system and method of selling pre-printed lottery tickets for random draw lotteries through the retailers POS without the use of additional lottery hardware." *Id.* at code (57).

The '135 patent describes a system and method that uses a "pre-printed lottery ticket," which acts as a uniquely identifiable "legal instrument," to initiate and facilitate the legal transaction necessary between a customer and a lottery administration body at a POS register to enable customers to purchase a chance at winning a prize associated with an upcoming lottery. Ex. 1001, 2:65–3:21. In a more detailed explanation of the invention, the '135 patent describes an embodiment with components of a POS, transaction processor, and lottery system, as shown in Figure 6 below.

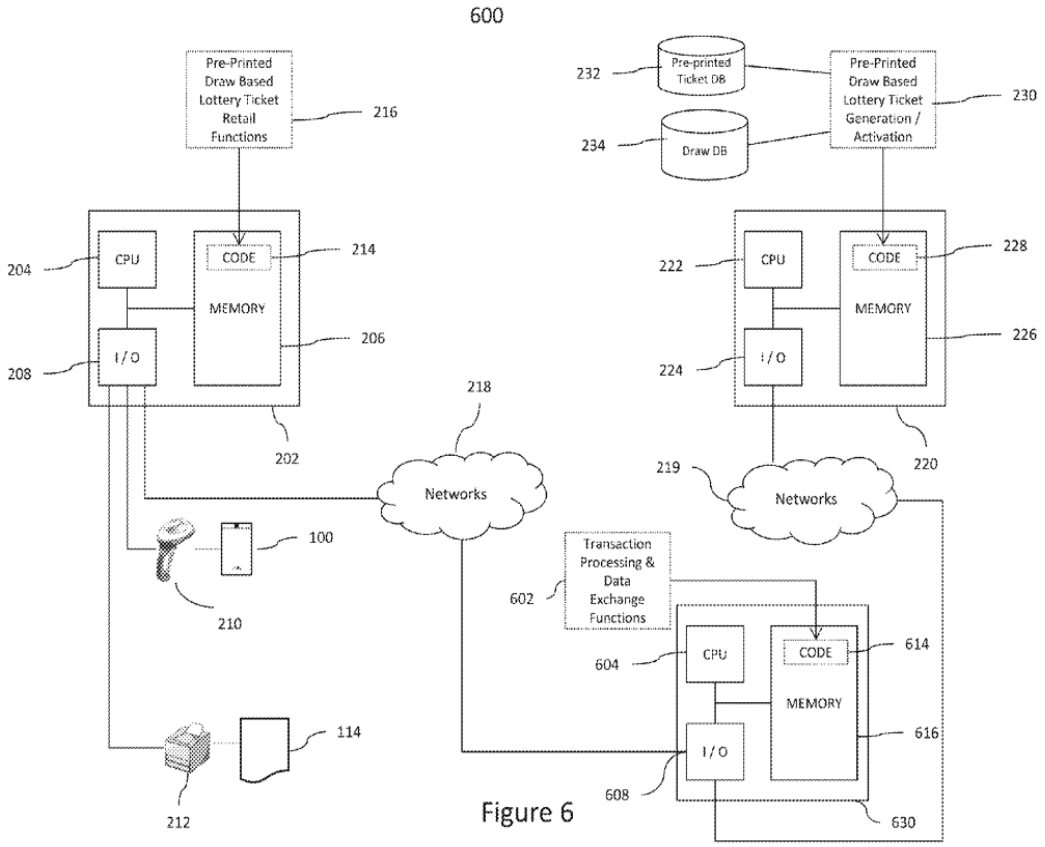

Figure 6

Id. at 2:31–32, Fig. 6. Figure 6 above "depicts components of a lottery system, point of sale environment and a transaction processor" that are "for purchasing a pre-printed lottery ticket." *Id.* at 7:66–8:2. As shown,

> the environment 600 for purchasing a pre-printed lottery ticket includes a retailer's point of sale terminal 202 for the retail of the pre-printed ticket, a lottery system 220 for the generation and activation of pre-printed ticket wagers and draw date and a transaction processor 630 to facilitate the exchange of data between the retailer's point of sale 202 and the lottery system 220 each connected to one other through one or more communication networks 218; 219.

Id. at 8:1–8.

The '135 patent states, "[t]he retailer's POS terminal 202 may include a central processing unit (CPU) 204, memory unit 206 and [I/O] interface(s) 208 for communicating with devices external to the POS terminal." Ex. 1001, 8:12–25. And the '135 patent teaches that "[t]he POS terminal 202 includes instructions 214 stored in the memory unit, which when executed by the processor unit 204 configure the POS terminal 202 to provide pre-printed draw-based lottery ticketing functionality 216," including the "functionality for communicating scanned in barcode information of pre-printed lottery tickets with the transaction processor system, and receiving confirmation of the pre-printed ticket's activation." *Id.* at 8:20–28.

The '135 patent describes lottery system 220 as including "[a] central processing unit (CPU) 222, memory unit 226 and I/O interface(s) 224 for communicating with devices external to the lottery system 220." Ex. 1001, 8:29–32. When processing unit 222 executes instructions 228 stored in the memory unit 226, it "configure[s] the lottery system to provide pre-printed draw-based lottery ticket activation and cancellation functionality 230," in addition to having the functionality to "generate draw and wager information

and associate the pre-printed ticket information in a draw information database 234." *Id.* at 8:33–35, 8:45–47.

Transaction processor system 630 is described by the '135 patent as including "a central processing unit (CPU) 604, memory unit 616 and [I/O] interface(s) 608 for communicating with devices external to the transaction processor system 630." Ex. 1001, 8:51–54. Memory unit 616 stores instructions that the CPU 604 executes to "provide transaction processing and data exchange functionality 602" with a plurality of different retailers to a single lottery system and enable the activation or cancellation of pre-printed lottery tickets to be performed at a retailer's POS terminal 202. *Id.* at 8:54–62. "Once activated, the pre-printed ticket serves as a lottery ticket and may be verified as any regular lottery ticket purchased from a lottery terminal." *Id.* at 9:22–24.

F. Illustrative Claim

Claims 1, 2, 4, 5, and 6 are the independent claims challenged in this proceeding. Claim 1 is illustrative of the claimed subject matter and is reproduced below with Petitioner's annotations added for reference (*see* Pet. vi):

> 1[pre]. A method of providing a lottery ticket for a random draw comprising:
> [a] scanning at a point-of-sale (POS) terminal a pre-printed lottery ticket to obtain unique identification information and product information from the pre-printed lottery ticket;
> [b] transmitting the unique identification information and product information from the POS terminal to a lottery administration system;
> [c] receiving at the POS terminal payment confirmation;
> [d] transmitting payment confirmation from the POS terminal to the lottery administration system;

> [e] receiving at the POS terminal from the lottery administration system draw details associated with the pre-printed lottery ticket; and
> [f] printing the draw details on a receipt.

Ex. 1001, 10:25–40.

II. ANALYSIS

A. Legal Standards – Obviousness

The U.S. Supreme Court set forth the framework for applying the statutory language of 35 U.S.C. § 103 in *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17–18 (1966):

> Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.

The Supreme Court explained in *KSR International Co. v. Teleflex Inc.* that

> [o]ften, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit.

550 U.S. 398, 418 (2007) (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) ("[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning

with some rational underpinning to support the legal conclusion of obviousness." (alteration in original))).

"Whether an ordinarily skilled artisan would have been motivated to modify the teachings of a reference is a question of fact." *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1327 (Fed. Cir. 2016) (citations omitted). "[W]here a party argues a skilled artisan would have been motivated to combine references, it must show the artisan 'would have had a reasonable expectation of success from doing so.'" *Arctic Cat Inc. v. Bombardier Recreational Prods. Inc.*, 876 F.3d 1350, 1360–61 (Fed. Cir. 2017) (quoting *In re Cyclobenzaprine Hydrochloride Extended-Release Capsule Patent Litig.*, 676 F.3d 1063, 1068–69 (Fed. Cir. 2012)).

B. Level of Ordinary Skill in the Art

Petitioner proposes that the level of ordinary skill in the art is

> an artisan with 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 (i) having a Bachelor's degree in computer science, computer communications, electrical engineering, or equivalent degree, coupled with at least three years of work experience; (ii) having a Master's degree in computer science, computer communications, or electrical engineering, but having less work experience; or (iii) having no formal degree, but having experience in the relevant field of at least six years of work experience.

Pet. 2–3 (citing Ex. 1003 ¶ 13).[5] Patent Owner states that, "[f]or the purpose of this proceeding, Patent Owner adopts the Petition's proposed definition of the level of ordinary skill in the art." PO Resp. 19.

---

[5] Petitioner proposes the same level of ordinary skill in the art that the Board adopted in PGR2020-00084. Pet. 2–3 (citing Ex. 1008, 11).

We find that the parties' agreed-upon level of ordinary skill in the art is consistent with the level of ordinary skill in the art reflected by the '135 patent and the prior art of record. *See* Inst. Dec. 14; *see Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001); *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995); *In re Oelrich*, 579 F.2d 86, 91 (CCPA 1978). Therefore, we adopt the parties' agreed-upon level of ordinary skill in the art, as articulated above, in our consideration of the issues presently before us.

C. Claim Construction

In this *inter partes* review, claims are construed using the same claim construction standard that would be used to construe the claims in a civil action under 35 U.S.C. § 282(b). *See* 37 C.F.R. § 42.100(b) (2020). The claim construction standard includes construing claims in accordance with the ordinary and customary meaning of such claims as understood by one of ordinary skill in the art at the time of the invention. *See id.*; *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–14 (Fed. Cir. 2005) (en banc). In construing claims in accordance with their ordinary and customary meaning, we take into account the specification and prosecution history. *Phillips*, 415 F.3d at 1315–17.

If the specification "reveal[s] a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess[,] . . . the inventor's lexicography governs." *Phillips*, 415 F.3d at 1316 (citing *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002)). Another exception to the general rule that claims are given their ordinary and customary meaning is "when the patentee disavows the full scope of a claim term either in the specification or during

prosecution." *Uship Intellectual Props., LLC v. United States*, 714 F.3d 1311, 1313 (Fed. Cir. 2013) (quoting *Thorner v. Sony Computer Entm't Am., LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012)). "The standard[] for finding . . . disavowal [is] exacting." *GE Lighting Solutions, LLC v. AgiLight, Inc.*, 750 F.3d 1304, 1309 (Fed. Cir. 2014). A finding of prosecution disclaimer "requires that the alleged disavowing actions or statements made during prosecution be both clear and unmistakable." *TecSec, Inc. v. Int'l Bus. Machs. Corp.*, 731 F.3d 1336, 1346 (Fed. Cir. 2013) (quoting *Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1325–26 (Fed. Cir. 2003)).

Additionally, only terms that are in controversy need to be construed, and these need be construed only to the extent necessary to resolve the controversy. *See Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019) ("The Board is required to construe 'only those terms . . . that are in controversy, and only to the extent necessary to resolve the controversy.'") (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

1. "transaction processor" and "data package"

In the Petition, Petitioner contends that we should follow the Board's decision in PGR2020-00084 and construe "transaction processor" and "data package" in accordance with each term's plain and ordinary meaning. Pet. 13; *see id.* at 13–19. Patent Owner does not address these claim terms in the Patent Owner Response nor does Patent Owner assert that the prior art relied on by Petitioner fails to teach either of these claim terms. *See generally* PO Resp. Accordingly, we need not construe these terms expressly because their meaning is not in dispute and their construction is not necessary to resolve the controversy before us.

