

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

FANDUEL, INC.,
Petitioner,

v.

INTERACTIVE GAMES LLC,
Patent Owner.

Case IPR2017-01491
Patent 8,771,058 B2

Before KEN B. BARRETT, PATRICK R. SCANLON, and
GEORGE R. HOSKINS, *Administrative Patent Judges*.

HOSKINS, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

I. INTRODUCTION

FanDuel, Inc. (“Petitioner”) filed a Petition (Paper 1, “Petition” or “Pet.”) seeking an *inter partes* review of claims 1, 6–9, and 19 of U.S. Patent No. 8,771,058 B2 (“the ’058 patent”). We, initially, instituted a trial to determine whether claims 1, 6–9, and 19 are unpatentable on some but not all of the Petition’s challenges. Paper 10 (“Institution Decision” or “Inst. Dec.”).

Accordingly, Patent Owner filed a Response (Paper 17, “PO Resp.”), and Petitioner filed a Reply to the Response (Paper 21, “Pet. Reply”). These briefs address the initially instituted challenges.

During the trial, the U.S. Supreme Court decided *SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348 (2018). In light of *SAS* and Office guidance¹, we modified the Institution Decision, to institute on all of the Petition’s challenges. *See* Paper 20. Petitioner then opted to proceed with all of the initially non-instituted challenges. *See* Paper 22, 3. We modified the case schedule to permit additional briefing and evidence concerning the initially non-instituted challenges. *See* Paper 22.

Accordingly, Patent Owner filed a Supplemental Response (Paper 23, “Supp. PO Resp.”), and Petitioner filed a Reply to the Supplemental

¹ “Guidance on the impact of *SAS* on AIA trial proceedings” (Apr. 26, 2018), accessible at <https://www.uspto.gov/patents-application-process/patent-trial-and-appeal-board/trials/guidance-impact-sas-aia-trial> (last accessed Oct. 2, 2018) (“[a]t this time, if the PTAB institutes a trial, the PTAB will institute on all challenges raised in the petition,” and “for pending trials . . . the panel may issue an order supplementing the institution decision to institute on all challenges raised in the petition”).

Response (Paper 25, “Supp. Pet. Reply”). These briefs address the initially non-instituted challenges.

An oral hearing was held, for which the transcript was entered into the record (Paper 37, “Tr.”).

We have jurisdiction under 35 U.S.C. § 6. This Decision is a Final Written Decision under 35 U.S.C. § 318(a) as to the patentability of claims 1, 6–9, and 19 of the ’058 patent. Based on the record before us, Petitioner has shown, by a preponderance of the evidence, that claims 1, 7–9, and 19 of the ’058 patent are unpatentable, but Petitioner has not shown that claim 6 of the ’058 patent is unpatentable.

II. BACKGROUND

A. *Real Parties in Interest and Related Proceedings*

Petitioner identifies FanDuel, Inc. and FanDuel Limited as the real parties in interest. Pet. 70; Paper 9, 1. Patent Owner identifies Interactive Games LLC as the real party in interest. Paper 5, 2. The parties identify several U.S. District Court litigations as matters that would affect, or be affected by, a decision in this proceeding. Pet. 70; Paper 5, 2; Paper 9, 1.

B. *The ’058 Patent*

The ’058 patent discloses a gaming system in which participants may use a mobile device to play games under the control of a central server. For example, Figure 1 of the ’058 patent is reproduced below.

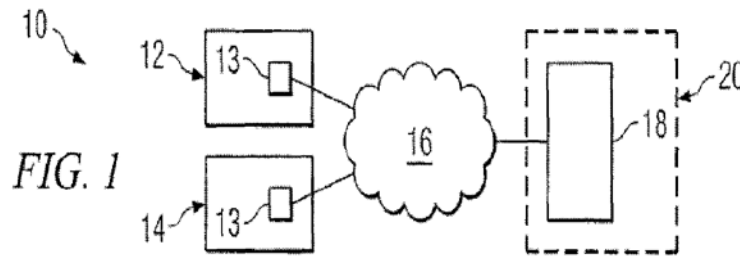


Figure 1 illustrates two users 12, 14 using respective gaming communication devices 13 to communicate wirelessly with server 18 of gaming service provider 20, such as a casino. *Id.* at 13:45–14:2. Devices 13 may be mobile phones, personal data assistants, or computers. *Id.* at 13:52–56. Use of device 13 and server 18 permits user 12 to engage in (including wager on) traditional gambling activities such as slot machine games, poker, and sports betting. *Id.* at 13:4–17.

Server 18 “may store rules which determine what a game configuration should be as a function of location” of device 13. *Id.* at 12:15–33, Abstract. Several examples of location-determined “game configurations” are provided, as discussed further below. *Id.* at 11:60–12:14.

C. The Challenged Claims

The '058 patent contains nineteen claims. Petitioner challenges only claims 1, 6–9, and 19. Claim 1 illustratively recites:

1. A method comprising:
 - determining a first location of a mobile gaming device;
 - determining a first game configuration associated with the first location;
 - generating, by a computer system, a first game outcome using the first game configuration;

instructing a display screen of the mobile gaming device to display an indication of the first game outcome;

determining a first payout associated with the first game outcome;

crediting a player account with a first amount based on the first payout;

determining a second location of the mobile gaming device, wherein the second location is different from the first location;

determining a second game configuration associated with the second location, wherein the second game configuration is different from the first game configuration;

generating, by the computer system, a second game outcome using the second game configuration;

instructing the display screen of the mobile gaming device to display an indication of the second game outcome;

determining a second payout associated with the second game outcome; and

crediting the player account with a second amount based on the second payout.

Ex. 1001, 60:2–28. Claims 6–9 depend from claim 1. *Id.* at 60:45–61.

Claim 19 is an independent claim directed to a computer system comprising a processor and a memory, configured to perform a method similar to the method of claim 1. *Id.* at 62:1–28.

D. Asserted Grounds of Unpatentability

The Petition asserts the challenges identified below, all under 35 U.S.C. § 103, to claims 1, 6–9, and 19 of the '058 patent. *See* Pet. 7. All of these challenges are at issue after *SAS*.

References	Claim(s) Challenged
Carter ² and Walker ³	1, 7–9, and 19
Carter, Walker, and the Slot Payouts Webpage ⁴	1 and 6
Luciano ⁵ and Alcorn ⁶	1, 7–9, and 19
Luciano, Alcorn, and the knowledge of a person of ordinary skill in the art	19
Luciano, Alcorn, and the Slot Payouts Webpage	1 and 6

III. ANALYSIS

A. Claim Construction

In this proceeding, when construing the claims of the '058 patent, we use the broadest reasonable construction in light of the '058 patent specification. *See* 37 C.F.R. § 42.100(b) (2016)⁷; *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016) (upholding the broadest reasonable construction standard); Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,764 (Aug. 14, 2012).

² Ex. 1003, U.S. Patent Pub. No. 2002/0147049 A1, pub. Oct. 10, 2002.

³ Ex. 1004, U.S. Patent Pub. No. 2004/0005919 A1, pub. Jan. 8, 2004.

⁴ Ex. 1005, “Slot Payouts by Casino / City / State” (alleged by Petitioner to have been published at least as early as July 4, 2005, *see* Pet. 47–48).

⁵ Ex. 1006, U.S. Patent No. 7,035,626 B1, iss. Apr. 25, 2006.

⁶ Ex. 1007, U.S. Patent No. 6,104,815, iss. Aug. 15, 2000.

⁷ A recent amendment to this rule does not apply here, because the Petition was filed before November 13, 2018. *See* “Changes to the Claim Construction Standard for Interpreting Claims in Trial Proceedings Before the Patent Trial and Appeal Board,” 83 Fed. Reg. 51340, 51340 (“DATES”).

1. “*game configuration*” (*claims 1 and 19*)

Claim 1 recites “determining a first *game configuration*,” and “generating . . . a first game outcome using the first game configuration.” Ex. 1001, 60:4–7 (emphasis added). Claim 1 recites similar limitations for a second, different, game configuration. *Id.* at 60:18–22. Claim 19 contains identical limitations. *Id.* at 62:8–11, 62:20–22.

Petitioner contends the broadest reasonable construction “of the term ‘game configuration’ [in claims 1 and 19] must at least include ‘any rules or algorithms that influence resolutions, results or any other outcome of a game.’” Pet. 6 (citing Ex. 1001, 11:60–12:1).

Patent Owner contends “the plain language of the claims . . . require[s] that each ‘game configuration’ be used to ‘generat[e]’ a ‘game outcome,’” so “any reasonable interpretation of the claim must include ‘game configuration[s]’ that are used to generate game outcomes.” PO Resp. 12–13; Ex. 2002 ¶ 32.

The ’058 patent specification identifies several different kinds of “game configurations,” as follows:

- (a) any rules or algorithms according to which resolutions or outcomes are generated in the game;
 - (b) any rules or algorithms according to which information is presented in the game;
 - (c) any information that is presented in the game;
 - (d) any rules or algorithms that determine how payouts are awarded in a game; and
- any other rules or algorithms which influence the results of a game, the manner in which a game is presented, or any other aspect of the game.

Ex. 1001, 11:60–12:1 (line breaks added). Thus, the term “game configuration,” in isolation, carries a broad connotation: any rule or

algorithm which influences the result of the game, the presentation of the game, or any other aspect of the game.