2. "pre-printed lottery ticket"

The term "pre-printed lottery ticket" is recited in each of the Challenged Claims.[6] Patent Owner first raised the construction of this term in its Patent Owner Response. PO Resp. 20–23. Patent Owner contends "pre-printed lottery ticket" should be construed as "a lottery ticket which has no lottery numbers associated with it at the time of customer purchase." *Id.* at 20. In raising this construction, Patent Owner primarily relies on arguments raised during the prosecution of the '135 patent, which Patent Owner asserts make a clear and unmistakable disclaimer of claim scope. Petitioner contests Patent Owner's position for several reasons, including that the arguments are not clear and unmistakable, and, therefore, do not rise to the standard required for a disclaimer. We address the parties' positions as we discuss the construction of the term.

We start with the claim language. Claim 1 recites "[a] method of providing a lottery ticket for a random draw comprising: scanning at a point-of-sale (POS) terminal a *pre-printed lottery ticket* to obtain unique identification information and product information from the pre-printed lottery ticket." Ex. 1001, 10:25–28 (emphasis added). After scanning, claim 1 recites "transmitting unique information from the POS terminal to a lottery administration system" (element [1b]), "receiving at the POS terminal payment confirmation (element 1[c]), "transmitting payment confirmation from the POS terminal to the lottery administration system" (element 1[d]), "receiving at the POS terminal from the lottery administration system *draw details* associated with the pre-printed lottery

[6] Claim 3 depends from "claim 1 or 2," each of which expressly recites "pre-printed lottery ticket." Ex. 1001, 10:65 (preamble of claim 3).

ticket" (element 1[e]), and "printing the draw details on a receipt" (element 1[f]). *Id.* at 10:25–40 (emphasis added). The Specification makes clear that, in general, examples of "draw details" include "*the numbers* that have been selected by the customer or *generated on behalf of the customer*." *Id.* at 1:39–41 (emphases added).[7] As reflected above, the first recitation of any lottery numbers being associated with the pre-printed lottery ticket in claim 1 is in element 1[e] when the POS terminal receives the draw details from the lottery administration system. Although claim 1 does not recite how the draw details are determined or a method step in which draw details are determined, it at least suggests that the draw details were not already printed on the pre-printed lottery ticket because the draw details are received at the POS terminal *from* the lottery administration.[8] Nonetheless, claim 1 does not especially help in resolving the parties' dispute as to the meaning of "pre-printed lottery ticket."

Turning to the Specification, we find that, absent disclaimer, the meaning of "pre-printed lottery ticket" would include a pre-printed lottery ticket in which the wager information *is not* associated with the ticket prior

---

[7] The Specification also makes clear that the terms "wager" and "wager information" refer to lottery numbers. Ex. 1001, 2:65–3:1 ("The online lottery ticket is manufactured and distributed as pre-printed lottery tickets that do not have a draw date or *wager (i.e. lottery numbers)* assigned or associated to the pre-printed ticket." (emphasis added)), 6:2–5 ("The receipt may also include draw and *wager information 120* provided by the lottery system when the pre-printed ticket was activated." (emphasis added)), Fig. 1 (identifying wager information 120 as including the lottery numbers)).

[8] System claim 4 expressly recites "determining at the lottery administration system draw information for a subsequent draw being held." Ex. 1001, 11:14–16.

to scanning the ticket at a retailer's POS (in other words, wager information is not associated with the ticket before the time of customer purchase) *and* also would include a pre-printed lottery ticket in which the wager information *is* associated with the ticket prior to scanning (in other words, wager information is associated with the ticket before the time of customer purchase). Both parties agree that the Specification describes pre-printed lottery tickets with such breadth. *See* PO Resp. 21 n.2 (recognizing that the Specification includes an embodiment that is disclaimed in light of the asserted prosecution history disclaimer); Pet. Reply 6 (asserting that Patent Owner's position on disclaimer would result in disclaiming multiple embodiments from the Specification). Although the focus of the parties' arguments is the prosecution history, we walk through the Specification below to show how the Specification describes a pre-printed lottery ticket, particularly in relation to embodiments describing the lottery system generating the wager information and whether such wager information is associated with the pre-printed lottery ticket before the time of customer purchase, which we find, at a minimum, begins at the time of scanning.

First, in the Detailed Description of the invention, the Specification provides the following:

> *The online lottery ticket is manufactured and distributed as pre-printed lottery tickets that do not have a draw date or wager (i.e. lottery numbers) assigned or associated to the pre-printed ticket*. The pre-printed tickets would each have a unique bar code that identifies the particular pre-printed ticket and would also have a Universal Product Code bar code that would identify the lottery product. One bar code may contain both pieces of information. The pre-printed tickets are provided to retailers and are displayed to the consumer.

> *Until purchased and activated, the pre-printed tickets* have no value, *nor do they have any wager* or draw date *assigned*. They cannot be used for validation or redemption purposes prior to purchase. *Once scanned by the retailer's POS and paid for by the customer, the lottery system will generate wagers for the pre-printed ticket* and assign the next available draw date. *The generated numbers*, the draw date and unique ticket identifier *is printed on the customers shopping receipt*. . . . Draw information on the printed receipt also serves to confirm the activation of the pre-printed lottery ticket and the assignment of draw numbers and draw date.
>
> . . .
>
> *Since the wager* and draw date *information is not printed on the pre-printed ticket*, these details may be made available to the purchaser through other means including but not limited to the printed receipt, scanning the pre-printed ticket on existing lottery terminals or self-serve ticket checkers, and entering the pre-printed ticket's unique identifier into online websites or mobile applications.
>
> *A variation of the above is to produce pre-printed tickets with pre-printed wagers on the ticket*. In such a case, when the pre-printed ticket with pre-printed wagers is purchased, the lottery system may simply assign the next draw date to the pre-printed ticket and activate the ticket within the lottery system. *This lottery system in this variation will have a database of pre-printed tickets and associated lottery wagers*.

Ex. 1001, 2:65–3:52 (emphases added); *see also id.* at 4:30–50 ("Upon receiving information for activating a pre-printed ticket being purchased, the lottery system may initiate a pre-printed ticket wager by validating the pre-printed ticket details, generating the appropriate lottery wager information, for example generating an appropriate number of random numbers for the draw. The generated wager information may then be associated with unique identifier of the pre-printed ticket in the lottery

system and the pre-printed ticket activated for the next available draw. . . . Prior to the retailer's POS closing the sale and printing the receipt, the retailers POS system may communicate the payment confirmation and details to the lottery system. Once payment confirmation is received the lottery system may in turn communicate the lottery numbers and draw information to the retailers POS."). As the above description reflects and as relevant to the parties' dispute, there are two types of pre-printed lottery tickets described. One does not have any wager information assigned before scanning at a retailer's POS. The other has wager information assigned and printed on the pre-printed ticket before scanning at a retailer's POS.

Second, the Specification's description of the figures and embodiments similarly tracks the above discussion. Figure 1 of the '135 patent is reproduced below.

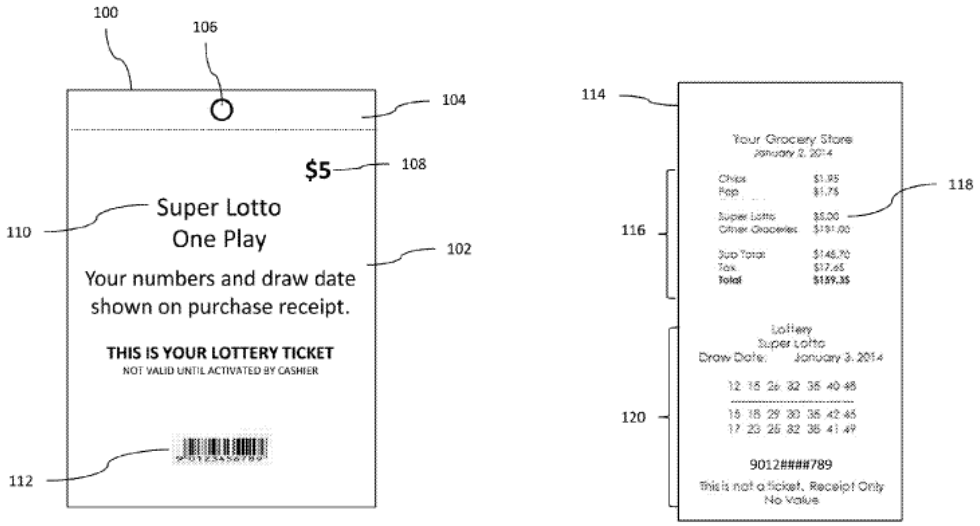

Figure 1

Figure 1 "depicts a pre-printed lottery ticket and purchase receipt." Ex. 1001, 5:46–47. As reflected in the figure, in this embodiment the lottery

numbers are not printed on pre-printed lottery ticket 100 and there is no indication the lottery numbers are associated with the pre-printed lottery ticket 100 prior to scanning at the retailer's POS. The '135 patent explains that "[t]he receipt may . . . include draw and wager information 120 provided by the lottery system when the pre-printed ticket was activated. The draw and wager information 120, may include . . . the wager numbers . . . ." *Id.* at 6:2–6.

Additionally, in its discussion of Figure 2, which "depicts components of a lottery system and point of sale environment" (Ex. 1001, 6:14–15), the '135 patent explains that lottery system 220 includes functionality 230, which "may . . . generate draw and wager information and associate the pre-printed ticket information in a draw information database 234. The draw information database 234 may be used in verifying subsequent tickets, including pre-printed lottery tickets, as winning tickets following the draw event" (*id.* at 6:54–60). This description of the lottery system follows the discussion reflected above indicating that the lottery system may *generate* the wager information. In other words, the wager information is not already printed on the pre-printed lottery ticket. The Specification's description of the embodiment involving a "transaction processor," shown in Figure 6, is similar. *See id.* at 8:29–50 (describing lottery system 220 and functionality 230 as "may . . . generate . . . wager information").

Figures 3, 4, 5, 7, and 8 each depict "a process for providing a ticket for a random draw." Ex. 1001, 6:61–62 (Fig. 3), 7:15–16 (Fig. 4), 7:39–40 (Fig. 5), 8:63–64 (Fig. 7), 9:29 (Fig. 8). In describing the process of Figure 3, the Specification states:

> A pre-printed lottery ticket is scanned (302) at a POS terminal 202 and unique identification information and details of the pre-printed ticket is communicated (304) to a *lottery system 220, which* verifies the ticket information and *determines* draw and *wager information (306), if the wager information is not already associated with the ticket information*.

Id. at 6:64–7:3 (emphases added). The Specification similarly describes, that in the processes of Figures 4, 5, 7, and 8, the lottery system determines the wager information, if the wager information is not already associated with the ticket information. *Id.* at 7:28–32 (Fig. 4), 7:44–50 (Fig. 5), 9:4–8 (Fig. 7), 9:45–49 (Fig. 8). The Specification thus reveals two options: (a) the wager information can already be associated with the ticket information prior to scanning the ticket and (b) if the wager information is not already associated with the ticket information prior to scanning, the lottery system determines the wager information. In other words, in (b), the lottery system determines the wager information *after* a customer has initiated the purchase process and the ticket is scanned at the retailer's POS.

Lastly, Figure 9 describes an embodiment of a pre-printed lottery ticket—pre-printed lottery ticket 912—that "unlike the other pre-printed lottery tickets described above, the pre-printed lottery ticket 912 is already associated with wager information 914 which may be printed on the ticket to allow selection of preferred numbers by a consumer." Ex. 1001, 10:5–10. For this embodiment, the Specification explains that the pre-printed ticket includes "the wager information, which is depicted as being the numbers of the draw 914." *Id.* at 10:10–14. Describing the process with pre-printed lottery ticket 912, the Specification states:

> When the bar-code 918 of the pre-printed ticket is scanned, the unique ID information may be used to activate the pre-printed ticket with the subsequent draw. *The wager information does not need to be generated since it is already generated and associated with the pre-printed lottery ticket in the lottery system, for example at the time of manufacture or printing.*

Id. at 10:14–20 (emphasis added). Thus, in this embodiment, the wager information is already associated with the pre-printed lottery ticket prior to scanning because the wager information is already printed on the pre-printed lottery ticket.

As reflected in the extensive discussion of the Specification, the '135 patent describes a pre-printed lottery ticket in which lottery numbers are not associated with the ticket at the time of customer purchase and in which the lottery system determines the lottery numbers (reflected in Figure 1's pre-printed ticket 100 and the processes described in Figures 3, 4, 5, 7, and 8 where the lottery system determines the wager information). And, the Specification describes a pre-printed lottery ticket in which lottery numbers are associated with the ticket before the time of customer purchase (reflected in Figure 9's pre-printed ticket 912 and the alternative described in the processes of Figures 3, 4, 5, 7, and 8 where the wager information is already associated with the ticket information).

We now turn to the prosecution history, which we find dispositive. Specifically, Patent Owner directs our attention to arguments made during prosecution of the '135 patent, where the applicant sought to distinguish Yacenda,[9] a reference the examiner relied on when rejecting the

---

[9] U.S. Patent No. 6,322,446 B1, issued Nov. 27, 2001. *See, e.g.*, Ex. 1002, 148 (identifying Yacenda).

then-pending claims, which include the Challenged Claims.[10] PO Resp. 21–22. Specifically, the applicant raised the following argument seeking to distinguish Yacenda from the then-pending claims:[11]

> *Yacenda* does not disclose a pre-printed lottery ticket comprising unique identification information. *See Yacenda* at col. 3, l. 23 – col. 4, ll. 50. Instead of disclosing a pre-printed lottery ticket, *Yacenda* discloses that its system allows the customer to select the numbers it wishes to play – i.e., not a pre-printed lottery ticket. *Yacenda* explains this important difference as follows:
>
>> Referring to FIGS. 2A and 2B, a flowchart illustrates a method for facilitating play of on-line state lottery games. To purchase lottery tickets, **a lottery player enters** his/her player information and **ticket information at a player terminal (step 101)**. The player information includes name, age, address, and account information of the lottery player. **The ticket information includes types and numbers of the lottery tickets to be purchased by the lottery player**. A lottery agent receives the player and ticket information through an electronic network, such as the Internet (step 103), and verifies that the lottery player satisfies certain criteria required by the state to

---

[10] In an Office Action mailed January 3, 2017, the examiner, *inter alia*, rejected then-pending claims 1–9 and 20 as anticipated by Yacenda and then-pending claims 15, 16, and 19 as obvious over Yacenda in combination with another prior art reference. Ex. 1002, 148–49 (rejecting claims 1–9 and 20), 149–50 (rejecting claims 15, 16, and 19); *see id.* at 139–53 (Jan. 3, 2017, Office Action). Then-pending claims 15–20 correspond to issued claims 1–6 (the Challenged Claims). *See id.* at 15–19 (Notice of Allowability, including the Examiner's Reasons for Allowance).

[11] The arguments by the applicant are reproduced such that the emphasis added by the applicant as well as the citations provided are preserved as reflected in the prosecution history.

> purchase the state lottery tickets (step 105). For example, the state may require in the criteria that a lottery player must be at least 18-year old and resident in the state. The lottery agent stores the player and ticket information of the verified player in a database (step 107), and transmits the ticket information to the state, i.e., a state lottery administrator (step 109). The state lottery administrator then issues serial numbers associated with the ticket information after confirming the purchase of the state lottery tickets by the lottery player (step 111). The issued serial numbers each of which is unique to each of the purchased lottery tickets are transmitted to the lottery agent. After receiving the serial numbers, the lottery agent transmits to the player terminal lottery game data including image data of the lottery tickets (step 113), and at the same time the lottery agent debits the player's account for the purchase of the lottery tickets (step 115) with the lottery game data, the player terminal displays virtual lottery tickets corresponding to the lottery tickets purchased **including ticket numbers selected by the player and associated with the serial numbers**. The player then plays a lottery game with the virtual lottery tickets displayed on the player terminal (step 117). After winning numbers are drawn by the state and transmitted to the lottery agent (step 119), **the lottery agent compares the winning numbers with the ticket numbers selected by the lottery player (step 121)**.

See Yacenda at col. 6, l. 44 – col. 7, l. 13 (emphasis added). Based on the foregoing, *Yacenda*'s system is directly opposite of the instant claims, as the instant claims require a "pre-printed lottery ticket" which has no lottery numbers associated with it at the time of customer purchase.

Ex. 1002, 75–76.[12] The applicant continued by pointing to the Specification and raising the following argument:

> The instant Specification defines the "pre-printed lottery ticket" as follows:
>
> > The online lottery ticket is manufactured and distributed as pre-printed lottery tickets that do not have a draw date or wager (i.e. lottery numbers) assigned or associated to the pre-printed ticket.
>
> *See* Application at p. 5, ll. 18-20.[13] The Application goes on to disclose:
>
> > During the checkout process, the pre-printed ticket is scanned by the cashier in the retailer's POS as they would scan any other product being purchased. The pre-printed ticket may require one, possibly two scans dependent on the bar code standard used and the technical abilities of the retailer's POS system. Upon scanning of the ticket the retailer's POS will be updated with the product description and cost. The retailer's POS will communicate the transaction type, such as purchase or cancel, and the pre-printed ticket details, such as product information and/or a unique identifier, to the lottery system though [sic] a secure communications channel. Upon receiving information for activating a pre-printed ticket being purchased, the lottery system may initiate a

---

[12] Although the quotation of the applicant's argument was from the context of then-pending claims 1–9 and 20 (*see* Ex. 1002, 75), the applicant relied on the same argument when responding to a rejection directed to claims 15, 16, and 19 (*id.* at 78–79 ("As noted above with respect to the 35 U.S.C. § 102(b) rejections, *Yacenda* fails to disclose a 'pre-printed lottery ticket' as recited in claims 15-16 and 19.")).

[13] This portion of the application corresponds to column 2, line 65–column 3, line 1 of the '135 patent.

> pre-printed ticket wager by validating the pre-printed ticket details, generating the appropriate lottery wager information, **for example generating an appropriate number of random numbers for the draw**. The generated wager information may then be associated with unique identifier of the pre-printed ticket in the lottery system and the pre-printed ticket activated for the next available draw.

See Application at p. 7, l. 20 – p. 8, l. 5 (emphasis added).[14]

Ex. 1002, 76–77 (footnotes added); *see* PO Resp. 21–22 (reproducing a portion of the applicant's arguments).

Patent Owner contends that the applicant provided "an express definition" of "pre-printed lottery ticket" resulting in "a clear disavowal of claim scope to tickets that already have lottery numbers assigned to them at the time of customer purchase." PO Resp. 22. Patent Owner notes that after the applicant raised this argument, the examiner withdrew the rejections based on Yacenda. *Id.* Patent Owner contends that "[t]his definition should be applied in this IPR." *Id.* In so doing, Patent Owner recognizes that the '135 patent "discloses another embodiment in which a lottery ticket 912 already is associated with wager information 914 which may be printed on a ticket to allow selection of preferred numbers by a customer," but contends that "the embodiment was disavowed by the definition provided in the '135 Patent's prosecution history." *Id.* at 21 n.2 (citing Ex. 1001, 10:5–10; Ex. 1002, 76–77).

---

[14] This portion of the application corresponds to column 4, lines 18–38 of the '135 patent.

We agree with Patent Owner that the applicant disclaimed a lottery ticket that has lottery numbers associated with it at the time of customer purchase from the meaning of "pre-printed lottery ticket" and the scope of the Challenged Claims. We understand that the finding of disclaimer is a "demanding standard" and a "high one." *Avid Tech., Inc. v. Harmonic, Inc.*, 812 F.3d 1040, 1045 (Fed. Cir. 2016). Here, however, we find the applicant's statement, discussed further below, rises to the level of clearly and unmistakably disclaiming a pre-printed lottery ticket that has lottery numbers associated with it at the time of customer purchase. We walk through the arguments made during prosecution to explain how we reach this determination.

The applicant first distinguished Yacenda by stating, "[i]nstead of disclosing a pre-printed lottery ticket, *Yacenda* discloses that its system allows the customer to select the numbers it wishes to play – i.e., not a pre-printed lottery ticket." Ex. 1002, 75–76. This statement means that a "pre-printed lottery ticket" (as claimed) does not allow a customer to select the numbers it wishes to play. This statement alone does not clearly and unmistakably distinguish a lottery ticket that has lottery numbers associated with it at the time of customer purchase because it could encompass what is commonly known as a quick-pick lottery ticket in which a computer picks the lottery numbers for a ticket and the customer has no ability to select the numbers him or herself. But, critically, this was not the only statement made by the applicant.

Following the block quote from Yacenda, the applicant then stated, "[b]ased on the foregoing, *Yacenda*'s system is directly opposite of the instant claims, as the instant claims require a 'pre-printed lottery ticket'

which has no lottery numbers associated with it at the time of customer purchase.'" Ex. 1002, 76. This statement is clear and unmistakable. It (1) specifically states that "the instant claims require" and (2) then states what the claims require—a "'pre-printed lottery ticket' which has no lottery numbers associated with it at the time of customer purchase." We fail to see how the applicant could have been more clear in stating a ***requirement*** of the Challenged Claims. And, by doing so, the applicant narrowed the scope of what would otherwise be encompassed in the meaning of "pre-printed lottery ticket" and therefore what would otherwise be encompassed in the scope of the Challenged Claims—a lottery ticket which has lottery numbers associated with it at the time of customer purchase.

We also find that the emphasis added by the applicant to the block quote from Yacenda (*see* Ex. 1002, 76) is consistent with the applicant's disclaimer. Specifically, the applicant repeatedly emphasized that, in Yacenda, a lottery player chooses the lottery ticket numbers. *Id.* The applicant emphasized that the player enters the numbers of the lottery tickets at a player terminal and that the ticket numbers are selected by the player. *Id.* And, this process occurs before the time of customer purchase. Therefore, the emphases added by the applicant to the block quote of Yacenda are consistent with the applicant's statement after the block quote disclaiming a pre-printed lottery ticket that has lottery numbers associated with it at the time of customer purchase.