Claims 1 and 19 additionally recite generating a game outcome using the game configuration. Dependent claims provide examples of game configurations that may be used to generate a game outcome: a *payout percentage* (claim 2), a *probability of occurrence* for a game outcome (claim 3), a *payout* for a game outcome (claim 4), and a *bet amount required for play* (claim 5). Ex. 1001, 60:29–44 (emphases added). We, thus, agree with the parties that the first and second game configurations of claims 1 and 19 must each include at least one rule that influences a game outcome, wherein the two outcome-influencing rules are different from each other.

At the same time, the dependent claims also provide examples of game configurations that are not used to generate a game outcome: an *image displayed* during play (claim 10), a *color displayed* during play (claim 11), a *name of a merchant displayed* during play (claim 12), and *information about a merchant* (claim 13). *Id.* at 60:62–61:6. We, thus, conclude that, while the first and second game configurations of claims 1 and 19 must each include at least one rule that influences a game outcome, the game configurations at the same time may include additional rules that do not influence a game outcome.

2. *instructions to “cause the computer system to perform a method comprising . . . determining” first and second locations of a mobile gaming device (claim 19)*

Claim 19 recites a processor to execute instructions to “cause the computer system to perform a method comprising . . . *determining*” first and second locations of a mobile gaming device. Ex. 1001, 62:1–7, 62:16–18

(emphasis added). The parties dispute the meaning of those location “determining” limitations. *See* Pet. 13–14, 46; PO Resp. 20–23; Pet. Reply 13.

Petitioner contends the ’058 patent “specification discloses that the term ‘determining encompasses a wide variety of actions and . . . can include receiving (e.g., receiving information).’” Pet. 13 (quoting Ex. 1001, 51:59–52:1, in connection with “determining a first location of a mobile gaming device” in claim 1); *id.* at 46 (“*See*, Claim 1(a)” in connection with “determining a first location of a mobile gaming device” in claim 19). Therefore, Petitioner’s view is that a processor may “determine” a location of the mobile device by receiving location information from the mobile device. *Id.* at 13–14.

Patent Owner acknowledges the ’058 patent’s definition of the term “determining” as including receiving information, but contends claim 19 requires more than that, because “claim 19 requires that the memory in the computer system include instructions that *cause* the computer system to complete the location determinations.” PO Resp. 20–22; Ex. 2002 ¶ 44. According to Patent Owner, “one of ordinary skill in the art would recognize that instructions on a receiving device alone are not sufficient to cause it to receive anything,” because “there must also be corresponding instructions on a sending device that initiate transmission of what will be received.” PO Resp. 22–23; Ex. 2002 ¶ 45.

The ’058 patent provides “a guide to interpreting” the patent. Ex. 1001, 51:56–59:67. The guide includes a discussion of the term “determining.” *Id.* at 51:59–52:14. That discussion indicates:

The term “determining” and grammatical variants thereof (e.g., to determine a price, determining a value, determine an object which meets a certain criterion) is used in an extremely broad sense. The term “determining” encompasses a wide variety of actions and therefore “determining” can include calculating, computing, processing, deriving, investigating, looking up (e.g., looking up in a table, a database or another data structure), ascertaining and the like. Also, “determining” can include receiving (e.g., receiving information), accessing (e.g., accessing data in a memory) and the like. Also, “determining” can include resolving, selecting, choosing, establishing, and the like.

Id. at 51:59–52:4; *see also id.* at 52:8–11 (“The term ‘determining’ . . . does not imply that an algorithm or process is used.”).

Patent Owner’s attempt to circumvent the “extremely broad” meaning of the term “determining,” encompassing a “wide variety of actions,” in the context of claim 19, is unavailing. *Id.* As described in the ’058 patent specification, the processor of claim 19 may determine a location of the mobile device by receiving information representing the location of the mobile device from another processor. *Id.* at 51:59–52:2. Even if such receipt by the claimed processor requires the other processor to have its own instructions for sending the location information to the claimed processor, as Patent Owner contends, still the limitation is met by the claimed processor having instructions for receiving the location information. The claimed processor’s instructions cause the claimed processor to make the determination by causing the claimed processor to receive the location information from the other processor.

3. *Remaining Claim Terms*

The parties do not offer any further explicit claim constructions. We determine no further explicit claim constructions are needed to resolve the issues presented by the arguments and evidence of record. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co. Ltd.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (per curiam) (claim terms need to be construed “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)).

B. *Obviousness over Carter and Walker*

Petitioner asserts claims 1, 7–9, and 19 of the ’058 patent are unpatentable under 35 U.S.C. § 103 as having been obvious over Carter and Walker. Pet. 8–47. Petitioner cites the Declaration of Mr. Garry Kitchen in support. Ex. 1011. Patent Owner opposes Petitioner’s assertions. PO Resp. 6–32. Patent Owner cites the Declaration of Dr. Robert Akl in support. Ex. 2002.

We have reviewed the arguments and evidence of record. We conclude a preponderance of the evidence establishes claims 1, 7–9, and 19 are unpatentable as having been obvious over Carter and Walker. We begin our analysis with a brief statement of the law of obviousness, then consider the level of ordinary skill in the art, then briefly summarize Carter and Walker, and finally address Petitioner’s and Patent Owner’s contentions.

1. *Law of Obviousness*

A patent claim is unpatentable under 35 U.S.C. § 103 if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) objective evidence of nonobviousness, if made available in the record, which is not the case here. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

2. *Level of Ordinary Skill in the Art*

Petitioner contends a person having ordinary skill in the art pertaining to the ’058 patent would have “a Bachelor of Science Degree in Electrical Engineering or Computer Engineering or equivalent,” as well as “at least two years of experience in the design and development of video game-related hardware and software.” Pet. 6–7 (citing Ex. 1011 ¶ 51). Patent Owner, by contrast, proposes “at least a B.S. degree in Electrical Engineering, Computer Engineering, Computer Science or similar field,” as well as “around two years’ experience in design, development, and/or analysis of hardware and software in the mobile gaming or telecommunications industries, or equivalent.” PO Resp. 4 (citing Ex. 2002 ¶ 15).

Thus, there is a substantial amount of overlap, but also some disagreement, between the parties on this point. A first disagreement is that Petitioner would require “video-game related” experience, which Patent Owner contends is ambiguous. *Id.* at 4–5 (citing Ex. 2003, 26:12–15 and Ex. 2002 ¶ 16). A second disagreement is that Patent Owner’s proposal

would encompass non-gaming “telecommunications” experience without requiring gaming experience, whereas Petitioner asserts requiring “experience developing games . . . is appropriate for a patent directed to gaming.” *Id.* at 4; Pet. Reply 19–20.

We agree with Patent Owner that Petitioner’s reference to *video* game experience, as opposed to some other computer gaming experience, is not required to achieve ordinary skill in the art pertinent to the ’058 patent. The ’058 patent is concerned principally with “game configurations that are specific to a location”; the specific technical implementation of presenting the game on a computer screen is only a secondary consideration. *See, e.g.*, Ex. 1001, Abstract, 1:40–8:6, 60:1–62:28. However, even if we were to accept Petitioner’s position on this point, it would not affect the bases for our decision set forth below.

We agree with Petitioner that ordinary skill here requires gaming experience, and does not encompass telecommunications experience without gaming experience. While location tracking is a component of the ’058 patent’s claimed invention, the specifics of how such tracking occurs are only a secondary consideration, especially in the context of the presently claimed invention. *See, e.g.*, Ex. 1001, Abstract, 60:1–62:28. However, even if we were to accept Patent Owner’s position on this point, it would not affect the bases for our decision set forth below.

We determine a person of ordinary skill in the art pertaining to the ’058 patent would have a Bachelor of Science Degree in Electrical Engineering, Computer Engineering, or a similar field. Such a person, further, would have at least about two years of experience designing and developing computer hardware and software to be used for playing games.

3. Carter

Carter discloses a “Location Based Mobile Wagering System.”
Ex. 1003, Title, ¶ 3. Figure 2 of Carter is reproduced below.⁸

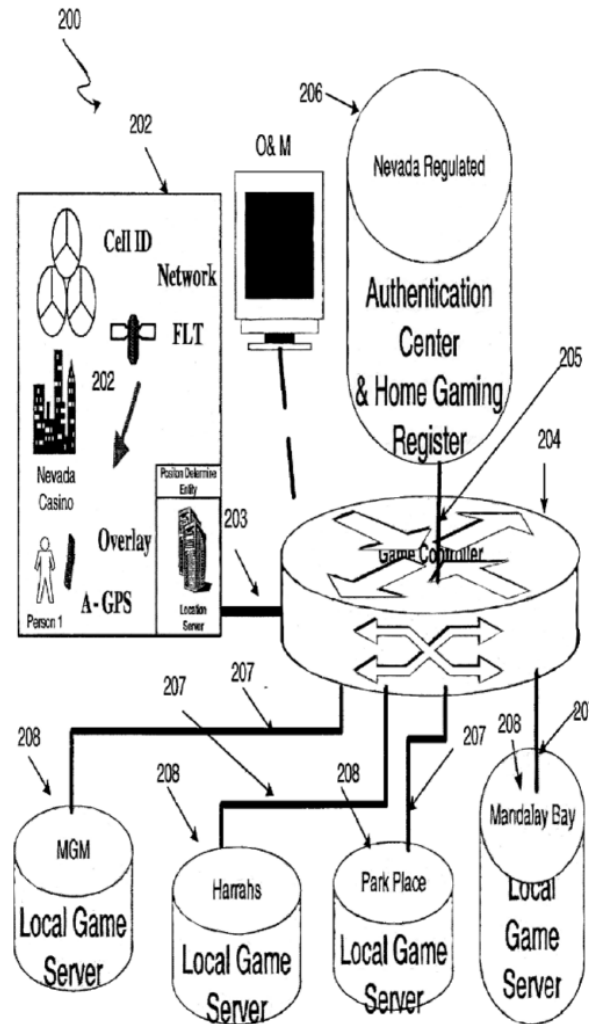


FIG. 2

Figure 2 illustrates mobile gaming system 200, including wireless mobile communication system 202, game controller 204, home gaming register system 206, and four local gaming servers 208. *Id.* ¶ 35. A user uses mobile

⁸ This rendering is copied from the Petition (page 16), which removes shading from the figure to improve legibility.

gaming unit 102 (shown in Figure 1) to access gaming system 200 via a wireless network and wireless mobile communication system 202.