As our above-discussion of the Specification reveals, the Specification discloses a pre-printed lottery ticket that does have lottery numbers associated with it at the time of customer purchase, and a pre-printed lottery ticket that does not have lottery numbers associated with it at the time of

customer purchase. For example, the Specification teaches that pre-printed lottery ticket 912 does have lottery numbers associated with it at the time of purchase, whereas the pre-printed lottery tickets described previously do not. More particularly, in describing pre-printed lottery ticket 912 (disclosed in the Figure 9 embodiment) the Specification explicitly draws a distinction between pre-printed lottery ticket 912 and "the other pre-printed lottery tickets described above" because "the pre-printed lottery ticket 912 is already associated with wager information 914 which may be printed on the ticket to allow selection of preferred numbers by a consumer." Ex. 1001, 10:5–10. The "other pre-printed lottery tickets described above" refer to pre-printed ticket 100 and particularly the processes described in Figures 3, 4, 5, 7 and 8, where the Specification explains that the lottery system determines the wager information (the lottery numbers) if the wager information is not already associated with the ticket information. *See, e.g.*, *id.* at 6:61–7:3 (describing part of the process of Figure 3). The processes described in those figures clearly reflect that at least some of those "other pre-printed lottery tickets" do not have wager information associated with the ticket at the time the tickets are scanned at a retailer's POS terminal, meaning at the time of customer purchase. For those pre-printed lottery tickets, the lottery system determines the lottery numbers. For pre-printed lottery ticket 912, the lottery numbers are printed on the pre-printed lottery ticket and therefore are known and already associated with the ticket prior to the time of customer purchase. Because the Specification clearly describes pre-printed lottery tickets as encompassing both options, the applicant had the ability during prosecution to disclaim one of those options. And, we find that the applicant's statement of what the "claims require" followed by a

precise statement of that requirement clearly and unmistakably disclaim from the scope of "pre-printed lottery tickets" those tickets that have lottery numbers associated with the tickets at the time of customer purchase. We do not see any other way of interpreting the applicant's clear and unmistakable statement as to what the claims require.

In its Reply, Petitioner contests Patent Owner's characterization of the arguments raised during prosecution of the '135 patent, contending that the statements made therein are not clear and unmistakable, and, therefore, do not constitute a disclaimer of claim scope. Pet. Reply 6–20. Petitioner raises several arguments in response to Patent Owner's construction. We address each.

First, Petitioner presents what it calls "Legal Principles of Prosecution Disclaimer." Pet. Reply 6. Petitioner identifies the legal standard for disavowal or prosecution history disclaimer. *Id.* at 6–7. But, Petitioner also contends, citing to a case from the Federal Circuit that "[t]o disclaim embodiments from the specification, there should be an 'indication that the claims should be read to exclude [them].'" *Id.* at 7 (second alteration in original) (quoting *Quest Integrity USA, LLC v. Cokebusters USA Inc.*, 924 F.3d 1220, 1229–30[15] (Fed. Cir. 2019)). And, just a few pages later, Petitioner takes this argument one step further, saying the Federal Circuit *requires* a disclaimer of any embodiment to be express. *Id.* at 10 ("*First*, the Federal Circuit ***requires*** that any disclaimer of ***any*** embodiment be express, yet nothing about the statements 'in any way suggest[s]' or is an 'indication

[15] Petitioner cites to this page range, but the actual portion quoted by Petitioner is fully contained on page 1229.

that the claims should be read to exclude [the specification's embodiments]." (alterations in original)).

These are incorrect statements of the law and not what the Federal Circuit stated in *Quest*. The full quotation from *Quest* states, "[w]e conclude that the asserted claims were not narrowed to exclude Example 1 because there was neither 'clear and unmistakable disclaimer' of the claim scope . . . nor any other indication that the claims should be read to exclude Example 1 . . . ." *Quest*, 924 F.3d at 1229. Thus, *Quest* does not stand for the proposition that *the only way* to disclaim an embodiment from the specification is by indicating that the claims should be read to exclude it. Rather, as the first portion of the full quotation reveals, the Federal Circuit first concluded that there was no clear and unmistakable disclaimer. *Id.* The latter part of the quotation reflects that there also was no other indication that the claims should be read to exclude an embodiment. And, during oral argument, counsel for Petitioner agreed that such a statement explicitly disclaiming particular embodiments is not required. Tr. 12:18–13:17. Thus, we reject Petitioner's attempt to make it seem as though something more than a clear and unmistakable disclaimer is needed to disclaim an embodiment disclosed in a patent specification. That, clearly, is ***not*** what *Quest* states. Second, for the reasons discussed above, we find that the applicant made a clear and unmistakable disclaimer of claim scope during prosecution even though the disclaimer does not expressly refer to any particular embodiment disclosed in the Specification.

Additionally, in this same "Legal Principles" section, Petitioner states that "[i]f a disclaimer in a parent application is found, then the disclaimer 'carries forward into the construction of the same claim term in the child

[application].'" Pet. Reply 7 (quoting *Cordis Corp. v. Boston Scientific Corp.*, 658 F.3d 1347, 1356 n.5 (Fed. Cir. 2011)). Petitioner then points to arguments allegedly made by Patent Owner in the Arizona state litigation, contending that Patent Owner argued that the "very same disclaimer issue raised here . . . does not apply to a child application." *Id.* (citing Ex. 1037 ¶¶ 7–8). Petitioner asserts that "[a]ttempting to reclaim disclaimed subject matter in a child application, as [Patent Owner] argues it did, violates . . . principles of public notice and reliance." *Id.* at 8.

To begin, we understand that the Arizona state litigation involves at least a breach of contract claim brought by Patent Owner "against SL Card, a company that an affiliate of Petitioner acquired." Pet. 75. We also understand that a potential question involved in that litigation is whether one or more products are covered by the claims of the '135 and '894 patents. *Id.* As noted above, the '894 patent is a child of the '135 patent (i.e., the '894 patent application is a continuation of the '135 patent application). The '894 patent is not at issue in this proceeding and we do not believe it is necessary for us to address the scope of the claims recited therein in this proceeding. The determination we make herein regarding claim scope is that of the scope of the Challenged Claims, which are the claims presently before us.

Second, Petitioner contends that the applicant did not make a clear and unmistakable disclaimer. Pet. Reply 8–12. Petitioner reproduces some of the text from Yacenda that the applicant quoted and emphasized during prosecution, contending that the applicant distinguished Yacenda "because it does not disclose any ***pre-printing*** of a ticket, but instead discloses ***virtual*** tickets with player selections." *Id.* at 8–9. Petitioner contends, "pre-printed

tickets with pre-printed numbers would also distinguish Yacenda, since they do not allow a player to select lottery numbers in a terminal." *Id.*

We disagree. The applicant's argument during prosecution does not even mention the word "virtual." *See* Ex. 1002, 75–77. Nor does the applicant's argument imply that the distinctions between Yacenda and the then-pending claims are because Yacenda's system uses a player terminal and displays a virtual lottery ticket. Additionally, the large block quote of Yacenda that the applicant included in its arguments during prosecution include Yacenda's disclosure that "the player terminal displays virtual lottery tickets" and "virtual lottery tickets displayed on the player terminal," but that language is neither emphasized by the applicant nor called out in any way as being a reason why the applicant sought to distinguish Yacenda. *See id.* at 76. To the contrary, the applicant distinguished Yacenda because Yacenda "allows the customer to select the numbers it wishes to play" before purchase whereas the applicant stated that the "instant claims require a 'pre-printed lottery ticket' which has no lottery numbers associated with it at the time of customer purchase." *Id.* That is the critical difference the applicant drew between the then-pending claims (which include the Challenged Claims) and Yacenda. Additionally, whether pre-printed tickets with pre-printed numbers would also distinguish Yacenda, as Petitioner contends (*see* Pet. Reply 8–9), is not the issue. Even if that is correct, that point does not negate or otherwise detract from the applicant's clear and unmistakable statement as to what the "the instant claims *require*." Ex. 1002, 76 (emphasis added).

Petitioner then argues that the Specification does not provide a lexicographic definition of "pre-printed lottery ticket," in contrast to the

position raised by the applicant during prosecution. Pet. Reply 9–10. We agree with Petitioner that the Specification of the '135 patent does not provide a lexicographic definition of "pre-printed lottery ticket." The parties focus on the following portion of the Specification, which was also highlighted in the argument raised by the applicant during prosecution: "The online lottery ticket is manufactured and distributed as pre-printed lottery tickets that do not have a draw date or wager (i.e. lottery numbers) assigned or associated to the pre-printed ticket." Ex. 1001, 2:65–3:1. If that phrase provides a lexicographic definition of anything, it is of an "online lottery ticket," because that is the subject of the sentence and the sentence says "[t]he online lottery ticket *is*" and then provides what it is. Regardless, we need not and do not construe "online lottery ticket" and a finding as to whether applicant provided a lexicographic definition of "pre-printed lottery ticket" does not dictate the result of our finding of a clear and unmistakable disclaimer. As noted above, a lexicographic definition *or* a prosecution history disclaimer are two ways in which an applicant can demonstrate that a claim term has a meaning other than its plain and ordinary meaning. An applicant need not do both. In fact, the concept of a disclaimer suggests that an applicant is disclaiming part of the meaning that the claim term would otherwise have but for the disclaimer. In this case, as discussed above and further below, the Specification makes clear that it discloses embodiments that are disclaimed by the disclaimer as well as embodiments that are not.

Following from the discussion above regarding embodiments disclosed in the Specification, Petitioner contends that "the overbreadth of [Patent Owner's] proposed disclaimer is manifest in that it would exclude ***all*** of the embodiments in the specification." Pet. Reply 10. In this regard,

Petitioner repeats its legally incorrect position that "the Federal Circuit ***requires*** that any disclaimer of ***any*** embodiment be express," citing *Quest*. *Id.* (citing *Quest*, 924 F.3d at 1229–30). We have already dispensed with this erroneous argument. Next, Petitioner contends that Patent Owner "cites to no support that a disclaimer could even exclude all embodiments of a specification." *Id.* Patent Owner need not cite to such a case, regardless of whether one exists, because we disagree with Petitioner that the disclaimer excludes all embodiments of the '135 patent. After pointing to pre-printed lottery ticket 912, which Patent Owner agrees is disclaimed, Petitioner asserts that each of the other embodiments of pre-printed lottery tickets described in the processes of Figures 3, 4, 5, 7, and 8 are also disclaimed because the process leaves open the possibility that the wager information is already associated with the ticket information. *Id.* at 11. We disagree. The disclaimer operates to disclaim, from those recited processes, a pre-printed lottery ticket which has wager information already associated with the ticket information. The Specification makes it clear that one option is having the wager information already associated with the ticket information. But, that is not the only option. As discussed above, each of the processes of Figures 3, 4, 5, 7, and 8 includes the option that the lottery system determines the wager information—meaning, the wager information is *not* already associated with the ticket information at the time of customer purchase. Thus, we disagree with Petitioner's position that the disclaimer, as properly construed, disclaims every embodiment of the '135 patent.

Additionally, we disagree with Petitioner's position that scanning of the tickets, as described in the Specification, occurs before "the time of customer purchase" and, therefore, all of the embodiments are disclaimed.