Id. ¶¶ 25–26, 36, Figs. 1–2. Mobile gaming unit 102 may be a personal computer, a personal data assistant, or a mobile telephonic device. *Id.* ¶ 26, Fig. 1. Gaming system 200 permits the mobile users to engage in (including wager on) traditional gambling activities such as slot machine games, poker, and sports betting. *Id.* ¶¶ 36–37, 46–47.

Carter indicates that “in recent years on line gaming has been the subject of several legal disputes” by allowing gamblers to gamble while located in jurisdictions which “placed legal restrictions on gambling.” *Id.* ¶ 10. Carter therefore describes a need for a system to provide gamblers with remote access to a gaming controller, without subjecting the operator of the gaming controller to liability in the gambler’s local jurisdiction. *Id.* Carter fills that need with a system that is “capable of determining a gambler[’]s location and, thereby *restrict access to the gaming controller* based on the gambling laws where the gambler is located.” *Id.* (emphasis added).

To do so, Carter’s game controller 204 collects location information from the user’s mobile gaming unit 102 and matches it with a “jurisdictional profile” maintained by HGR system 206 or local game servers 208. *Id.* ¶¶ 36–37, 39–40, 43. Each jurisdictional profile includes “*any information* relative to the gambling restrictions” in the corresponding jurisdiction. *Id.* ¶ 37 (emphasis added). Such information includes “a listing of available gaming opportunities” in the jurisdiction, and other information “necessary for allowing the user to place a wager” in the jurisdiction. *Id.* ¶ 40. Game controller 204 forwards to mobile gaming unit 102 “information concerning

the available games” in the jurisdiction where unit 102 is located, and the user may select an available game to play. *Id.* ¶¶ 44–45.

4. *Walker*

Walker discloses a method and apparatus for enabling a player to select features on a gaming device. Ex. 1004, Title. Walker’s gaming devices include personal computers, telephones, and portable handheld gaming devices. *Id.* ¶ 218. Walker describes various “condition[s] for disabling or enabling a feature” on a gaming device (*id.* ¶ 253), such as:

A location of the gaming device (e.g., a feature may be enabled if the gaming device is near a door of a casino floor, but may not be enabled if the gaming device is near a poker room)[.]

Id. ¶¶ 254, 264. Other conditions for enabling a feature include what casino is operating the gaming device, and the “location or jurisdiction of” the casino. *Id.* ¶¶ 282–284.

Walker indicates its “[f]eatures may affect various operations” of a gaming device, “such as the way a game is played” and “the way outcomes are determined in a game.” *Id.* ¶ 61. For example, “activating a feature on a gaming device” may include “enabling the player to play the gaming device in accordance with modified outcome probabilities.” *Id.* ¶¶ 91, 100.

5. *Independent Claim 1*

- a) “1. A method comprising: determining a first location of a mobile gaming device”
-- and --
“determining a second location of the mobile gaming device, wherein the second location is different from the first location”

Petitioner contends Carter’s mobile gaming unit 102 is a mobile gaming device. Pet. 10–11 (citing Ex. 1003, Fig. 1, ¶¶ 12, 22, 26, 46–47);

Ex. 1011 ¶¶ 53–56, 66–67. Petitioner contends Carter discloses determining a first location of mobile gaming unit 102, when the unit determines its location and notifies game controller 204 of its location. Pet. 11–14 (citing Ex. 1003, Fig. 3, ¶¶ 15, 27–28, 36, 43, 49, and claims 2, 3, 23, 26); Ex. 1011 ¶¶ 59, 67. Petitioner contends Carter discloses determining a second location of mobile gaming unit 102, different from the first location, as unit 102 moves from location to location. Pet. 34–35 (citing Ex. 1003, Fig. 2, ¶¶ 40, 43, 49, and claims 20, 24, 27). Patent Owner does not dispute these contentions, although Patent Owner does dispute whether Carter discloses slightly different limitations in claim 19, as discussed below in Section III.B.7. We find Petitioner’s contentions as to Carter disclosing these limitations in claim 1 are supported by a preponderance of the evidence. *See, e.g.*, Ex. 1003, Fig. 1, ¶¶ 12, 22, 26–28, 36.

b) *“determining a first game configuration associated with the first location”*

-- and --

“determining a second game configuration associated with the second location, wherein the second game configuration is different from the first game configuration”

Petitioner contends (i) Carter discloses the claimed game configuration determinations. *See* Pet. 14–18, 35–36. In the alternative, Petitioner contends (ii) Walker discloses the claimed game configuration determinations, and (iii) it would have been obvious to modify Carter to include the claimed game configuration determinations in light of Walker. *See id.* at 18–28, 36–38. Patent Owner disputes each contention (i)–(iii). *See* PO Resp. 8, 9, 12–20, 23–32.

For the following reasons, we conclude a preponderance of the evidence establishes Carter discloses the claimed game configuration determinations. Further, even if Carter is lacking in that regard, a preponderance of the evidence establishes Walker discloses the claimed game configuration determinations, and it would have been obvious to modify Carter to include such determinations.

i) Carter Disclosure

Petitioner contends Carter discloses the claimed game configuration determinations. Pet. 14–18, 35–36. Petitioner relies on Carter’s tracking of gaming opportunities and restrictions in jurisdictions where mobile gaming unit 102 may travel, via Carter’s jurisdictional profiles. Pet. 14 (citing Ex. 1003 ¶¶ 12, 31, 37, 43); Tr. 47:24–49:19. Petitioner contends Carter’s gaming system 200 matches location information received from mobile gaming unit 102 to an associated jurisdictional profile, and provides gaming opportunities and restrictions to unit 102 in accordance with the information in the associated jurisdictional profile. Pet. 14–18, 35–36 (citing Ex. 1003, Figs. 2–3, ¶¶ 12, 31–32, 37, 40, 43–44, 47, 49, and claims 7–9, 20, 23–24, 26, 27). Petitioner further cites Carter’s disclosure that a “gaming opportunity [is] characterized by a gaming outcome.” Pet. 18 (citing Ex. 1003, claim 23)

Patent Owner argues Carter does not disclose the claimed game configuration determinations. PO Resp. 8, 12–16; Ex. 2002 ¶¶ 28, 31–36. According to Patent Owner, Carter’s “jurisdictionally restrict[ing] the list of available games for selection by a user . . . has nothing to do with how the claimed game configurations generate different game outcomes in different

locations.” PO Resp. 8, 14–15; Ex. 2002 ¶¶ 28, 32, 35. As an example, Patent Owner reasons:

[T]he fact that blackjack and bingo (i.e., two gaming opportunities) may be available in one jurisdiction while poker and roulette (i.e., two different gaming opportunities) are available in another jurisdiction has nothing to do with rules, algorithms, or other items that are used to generate a game outcome in any of blackjack, bingo, poker, or roulette games.

PO Resp. 15; Ex. 2002 ¶ 35. Patent Owner asserts “a user may play a game — and thus interact with a configuration of that specific game — only *after* the user selects the game from the jurisdictionally restricted list of available games,” so “[f]or games *not* provided on the jurisdictionally restricted list of available games, because there is no game, there can be no outcome of a game to generate for that respective game in that jurisdiction either.” PO Resp. 15–16 (citing Ex. 1003 ¶¶ 45–47, Fig. 3); Ex. 2002 ¶ 36. According to Patent Owner, claim 1 “goes one step further than Carter’s use of location, hinging not just game availability on location, but also game configurations, and thus game outcomes, on location.” PO Resp. 8 (citing Ex. 1003 ¶¶ 42–47); Ex. 2002 ¶ 28.

Petitioner replies⁹ that Patent Owner’s argument “ignores the fact that the games available in a particular jurisdiction are themselves a game configuration.” Pet. Reply 3. For example, in Petitioner’s view, blackjack is

⁹ Patent Owner asserts this portion of the Reply Brief improperly “rais[es] new invalidity arguments for the first time.” *See* Paper 32 (item #1). We, however, agree with Petitioner that this portion of the Reply Brief is not improper under 37 C.F.R. § 42.23(b). *See* Paper 33, 1. The Petition (at 14–18, 35–36) asserted Carter discloses first and second game configurations as location-based gaming opportunities, which was disputed in the Patent Owner Response (at 8, 12–16), and therefore is fair game for reply.

a card game “defined by rules (i.e., a game configuration),” whereas poker is a different card game defined by different rules (i.e., a different game configuration). *Id.* Thus, Petitioner contends the game configuration determinations of claim 1 are satisfied by determining blackjack is an available game for play in a first jurisdictional location, and determining poker is an available game for play in a second jurisdictional location. *Id.* Petitioner contends this view is supported by claim 17 of the ’058 patent, which depends from claim 1 to recite “the first game configuration includes an *ability to play* a first game, and the second game configuration includes an *ability to play* a second game but not the first game.” *Id.* at 3–4; Ex. 1001, 61:24–27 (emphases added).