Pet. Reply 11–12. As Patent Owner explains in its Sur-reply, the Specification describes the purchase of pre-printed lottery tickets and other products through a retailer's POS terminal. PO Sur-reply 4–5. And, in so doing, the Specification uses the phrase "being purchased," to indicate that the purchase process has begun. At a minimum, we find that the purchase process starts with the scanning of a pre-printed lottery ticket. In particular, we find instructive the following portions of the Specification, to which Patent Owner directs our attention (*see id.*):

> During the checkout process, the pre-printed ticket is scanned by the cashier in the retailer's POS as they would scan any other product ***being purchased***. . . .
>
> Upon receiving information for activating a pre-printed ticket ***being purchased***, the lottery system may initiate a pre-printed ticket wager by validating the pre-printed ticket details, generating the appropriate lottery wager information, for example generating an appropriate number of random numbers for the draw.

Ex. 1001, 4:18–35 (emphasis added), *reproduced in* PO Sur-reply 4. Thus, we agree with Patent Owner that "Petitioner's purported distinction—a ticket 'scan' cannot be part of a ticket 'purchase'—is incorrect." PO Sur-reply 4. Rather, we find that scanning a ticket as part of the checkout process is part of the purchase of the ticket and we, therefore, disagree with Petitioner's premise that the disclaimer excludes all embodiments of the pre-printed lottery ticket described in the Specification because the wager information is determined prior to payment.

Third, Petitioner contends that Patent Owner's "attempt to narrowly construe 'pre-printed lottery ticket' via disclaimer is at complete odds with [Patent Owner's] treatment of the term everywhere else—such as in child

patent applications and in the Arizona [state] litigation." Pet. Reply 12. Petitioner accuses Patent Owner of "seek[ing] to narrow the term 'pre-printed lottery ticket' here to avoid unpatentability, while broadening it elsewhere when it suits [Patent Owner's] purposes." *Id.* Petitioner points to claims in two child applications, one that issued as the '894 patent (Ex. 1034) and one that issued as U.S. Patent No. 11,488,451 B2 (Ex. 1035, "the '451 patent"), and contends that they recite pre-printed lottery tickets with lottery numbers associated with the tickets prior to the time of purchase. *Id.* (citing Ex. 1034, claim 21; Ex. 1035, claim 12). Petitioner contends that Patent Owner's actions during prosecution of the '894 and '451 patents are inconsistent with the statements Patent Owner argues constitute a disclaimer. *Id.* at 13. Petitioner also reiterates its argument that Patent Owner takes an inconsistent position in the Arizona state litigation because Patent Owner asserts, in that proceeding, that the '135 and '894 patents include embodiments that are commensurate in scope with a certain product, referred to as the "QuickTicket™ V2," and that said product has lottery numbers pre-printed on the ticket prior to purchase. *Id.* at 14–15.

As we indicated above, our focus is on the parent '135 patent and understanding what the claim terms mean therein. In that regard, although actions taken later in time can shed light of the potential meaning of a claim term, we are focused on the intrinsic record of the '135 patent, including its claims, Specification, and, particularly for this issue of disclaimer, its file history. None of the '894 patent, the '451 patent, or the Arizona state litigation are before us and we are not in a position to opine on the scope of the claims therein or Patent Owner's state court litigation position. *See* PO Sur-reply 6 (asserting that we "need not decide what effect, if any, the

disavowal has on any other patent"). Today, we are focused on the '135 patent and, for the reasons explained above, we find the applicant made a clear and unmistakable disclaimer of claim scope during the prosecution of the '135 patent application.

Fourth, Petitioner contends that Patent Owner's construction adds new limitations and renders claim 4 indefinite. Pet. Reply 16–17. Specifically, Petitioner asserts that Patent Owner's construction "adds an additional limitation to the claimed 'draw details'" because it requires the lottery administration system to generate the lottery numbers and transmit them back to the POS terminal as part of the claimed "draw details." *Id.* at 16. Petitioner's argument is unclear as to what limitation is being added to the claims. While claim 1 does not recite the lottery system generating the lottery numbers, neither does the meaning of "pre-printed lottery tickets" with the disclaimer. Rather, the disclaimer acts to disclaim pre-printed lottery tickets that already have lottery numbers associated with the tickets prior to customer purchase. The disclaimer does not directly speak to where the lottery numbers are generated. As noted above, however, the Specification states that the lottery system determines wager information. As to Petitioner's latter point regarding transmitting the draw details back to the POS terminal, claim 1 expressly recites "receiving at the POS terminal from the lottery administration system draw details associated with the pre-printed lottery ticket." Ex. 1001, 10:37–39. As such, we do not understand the disclaimer to add limitations to the claims; rather, we understand the disclaimer to disclaim some types of pre-printed lottery tickets, i.e., those that have lottery numbers associated with the tickets at the time of customer purchase. Additionally, we do not see an inconsistency

between the meaning of "pre-printed lottery ticket" post-disclaimer and the system of claim 4 that would potentially render claim 4 indefinite as Petitioner contends. *See* Pet. 16 (discussing claim 4). Petitioner's argument in this regard is based on its position that scanning is not part of the purchase process (*see* Pet. Reply 16 (asserting that the lottery numbers are associated with the tickets before the lottery system receives payment confirmation)), a position that we rejected above.

Fifth, Petitioner asserts that Patent Owner is estopped from arguing prosecution disclaimer for two different reasons. Pet. Reply 17–20. To begin, Petitioner contends that Patent Owner is estopped pursuant to 37 C.F.R. § 42.73 from "taking action inconsistent with an adverse judgment" by the Board. *Id.* at 17. Petitioner contends that in PGR2020-00084, the Board found that Szrek discloses a pre-printed lottery ticket as recited in the '894 patent. *Id.* at 17–18. Petitioner asserts that, if Patent Owner "is correct that the applicant disclaimed pre-printed lottery numbers from the scope of a 'pre-printed lottery ticket,' then that disclaimer must apply to the '894 patent as well." *Id.* at 18 (citing *Cordis Corp.*, 658 F.3d at 1356). Thus, Petitioner contends Patent Owner "is estopped from making this inconsistent argument." *Id.*

Patent Owner contends that Petitioner's Rule 42.73 arguments "lack[] legal support" because "Rule 42.73 does not preclude a patent owner from defending the patentability of claims that issued prior to an adverse judgment." PO Sur-reply 7.

PGR2020-00084 involved the '894 patent which issued from a child application to the '135 patent. Neither party raised this issue of claim construction in PGR2020-00084. Thus, whether the arguments raised by the

applicant in the parent '135 patent prosecution amounted to a disclaimer of claim scope that applied to the child '894 patent was not before the Board during PGR2020-00084. Additionally, we do not agree with Petitioner that 37 C.F.R. § 42.73(d)(3) necessarily precludes Patent Owner's arguments regarding disclaimer. Although that Rule precludes a patent owner or applicant "from taking action inconsistent with the adverse judgment"—the adverse judgment being the determination of unpatentability in PGR2020-00084 and finding that Szrek discloses a pre-printed lottery ticket, as recited in the claims challenged in that proceeding—Patent Owner argues that the disclaimer did not carry forward to the child '894 patent and there is caselaw[16] that provides a basis, in some specific circumstances, for such an argument.[17] The '894 patent is not before us, however, and the question of disclaimer was not presented in PGR2020-00084; thus, we do not believe the question of whether the disclaimer also applies to the child '894 patent is squarely presented here because our focus and attention are on the

---

[16] *Trading Techs. Int'l, Inc. v. Open E Cry, LLC*, 728 F.3d 1309, 1323 (Fed. Cir. 2013) ("When the purported disclaimers are directed to specific claim terms that have been omitted or materially altered in subsequent applications . . . those disclaimers do not apply." (omission in original) (quoting *Saunders Grp., Inc. v. Comfortrac, Inc.*, 492 F.3d 1326, 1333 (Fed. Cir. 2007)).

[17] Nothing in this Decision should be read to imply that we have considered the merits of Patent Owner's contention that the disclaimer in the parent '135 patent does not apply to the child '894 patent or read to imply that we have made any determination on the issue. We simply note that Patent Owner raised an argument that the Federal Circuit has found applicable in very specific, limited circumstances. Whether those circumstances are present in the '894 patent or its file history, we leave for another day as our focus is on the '135 patent.

'135 patent and the claims challenged in this proceeding. Therefore, we do not agree that Patent Owner is estopped by 37 C.F.R. § 42.73.

Petitioner also asserts that Patent Owner "is judicially estopped from arguing prosecution disclaimer because [Patent Owner] has taken inconsistent positions during prosecution to gain an unfair advantage." Pet. Reply 18. Petitioner contends judicial estoppel applies because all three factors are met when, as here:

> (1) the party takes a later position that is 'clearly inconsistent' with its earlier position, (2) the party succeeded in persuading a court or agency to adopt the earlier position, thereby posing a risk in inconsistent determinations, and (3) the party would derive an unfair advantage or impose an unfair detriment on the opposing party if not estopped.

Id. (citing *Transclean Corp. v. Jiffy Lube Int'l, Inc.*, 474 F.3d 1298, 1307 (Fed. Cir. 2007).

Petitioner first contends Patent Owner's construction "is 'clearly inconsistent' with its prosecution of the '894 and '451 patents, seeking claims facially inconsistent with [Patent Owner's] construction." *Id.* at 19 (citing Ex. 1034, claim 21; Ex. 1035 claim 12). Petitioner asserts that Patent Owner's arguments as to disclaimer are inconsistent "with representations to the Board it was not adding new matter when it added the claims that reclaimed the disavowed scope." *Id.* Petitioner next contends Patent Owner successfully persuaded the examiner to allow claims that recite a pre-printed lottery ticket with numbers associated with the ticket prior to purchase. *Id.* And, lastly, Petitioner asserts Patent Owner would have "an unfair advantage" if not estopped because it could argue that the '135 patent has a narrow scope here but argue the '451 and '894 patents have a broader scope in the Arizona state litigation. *Id.* at 19–20.

Patent Owner disagrees that estoppel applies because (a) Patent Owner has taken a consistent position regarding the scope of the claims of the '135 patent from prosecution through this proceeding, (b) disavowal in a parent application does not automatically extend to every related patent filing, and (c) the '894 patent was the subject of the PGR, the '451 patent is the subject of IPR2024-00465, and the '135 patent is the subject of this proceeding where consistency and fairness are promoted by applying the disavowal from prosecution. PO Sur-reply 8–9. Additionally, Patent Owner contends that Petitioner's "affiliate" argues in the Arizona state litigation that the disclaimer applies to the children '894 and '451 patents. *Id.* at 9.

As we state above, in the context of addressing Petitioner's argument about estoppel under § 42.73(d)(3), the caselaw provides a basis for Patent Owner to raise an argument that the disclaimer in the '135 patent file history does not carry forward to the children '894 and '451 patents. But, to actually make a determination on this issue requires construing terms of these two children patents and a full review of their file histories. Since the claims of those patents are not before us for construction and the record is not developed sufficiently in that regard for us to make such a determination, we make no finding on whether the disclaimer also applies to the '894 and '451 patents.

Having considered Petitioner's arguments in its Reply, we now turn specifically to consider extrinsic evidence in the form of paragraphs 4–13 of Mr. Hutton's Supplemental Declaration.[18] We acknowledge Mr. Hutton's testimony regarding his interpretation of the applicant's arguments as well as

---

[18] As explained further herein, we do not exclude this portion of Mr. Hutton's testimony from his Supplemental Declaration. *See infra* § III.

his understanding of the '135 patent Specification. Mr. Hutton's testimony is very similar to Petitioner's arguments, which we have addressed above. *See* Ex. 1038 ¶¶ 4–13. In particular, he refers to the applicant's arguments during prosecution and the broad disclosure of the '135 patent Specification, including that it discloses embodiments that would be excluded by the applicant's disclaimer. *Id.* ¶¶ 6–13.