We find a preponderance of the evidence establishes Carter discloses the claimed game configuration determinations. We agree with Petitioner that a game is defined by a set of rules that influence the game outcome, that is, a game configuration. *See supra* Section III.A.1 (claim construction of “game configuration”). Thus, a blackjack game is one game configuration applied to a deck of cards, and poker is a different game configuration applied to the same deck of cards. Determining whether a particular card game, such as blackjack or poker, is legally permitted to be played in the jurisdiction where Carter’s mobile gaming unit 102 is located, is determining whether that card game is associated with that jurisdiction.

ii) Walker Disclosure

Petitioner contends, to the extent “Carter does not teach a jurisdictional profile impacting the outcome of a particular game,” Walker discloses the claimed game configuration determinations. Pet. 18–23, 36;

Ex. 1011 ¶¶ 63–65, 68–69. Petitioner relies on Walker’s “features” as corresponding to the claimed game configurations, on the basis that Walker’s features “affect the outcome of a wagering game played on a gaming device.” Pet. 18–20, 36 (citing Ex. 1004 ¶¶ 43, 50–51, 60–61, 100); Ex. 1011 ¶¶ 68–69, 94. Petitioner cites Walker’s disclosure that a “feature, as used herein . . . comprises an enhancement, option, parameter, or mode that may affect . . . *how a game operates on a gaming device,*” and may “*affect various operations of a game . . . such as the way a game is played [and] the way outcomes are determined in a game.*” Pet. 18–19 (quoting Ex. 1004 ¶¶ 60–61) (emphases added); Ex. 1011 ¶ 68. Petitioner also cites Walker’s disclosure that the operation of a game may be affected by various features enabled for use on the gaming device. Pet. 19 (citing Ex. 1004 ¶ 43).

Petitioner further cites Walker’s disclosure that “activating a feature on a gaming device includes . . . enabling the player to play the gaming device in accordance with *modified outcome probabilities.*” Pet. 20, 36 (quoting Ex. 1004 ¶ 100) (emphasis added); Ex. 1004 ¶¶ 91, 100; Ex. 1011 ¶¶ 69, 94. Petitioner contends Walker’s modified outcome probability feature corresponds to a game configuration modification, for two reasons. First, the ’058 patent provides “[a] game configuration may include a probability of a resolution or an outcome.” Pet. 20 (quoting Ex. 1001, 12:5–9); Ex. 1011 ¶ 69. Second, an outcome probability is a rule that influences a game outcome, as the “game configuration” claim term has been construed above. Pet. 20; Ex. 1011 ¶ 69.

Patent Owner argues Walker does not disclose the claimed game configuration determinations. PO Resp. 9–10, 16–20; Ex. 2002 ¶¶ 29–30,

37–41. According to Patent Owner, Petitioner “hinges its arguments on *only a single* ‘modified outcome probabilities’ feature in Walker.” PO Resp. 16 (citing Pet. 20, 36) (emphasis added). Patent Owner asserts Walker’s modified outcome probabilities feature does not correspond to, as claimed, determining *first and second different* game configurations. *Id.* at 17–20; Ex. 2002 ¶ 37. Patent Owner contends Walker discloses only *enabling or disabling* a *single* modified outcome probabilities feature, and Walker “never suggests that there are *different types* of modified outcome probabilities.” PO Resp. 9, 16–17, 20 (emphasis added); Ex. 2002 ¶¶ 30, 38, 41. Patent Owner contends Petitioner relies on the ’058 patent “to somehow convert Walker’s *single* modified outcome probabilities feature into *two* different types of modified outcome probabilities features,” thereby tainting Petitioner’s analysis with hindsight. PO Resp. 17, 19–20 (citing Pet. 20, 37 and Ex. 1011 ¶¶ 69, 96); Ex. 2002 ¶¶ 38, 41.

Patent Owner further asserts that, in Walker, “‘*enabling* the player to play the gaming device in accordance with modified outcome probabilities’ is what happens when ‘a feature on a gaming device’ is activated.” PO Resp. 17 (citing Ex. 1005 ¶¶ 91, 95, 100); Ex. 2002 ¶ 39. In Patent Owner’s view: “Walker, different than the ’058 patent, teaches that enablement of that feature is binary — in contrast to being on some continuum where the feature could be of different types in different jurisdictions.” PO Resp. 17–18; Ex. 2002 ¶ 39. Patent Owner contends Walker is limited to a feature being either disabled, or enabled, based on the location of a device. PO Resp. 18–19 (citing Ex. 1005 ¶¶ 264, 282–284, 345, and Fig. 11E); Ex. 2002 ¶ 39.