We do not find Mr. Hutton's testimony particularly helpful. First, we have addressed the points raised by his testimony in our discussion above because they are largely the same as the arguments raised in Petitioner's Reply. Second, we find his testimony entitled to *very* little weight because he applies an incorrect understanding of the caselaw, which mirrors Petitioner's incorrect and arguably misleading quotations of the Federal Circuit's decision in *Quest*. In particular, in paragraph 5, Mr. Hutton states the following as his understanding of the law as it applies to prosecution disclaimer: "I also understand that in order to disclaim embodiments within the specification, the statements *should have some indication that the applicant intended to surrender embodiments from the specification*." Ex. 1038 ¶ 5 (emphasis added). This then leads Mr. Hutton to state: "[t]hus, in my opinion, a [person of ordinary skill in the art] would not view applicant's statements as a disclaimer, *because the applicant never stated that they intended to surrender multiple embodiments described in the specification*." *Id.* ¶ 13 (emphasis added). As we explained above in responding to a similar argument by Petitioner, the caselaw does not require an applicant to expressly state whether a disclaimer excludes particular embodiments of the subject specification when disclaiming claim scope during prosecution. *See Quest*, 924 F.3d at 1229. And, as noted above,

counsel for Petitioner agreed that such a statement explicitly disclaiming particular embodiments is not required. Tr. 12:18–13:17. Third, although we have considered Mr. Hutton's testimony, we find it "less significant than the intrinsic record in determining the legally operative meaning of" "pre-printed lottery ticket." *Phillips*, 415 F.3d at 1317. In particular, we are cognizant of the Federal Circuit's guidance that we "should discount any expert testimony that is clearly at odds with the claim construction mandated by . . . the prosecution history." *Id.* at 1318 (internal quotation omitted). In this instance, for the reasons explained above, we find that Mr. Hutton's testimony is clearly at odds with the applicant's arguments during prosecution and that his testimony is based on a misunderstanding of what is required by the governing caselaw for prosecution history disclaimer.

Based on our review of the complete record before us, including the intrinsic and extrinsic evidence, we determine that one of ordinary skill in the art would understand that the applicant disclaimed, from the meaning of "pre-printed lottery ticket," a lottery ticket which has lottery numbers associated with it at the time of customer purchase. For the reasons discussed further below, this issue is dispositive.

3. "product information"

Patent Owner proposes that we construe "product information" to mean "information that identifies a product but is separate and distinct from wager information and unique identification information." PO Resp. 24; *see also id.* at 23–27. Petitioner disagrees with at least part of Patent Owner's proposed construction. *See* Pet. Reply 20–23. For the reasons explained below, our finding that the applicant disclaimed a lottery ticket which has lottery numbers associated with it at the time of customer purchase is

dispositive. Therefore, we need not address the construction of "product information" to resolve the present controversy.

D. Ground 1: Obviousness over Szrek

Petitioner asserts that Szrek would have rendered the subject matter of claims 1–6 obvious to one of ordinary skill in the art at the time of the invention. Pet. 19–54. Patent Owner contends that Szrek does not disclose a "pre-printed lottery ticket" as that term is properly construed in light of the prosecution disclaimer. PO Resp. 28–37.

1. Scope and Content of the Prior Art

a. Szrek (Ex. 1005)

Szrek's stated goal "is to enable the secure sale of lottery tickets at general retail point of sale (POS) checkout points, such as standard cash registers, and other similar devices." Ex. 1005, 1:16–19. Szrek teaches that "[l]otteries and other gaming organizations [are] continuously look[ing] for ways to increase their lottery ticket sales" and that one known way to accomplish this is "by widening their market presence and improving [the] ticket sale experience for the public." *Id.* at 1:20–23. An obstacle with widening the market presence that Szrek seeks to address is created by how lottery tickets are traditionally sold. According to Szrek, "[t]raditionally lottery tickets [were] sold at the dedicated lottery terminals, usually located in small convenience stores and in supermarkets which is typically a single terminal at a service desk." *Id.* at 1:23–26. Although studies show a dedicated lottery terminal placed at the regular POS lanes in a supermarket was well received by customers, such a configuration did not prove financially successful, partly because of the relatively high cost of in-line lottery terminals compared to the levels of sale per lane. *Id.* at 1:26–34. To

address this obstacle, Szrek teaches that "there [was] consideration in the industry to effectuate lottery ticket sales by existing store cash registers." *Id.* at 1:37–38.

However, Szrek states, because of the wide variety of hardware and software used for cash registers, the conventional thinking was that developing a solution would be "difficult if not impossible" without significant security, operational, and printing problems. Ex. 1005, 1:50–60, 1:63–66. Szrek teaches that skilled artisans viewed regular cash register paper stock as inadequate for lottery ticket use "because it is insecure, non-durable and non-uniform from manufacturer to manufacturer." *Id.* at 1:57–60. These paper requirements existed because it was "understood in the industry that a lottery ticket is considered a bearer's bond," which serves as "proof of a valid transaction and of the bet wagered." *Id.* at 2:4–6. As a result, "[l]ottery tickets usually contain[ed] information about [the] wagered bet, date when [the] ticket was purchased and date of [the] game draw, selling entity information . . . and a unique transaction identifier." *Id.* at 2:6–10. Thus, Szrek states that "there is a demand for the ability to sell lottery tickets at cash registers." *Id.* at 2:60–61.

Szrek discloses a method and system for selling lottery tickets at POS registers, which "completely obviates the need for the local printing of lottery tickets at the point of sale" because "[o]nly a receipt of [the] lottery transaction is printed locally at the cash register which does not need to be printed in as secure fashion as a lottery ticket." Ex. 1005, 5:21–25. To carry out the disclosed system and method, Szrek states, "it is assumed that an environment is provided where the cash register is capable of communicating with the game provider (directly or indirectly) and the game

provider system (or some other system on behalf of [the] game provider system) is authorizing [the] cash register's lottery transactions," which may be "stored in [the] game provider system or in another system." *Id.* at 3:14–20.

Szrek describes the following as a "novel" aspect of the disclosed method: "instead of printing the lottery ticket, from a legitimate and authorized game provider, on the cash register, the ticket is preprinted (printed ahead of the ticket sale . . .)." Ex. 1005, 3:22–28. Szrek teaches that the preprinted ticket contains many elements of a traditional lottery ticket, including bet selections, unique ticket identifier, barcode that includes ticket identifier, duration for number of eligible draws (if activated), and ticket price. *Id.* at 5:65–6:2. However, the preprinted ticket "does not have a play value until it is activated at the cash register." *Id.* at 3:38–40.

Szrek teaches that the cash register activates the ticket by scanning the ticket barcode, which "originates a transaction to the game provider requesting ticket activation" and, in response, the game provider authorizes the activation as well as provides the lottery product description, price, and the activation receipt identifier. Ex. 1005, 3:41–45, 4:56–64. Once the preprinted ticket is activated, the cash register prints a receipt, which may include product type, the original preprinted ticket identifier, activation identifier, security codes, an activation price, and a valid draw identifier, such as draw number or draw time. *Id.* at 6:54–59. "Because [the] lottery ticket is preprinted in a secure fashion, and only an activation receipt for the transaction is printed at [the] cash register, the [preprinted] ticket could be regarded as secure." *Id.* at 3:55–57. As a result, Szrek teaches that the preprinted ticket may be used as a valid bearer's bond only once the ticket is

activated and the cash register receipt serves only as proof that the ticket was activated. *Id.* at 4:26–31.

2. The Challenged Claims

As noted above, each of the Challenged Claims recites a "pre-printed lottery ticket" expressly or via dependency. In the Petition, Petitioner contends Szrek discloses the recited "pre-printed lottery ticket." *See* Pet. 21 (element 1[a]). Patent Owner contends that Szrek does not disclose a "pre-printed lottery ticket" as properly construed in light of the disclaimer. PO Resp. 28–37. We focus our discussion on this issue, with reference to element 1[a],[19] as we find it dispositive.

Element 1[a] recites "scanning at a point-of-sale (POS) terminal a pre-printed lottery ticket to obtain unique identification information and product information from the pre-printed lottery ticket." Ex. 1001, 10:27–30. First, addressing "scanning at a point-of-sale (POS) terminal a pre-printed lottery ticket to obtain unique information . . . from the pre-printed lottery ticket," Petitioner asserts

> Szrek discloses "***Preprinted tickets*** (PT) 300," where "[e]ach ticket 300 preferably has a barcode 310 that could be ***scanned*** on the cash register [*i.e.* ***POS terminal***], with information allowing identifying this ***barcode as lottery ticket 300*** and ***uniquely identifying*** the ticket 330," element 330 being the "***unique ticket identifier*** 330."

Pet. 21 (alterations in original) (quoting Ex. 1005, 5:57, 5:67, 6:7–10). Thus, Petitioner contends "Szrek discloses that a pre-printed lottery ticket

[19] Our analysis applies to each of the Challenged Claims as each recites a "pre-printed lottery ticket" subject to the disclaimer.

contains a ***barcode*** which ***uniquely identifies*** the ticket when ***scanned at a POS terminal***." *Id.* (citing Ex. 1003 ¶¶ 108–109).

Second, addressing "scanning . . . to obtain . . . product information from the pre-printed lottery ticket," Petitioner asserts "Szrek provides a number of teachings that the scanned barcode contains product information, *i.e.* information about the lottery ticket product." Pet. 22 (citing Ex. 1003 ¶ 111). Specifically, Petitioner contends "Szrek discloses that the 'fixed part of the [pre-printed lottery ticket's] barcode should ***indicate the product type***,' *i.e.* ***product information***." *Id.* (alteration in original) (quoting Ex. 1005, 6:11–12). Additionally, Petitioner asserts "Szrek also discloses that 'the information in the barcode . . . may contain other information such as ***lottery product code, ticket price or other data***,' *i.e.* ***product information***." *Id.* (omission in original) (quoting Ex. 1005, 4:44–46). Petitioner further contends "Szrek discloses that the ticket identifier itself (which as discussed above is scanned from the barcode) also contains ***product information***." *Id.* Petitioner asserts "Szrek discloses that 'part of ticket identifier 330 could correspond to ***the bet combination*** 350 chosen by the players [or] some element making this ticket unique, such as issued tickets ***sequence counter*** on said self-service terminal 130 or kiosk 130,' *i.e.* ***product information***." *Id.* (alteration in original) (citing Ex. 1005, 7:21–31). Petitioner contends one of ordinary skill in the art "would understand that product type, product code, ticket price, bet combination, or sequence counter are all examples of ***product information*** because they are information about the product that was purchased, *i.e.* the lottery ticket." *Id.* (citing Ex. 1003 ¶ 111).

Patent Owner contends that Szrek does not teach or suggest a "pre-printed lottery ticket" because "[i]n Szrek's system, by the time lottery tickets 300 are purchased at a cash register 230, they have lottery numbers already assigned to them and, therefore, they are not 'pre-printed lottery tickets,'" as claimed." PO Resp. 28–29 (citing Ex. 1005, 3:23–31, 6:24–27; Ex. 2038 ¶¶ 56–61, 83–84, 86–91; Ex. 2044, 11:11–22, 16:9–22, 34:20–25, 37:4–21, 38:11–40:8). Patent Owner asserts that, "[i]n all the embodiments disclosed by Szrek, the lottery ticket 300 already has lottery numbers (Szrek's bet selections 350) associated with them at the time of purchase." *Id.* at 31 ("In Szrek's system, the lottery ticket has lottery numbers—called 'bet data' or 'bet selections'—associated with it prior to the time of customer purchase." (citing Ex. 2038 ¶ 84; Ex. 2044, 11:17–2, 16:16–22, 40:1–8). Patent Owner contends that Mr. Hutton (Petitioner's expert) agrees that Szrek's tickets have lottery numbers associated with them at the time of printing, whether Szrek's tickets are pre-printed at commercial printer 140, lottery terminal 120, or self-service terminal 130. *Id.* at 35 (citing Ex. 2044, 11:17–22, 16:16–22, 32:1–7, 34:20–25, 37:4–21, 40:1–8, 43:5–8, 44:16–45:17, 49:24–50:17).

Petitioner raises several arguments in its Reply assuming we find that the applicant disclaimed a portion of the meaning of "pre-printed lottery ticket." Pet. Reply 24–27. First, Petitioner asserts that "[w]hile Szrek generally describes that the pre-printed ticket contains pre-printed lottery numbers ([Ex. 1005], 3:29–34), Szrek also discloses embodiments where it does not." *Id.* at 24. Petitioner asserts Szrek "discloses an alternative embodiment where the game provider instead merely 'issues a processing request for preprinted ticket 300,' *i.e.* with no indication that the lottery

number is included with the ticket identifier." *Id.* (citing Ex. 1005, 7:13–15).

We disagree. Szrek consistently describes preprinted ticket 300 as including bet selections 350. *See, e.g.*, Ex. 1005, 5:65–67. In the section identified by Petitioner, Szrek explains that "[i]n the preferred embodiment, the preprinted ticket identifier 330 is known to the game provider 250." *Id.* at 7:12–13. Szrek then explains that "[t]he game provider 250 either issues a processing request for preprinted ticket 300 or it agrees with commercial printer 140 on method of its assignment and relation between ticket identifier 330 and data bet on the ticket 350 (via algorithm or some database or file information)." *Id.* at 7:13–18; *see* PO Sur-reply 10 ("This passage does not establish that Szrek's lottery tickets lack lottery numbers at the time of purchase.").

Second, Petitioner contends that Szrek uses permissive language when referring to lottery numbers being included on its pre-printed lottery tickets. Pet. Reply 24 (citing Ex. 1005, 3:29–31, 7:21–22, 7:26–27). We agree with Petitioner that Szrek uses permissive language in several instances to describe aspects of its pre-printed lottery tickets, but Petitioner fails to establish where Szrek discloses, teaches, or suggests that its pre-printed lottery tickets do not have lottery numbers associated at the time of customer purchase. Rather, we agree with Patent Owner that Szrek uses this permissive language when describing other functionality. *See* Ex. 1005, 3:25–31 ("[T]he ticket is preprinted (printed ahead of the ticket sale by a commercial printer capable of printing lottery tickets or on a wagering terminal, self-service lottery terminal, or at a lottery kiosk). The ticket can be preprinted according to player's selection, his favorite bet, or as a

computer-generated selections (quick pick)."), 7:12–18 (describing actions of game provider 250 in part related to data bet on the ticket 350 via "algorithm or some database or file information"), 7:18–22 (describing embodiments where part of ticket identifier 330 could correspond to bet combination 350). And, we agree with Patent Owner that "Szrek nowhere states that lottery tickets are preprinted without having lottery numbers associated with them." *See* PO Sur-reply 11.[20] In this regard, we credit Dr. Miller's testimony regarding Szrek and the embodiments disclosed therein.[21] *See, e.g.*, Ex. 2038 ¶ 83 (testifying that every embodiment of Szrek has lottery numbers assigned to the lottery ticket at the time of purchase). Thus, we find that Petitioner has not established that Szrek discloses, teaches, or suggests a pre-printed lottery ticket which has no lottery numbers associated with it at the time of customer purchase.

Third, Petitioner contends "it would have been obvious in view of knowledge of a [person of ordinary skill in the art] to use a pre-printed ticket without lottery numbers with Szrek's system." Pet. Reply 25. Petitioner points to Exhibit 1029 ("Gilmore") and argues that the Petition relies on Gilmore as background. *Id.* (citing Pet. 7–8). Petitioner contends that, "[i]n view of this knowledge, a [person of ordinary skill in the art] would have found it obvious for Szrek to support generating lottery numbers at time of purchase, whether at the cash register or the game provider." *Id.* Petitioner

---

[20] Patent Owner also points to deposition testimony by Petitioner's expert responding to questions regarding Szrek's disclosure of pre-printed lottery ticket and bet data. PO Sur-reply 11 (citing Ex. 2044, 11:14–22, 16:16–22, 32:24–35:13, 37:4–38:9, 45:5–17).

[21] Although we do not draw any negative inference, Petitioner did not depose Dr. Miller.

contends Mr. Hutton provides several reasons in his Supplemental Declaration. *Id.* (citing Ex. 1038 ¶¶ 14–16); *see id.* at 25–26 (asserting that the Board credited similar motivations in PGR2020-00084). Petitioner similarly contends that one of ordinary skill in the art "would have had a reasonable expectation of success." *Id.* at 26 (citing Ex. 1005, 3:31; Ex. 1003 ¶¶ 71, 106; Ex. 1009 ¶ 63; Ex. 1038 ¶ 17).

Patent Owner challenges Petitioner's third argument as raising an untimely new theory that the Challenged Claims are obvious over a combination of Szrek and Gilmore because Petitioner did not propose any combination with Gilmore in the Petition or any modification to Szrek.[22] PO Sur-reply 12–14. In particular, Patent Owner acknowledges that the Petition mentions Gilmore in the background when discussing sale of lottery tickets, but correctly notes that the Petition does not quote or rely on any portion of Gilmore regarding whether lottery numbers are or are not associated with tickets at the time of customer purchase. *Id.* at 13.

We agree with Patent Owner that Petitioner's third argument in its Reply, relying on Gilmore in combination with Szrek, is improperly raised for the first time in Petitioner's Reply. We recognize that Patent Owner raised a claim construction argument in its Patent Owner Response that was not raised in its Preliminary Response. And, "[b]ecause [our] [I]nstitution [D]ecision did not contain an express claim construction, the [Administrative Procedure Act ("APA")] require[s] [us] to give [Petitioner] 'adequate notice and an opportunity to respond under the new construction'

[22] As discussed further herein, Patent Owner also filed a Motion to Exclude Mr. Hutton's Supplemental Declaration, in part because it raises a new theory of modifying Szrek in light of Gilmore. PO MTE 1–2, 4–6.

first proposed in [Patent Owner's] [P]atent [O]wner [R]esponse." *ParkerVision, Inc. v. Vidal*, 88 F.4th 969, 979 (Fed. Cir. 2023) (quoting *Axonics, Inc. v. Medtronic, Inc.*, 75 F.4th 1374, 1383 (Fed. Cir. 2023)). In *Axonics*, the Federal Circuit specifically held:

> that where a patent owner in an IPR first proposes a claim construction in a patent owner response, a petitioner must be given the opportunity in its reply to argue and present evidence of anticipation or obviousness under the new construction, *at least where it relies on the same embodiments for each invalidity ground as were relied on in the petition*.

Axonics, 75 F.4th at 1384 (emphasis added); *see ParkerVision*, 88 F.4th at 980 ("And though not dispositive, we note that, consistent with the facts of *Axonics*, [petitioner] relied on the same capacitors in Tayloe that it relied on in its petition, i.e., capacitors 72, 76.").

Here, Petitioner had the opportunity to reply to Patent Owner's new construction, which it did, as described above. And, Petitioner used that opportunity to (a) contest the construction and (b) attempt to show that Szrek—the sole reference relied on for this challenge—taught the limitation at issue. We addressed those arguments above and explained why we do not find them persuasive. But, the Federal Circuit's decisions in *ParkerVision* and *Axonics* do not go so far as to give a petitioner carte blanche to craft a new ground of challenge based on a new reference that was not previously proposed in a challenge presented in a petition. On the facts presented here, we find that Petitioner's third argument, relying on Gilmore in combination with Szrek diverges too far from the challenge presented in the Petition that relies *exclusively* on Szrek as teaching the "pre-printed lottery ticket" recited

by the Challenged Claims.[23] As the Federal Circuit stated in *Axonics*, "a petitioner may not in reply rely on new prior art to teach a claim limitation." *Axonics*, 75 F.4th at 1383 (citing *Intelligent Bio-Sys., Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1369 (Fed. Cir. 2016)).

Additionally, we want to be crystal clear that the Petition relies on Szrek alone, *without modification*, to meet the "pre-printed lottery ticket" limitation of the Challenged Claims. *See, e.g.*, Pet. 2 (identifying only Szrek for the first obviousness challenge), 21 (discussing element 1[a] without modification). The specific portion of Petitioner's Reply that we find improper is page 25, line 3 through page 26, line 7. Despite Petitioner's protestations that it is "not using Gilmore as a new reference," this portion of the Reply relies on Gilmore as teaching an aspect of the Challenged Claims, relies on that teaching in combination with Szrek, and proposes to *modify*[24] Szrek based on that teaching from Gilmore while also proposing reasons for that modification and reasons as to why one of ordinary skill in the art would

---

[23] *See Ericsson Inc. v. Intellectual Ventures I LLC*, 901 F.3d 1374, 1380 (Fed. Cir. 2018) ("Under the [Patent and Trademark Office's] regulations, the Board has discretion to determine whether a petition for *inter partes* review identified the specific evidence relied on in a reply and when a reply contention crosses the line from the responsive to the new." (citing *Ariosa Diagnostics v. Verinata Health, Inc.*, 805 F.3d 1359 (Fed. Cir. 2015))).

[24] Further indicative that the Petition did not propose modifying Szrek, Petitioner's Reply relies exclusively on Mr. Hutton's Supplemental Declaration to provide reasons for the newly proposed modification. *See* Pet. Reply 25 (citing Ex. 1038 ¶¶ 14–16). As discussed further below, we grant, in part, Petitioner's Motion to Exclude these paragraphs of Mr. Hutton's Supplemental Declaration for the same reasons we find this Reply argument impermissible. *See infra* § III.

have had a reasonable expectation of success.[25] This type of use of Gilmore is not permissible because it exceeds the scope of our Rules (*see* 37 C.F.R. § 42.23(b) ("A reply may only respond to arguments raised in the corresponding . . . patent owner response . . . .")) and exceeds what the Federal Circuit has previously permitted petitioners to do with a reference relied on solely for background of the state of the art in a petition as explained above.[26]

Importantly, even if we were to consider Petitioner's argument as "combin[ing]" Szrek "with the ordinary knowledge of a person of skill in the art as evidenced by Gilmore" as Petitioner asserted during oral argument (Tr. 18:4–5), ***none*** of Petitioner's arguments as to ***modifying Szrek*** were raised in the Petition, and, therefore, we do not consider them on the merits in this Decision. The Petition relied on Szrek *without modification*, whereas the Reply—whether based on Gilmore or alleged knowledge in the art evidenced by Gilmore—relies on *modifying* Szrek. Modifying Szrek was not proposed in the Petition and that is a new theory that takes Petitioner's

---

[25] Petitioner acknowledged at oral argument that it was "not combining the entirety of Gilmore and Szrek, just its teachings." Tr. 24:12–13.

[26] During oral argument, Petitioner noted that, in PGR2020-00084, it relied on Szrek in combination with Gilmore to teach a pre-printed lottery ticket that Petitioner contends satisfies the meaning of the term subject to the disclaimer. Tr. 15:23–26. The specific ground that Petitioner references in PGR2020-00084, was based on Szrek in combination with Gilmore and the knowledge of one of ordinary skill in the art. *See* Ex. 1007, 38 (Ground 3). In other words, in that proceeding Petitioner presented the challenge *in the petition* as relying on the combination of Szrek and Gilmore (i.e., relying on Gilmore to modify Szrek) as compared to the present Petition that relies *solely* on Szrek *without modification*.

challenge in a different direction than what was presented in the Petition. We find this to be improper.

Further, to be clear, Gilmore is *not* excluded from the record and our determination does not preclude Petitioner from relying on Gilmore as "evidence of the background understanding of skilled artisans" at the relevant time period, and we have considered Gilmore for that purpose. *See Ariosa*, 805 F.3d at 1365. In a section titled "STATE OF THE ART," under a subsection titled "Sale of Lottery Tickets," the Petition sets forth the following regarding Gilmore:

> Gilmore describes a system for selling tickets through a retailer POS systems by scanning said tickets. Ex. 1029; Ex. 1003, ¶71. A lottery system controller 12 receives the data from the scan and sends an activation request to the lottery system. The lottery system 28 confirms the lottery numbers are recorded, and the controller 12 provides confirmation to the POS system.

Pet. 7–8. Paragraph 71 of Mr. Hutton's Declaration similarly describes Gilmore under a "State of the Art" heading and "Sale of Lottery Tickets Through Retailers' Existing POS Systems" subheading. Ex. 1003 ¶ 71. And we have considered Gilmore for the purpose of presenting the background state of the art as Gilmore was presented in the Petition and Mr. Hutton's Declaration, but that background understanding of the art, employed as presented in the Petition, does not fill the gap in Petitioner's burden to show that *Szrek* (without modification) discloses a "pre-printed lottery ticket" in light of the applicant's disclaimer.

In sum, for the reasons explained above, Petitioner fails to establish that Szrek discloses, teaches, or suggests a pre-printed lottery ticket that has no lottery numbers associated with it at the time of customer purchase.

3. Objective Indicia of Nonobviousness

Neither party presents evidence of objective indicia of nonobviousness at this stage of the proceeding.

4. Weighing the Graham Factors

"Once all relevant facts are found, the ultimate legal determination [of obviousness] involves the weighing of the fact findings to conclude whether the claimed combination would have been obvious to an ordinary artisan." *Arctic Cat*, 876 F.3d at 1361. On balance, considering the record presently before us, Petitioner has not established that Szrek would have rendered the subject matter of claims 1–6 of the '135 patent obvious to one of ordinary skill in the art at the time of the invention.

E. Ground 2: Obviousness over Llach and Szrek

Petitioner asserts that Llach and Szrek would have rendered the subject matter of claims 1–6 obvious to one of ordinary skill in the art at the time of the invention. Pet. 54–74. As in the previous ground, Petitioner relies on Szrek as teaching the recited "pre-printed lottery ticket." *See id.* at 59–60 ("As discussed above in Ground 1 for limitation 1[a], Szrek discloses a pre-printed lottery ticket containing a bar code from which ***unique identification information and product information*** (such as bet combination or sequence counter) are obtained when the bar code is scanned."), 60 ("the Llach-Szrek combination results in Llach's POS terminal scanning the barcode of Szrek's pre-printed lottery ticket"); *see also* Pet. Reply 30–31 (not raising additional argument as to "pre-printed lottery ticket"). Thus, we agree with Patent Owner that Petitioner's challenge under Llach and Szrek fails for the same reasons as Petitioner's challenge under Szrek, discussed above. PO Resp. 48–49.

III. PATENT OWNER'S MOTION TO EXCLUDE

Patent Owner filed a Motion to Exclude, seeking to exclude Exhibit 1038 (Supplemental Declaration of Michael Hutton) and Exhibits 1034–1036. PO MTE 1–2. During the oral hearing, Patent Owner withdrew its Motion to Exclude as applied to Exhibits 1034–1036, leaving only Exhibit 1038 as subject to its motion. Tr. 65:13–66:8. Patent Owner contends that Exhibit 1038 should be excluded because it contains new expert opinions and argument that do not appear in Mr. Hutton's first declaration. PO MTE 1. In particular, Patent Owner challenges three aspects of Mr. Hutton's rebuttal testimony: (1) his testimony rebutting Patent Owner's arguments as to the meaning of "pre-printed lottery ticket" and the applicant's arguments before the Office during prosecution of the '135 patent (*id.* at 4–5); (2) his testimony that it would have been obvious to modify Szrek to incorporate the generation of lottery numbers as taught by Gilmore, with a reasonable expectation of success, to satisfy the meaning of a "pre-printed lottery ticket" under Patent Owner's proposed construction (*id.* at 5–6); and (3) his testimony that it would have been obvious to "communicate the barcode, including both product type and ticket identifier, to the game provider" in response to Patent Owner's proposed construction and argument directed to "product information" (*id.* at 6). Patent Owner also contends that Mr. Hutton's Supplemental Declaration is prejudicial under Federal Rules of Evidence 401–403 because Patent Owner does not have an opportunity to submit a responsive supplemental expert declaration. *Id.* at 6–7.

In it Opposition, Petitioner contends that Patent Owner only objects to paragraphs 6–18 and 25–32 of Exhibit 1038 and therefore the exclusion of

the entire supplemental declaration is improper. Pet. Opp. 2. Petitioner contends that paragraphs 6–18 of Exhibit 1038 are responsive to Patent Owner's argument as to the meaning of the "pre-printed lottery ticket," which was first raised in the Patent Owner Response. *Id.* at 3–4. In its reply in support of its motion, Patent Owner identifies paragraphs 4–13 of Mr. Hutton's Supplemental Declaration as applying to the meaning of "pre-printed lottery ticket." PO MTE Reply 1–3. Patent Owner also reiterates that it cannot "present a fulsome rebuttal" because of "the limitations of a sur-reply." *Id.* at 2–3.

Patent Owner has not established that it is entitled to the relief requested by its Motion to Exclude as applied to paragraphs 1–13 of Mr. Hutton's Supplemental Declaration. Patent Owner's construction was first raised in its Patent Owner Response and Petitioner is entitled to an opportunity to respond to that construction both in its Reply and by submitting additional evidence, which it did by submitting Exhibit 1038. *See ParkerVision*, 88 F.4th at 979 ("the APA required the Board to give [petitioner] 'adequate notice and an opportunity to respond under the new construction' first proposed in [patent owner's] patent owner response") (citing *Axonics*, 75 F.4th at 1383). Although Patent Owner is correct that a sur-reply under our Rules is limited (*see* 37 C.F.R. § 42.23(b) ("A sur-reply may only respond to arguments raised in the corresponding reply and may not be accompanied by new evidence other than deposition transcripts of the cross-examination of any reply witness.")), Patent Owner could have requested authorization to expand the scope of its sur-reply to accommodate whatever type of response it believed was needed to respond to Mr. Hutton's Supplemental Declaration, including requesting authorization to submit

additional evidence, such as a rebuttal declaration. Patent Owner, however, did not do so. *See ParkerVision*, 88 F.4th at 981 (finding a patent owner's similar arguments unpersuasive in a similar circumstance). Accordingly, we deny Patent Owner's Motion to Exclude as applied to paragraphs 1–13 of Exhibit 1038.[27]

We do, however, find that Patent Owner has established that it is entitled to the relief requested by its Motion to Exclude as applied to paragraphs 14–18 of Exhibit 1038. In these paragraphs, Mr. Hutton testifies that it would have been obvious to one of ordinary skill in the art to modify Szrek based on the teachings of Gilmore, and provides reasons as to why one of ordinary skill in the art would have been motivated to do so with a reasonable expectation of success, none of which was presented in the Petition or Mr. Hutton's Declaration submitted therewith. Without repeating, the same reasons and basis for our decision not to consider Petitioner's argument in its Reply apply equally to these paragraphs of Mr. Hutton's Supplemental Declaration. *See supra* § II.D.2. Accordingly, for the same reasons, we grant Patent Owner's Motion to Exclude as applied to paragraphs 14–18 of Exhibit 1038, and, therefore, those paragraphs are excluded.

We do not need to reach the remaining paragraphs of Exhibit 1038 because the testimony therein is directed to the meaning of "product information" and Szrek's disclosure in that regard, issues that we do not

---

[27] For the reasons discussed above, we give very little weight to Mr. Hutton's testimony in paragraphs 4–13 of his Supplemental Declaration. *See supra* § II.C.2 (discussing the incorrect legal standard applied by Mr. Hutton in his testimony on claim construction from his Supplemental Declaration).

specifically resolve in this Decision because we find Patent Owner's arguments as to "pre-printed lottery ticket" dispositive. Accordingly, we dismiss as moot Patent Owner's Motion to Exclude as applied to paragraphs 19–34 of Exhibit 1038.

IV. CONCLUSION[28]

For the reasons discussed above, Petitioner has not demonstrated, by a preponderance of the evidence, that claims 1–6 of the '135 patent are unpatentable. Additionally, we do not consider the portion of Petitioner's Reply arguing that the Challenged Claims would have been obvious if Szrek were modified in light of Gilmore because that contention was not proposed in the Petition. Further, Petitioner's Motion to Exclude is dismissed as moot and Patent Owner's Motion to Exclude is granted in part, denied in part, and dismissed as moot in part.

---

[28] Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this decision, we draw Patent Owner's attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding*, 84 Fed. Reg. 16,654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. *See* 37 C.F.R. § 42.8(a)(3), (b)(2).

Our conclusions regarding the Challenged Claims are summarized below:

Claims Challenged	35 U.S.C. §	Reference(s) /Basis	Claims Shown Unpatentable	Claims Not Shown Unpatentable
1–6	103	Szrek		1–6
1–6	103	Llach, Szrek		1–6
Overall Outcome				1–6

V. ORDER

Accordingly, it is:

ORDERED that claims 1–6 of U.S. Patent No. 9,865,135 B2 are determined not to be unpatentable;

FURTHER ORDERED that Petitioner's Motion to Exclude (Paper 24) is *dismissed as moot*;

FURTHER ORDERED that Patent Owner's Motion to Exclude Evidence (Paper 25) is *granted in part, denied in part, and dismissed as moot in part*; and

FURTHER ORDERED that, because this a Final Written Decision, parties to this proceeding seeking judicial review of this Decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

For PETITIONER:

James M. Glass
Quincy Lu
QUINN EMANUEL URQUHART & SULLIVAN LLP
jimglass@quinnemanuel.com
quincylu@quinnemanuel.com

For PATENT OWNER:

Robert L. Hails, Jr.
Jason F. Hoffman
BAKER & HOSTETLER LLP
rhails@bakerlaw.com
jhoffman@bakerlaw.com