Petitioner replies that its arguments concerning the Walker disclosure rely on several location-varying features being disclosed, not just the exemplary modified outcome probabilities feature. Pet. Reply 5–6 (citing Pet. 20, 23). Petitioner also asserts Patent Owner’s rebuttal concerning Walker’s modified outcome probabilities feature improperly construes claim 1 as requiring different game configuration “types,” and is inconsistent with the ’058 patent’s disclosure that “[a] game configuration may include a probability of a resolution or an outcome.” *Id.* at 6–7 (citing Ex. 1001, 12:5–9). Petitioner further contends¹⁰ Walker’s description of “*modified* outcome probabilities” satisfies the claim requirement for two game configurations, because it “encompasses a set of *original* outcome probabilities that subsequently *modified*.” Pet. Reply 8, 9–10 (citing Ex. 1004 ¶¶ 63, 100) (emphases added).

We find a preponderance of the evidence establishes Walker discloses the claimed game configuration determinations. We find Walker’s modified outcome probabilities feature is sufficient on its own to disclose determining first and second, different, game configurations. As Petitioner points out, claim 1 recites determining different game configurations, not different “types” of game configurations as Patent Owner would have it. Walker correspondingly discloses a first game configuration as an unmodified

¹⁰ Patent Owner asserts these portions of the Reply Brief improperly “rais[e] new invalidity arguments for the first time.” *See* Paper 32 (items # 4, 5). We, however, agree with Petitioner that these portions of the Reply Brief are not improper under 37 C.F.R. § 42.23(b). *See* Paper 33, 2–3. The Petition (at 20, 23, 36) asserted Walker’s modified outcome probabilities feature satisfies the first and second game configuration determination requirements, which was disputed in the Patent Owner Response (at 16–20), and therefore is proper for a reply.

outcome probability, and a second, different, game configuration as a modified outcome probability. Ex. 1004 ¶¶ 61, 63, 91, 100; Ex. 1011 ¶ 69. Indeed, the '058 patent itself correspondingly discloses modifying a probability of a game resolution or outcome from 1/1000 “in a *first configuration*” to 1/1002 “in a *second configuration*.” Ex. 1001, 12:5–9 (emphases added). Such configurations are game configurations, because they are rules that influence a game outcome. *See supra* Section III.A.1 (claim construction).

Petitioner further asserts Walker discloses that its features, including the modified probabilities feature discussed above, may be implemented on a mobile gaming device based on the device’s location. *See* Pet. 20–23 (citing Ex. 1004 ¶¶ 53, 88–89, 110, 196, 218, 254, 264, 282–284, 298); Ex. 1011 ¶¶ 65, 68. Patent Owner does not dispute this contention, which we find to be supported by a preponderance of the evidence. *See, e.g.*, Ex. 1004 ¶¶ 53, 88, 110, 218, 254, 264, 282–284, 298; Ex. 1011 ¶¶ 65, 68.

iii) Motivation to Combine Carter with Walker in the Manner Claimed

Petitioner proffers two reasons why it would have been obvious to include Walker’s location-varying outcome probabilities feature in Carter’s jurisdictional profiles, such that Carter’s gaming system 200 would determine first and second different outcome probability game configurations for a particular game, respectively associated with first and second locations of mobile gaming unit 102. Pet. 23–28, 36–38; Ex. 1011 ¶¶ 70–78, 94–98; Tr. 50:23–52:1.

First, Petitioner finds motivation in Walker’s teaching of the game-specific modified outcome probabilities feature being enabled or

disabled based on the *legal jurisdiction location* where the mobile device is located, in combination with Carter's teaching of jurisdictional profiles including "any information relative to gambling restrictions in the jurisdiction." Pet. 25, 36–37 (citing Ex. 1004 ¶¶ 282–284; Ex. 1003 ¶¶ 37, 49); Ex. 1011 ¶¶ 72–73, 75–76, 95–97. Petitioner contends a person of ordinary skill in the art would have appreciated that Walker's modified outcome probabilities feature could be incorporated into Carter's jurisdictional profiles "to comply with jurisdictional restrictions." Pet. 25, 36–37; Ex. 1011 ¶¶ 72–75, 95–97.

Second, Petitioner cites Walker's disclosure of game features being enabled at a first *casino location* but not a second *casino location*, and of location-varying features being used to enhance a player's gambling experience to lead to increased casino revenue. Pet. 24, 37 (citing Ex. 1004 ¶¶ 20, 51, 283); Ex. 1011 ¶¶ 70–71, 98. Petitioner contends Carter's jurisdictional profiles, similarly, may be associated with specific casinos. Pet. 24, 38 (citing Ex. 1003, Fig. 2, ¶ 40); Ex. 1011 ¶¶ 71, 98. According to Petitioner, a person of ordinary skill in the art would have been motivated to incorporate Walker's casino-specific outcome probabilities feature within Carter's casino-specific jurisdictional profiles, to enhance Carter's gaming system in the same way that the feature enhances Walker's gaming system. Pet. 24–25, 38; Ex. 1011 ¶¶ 70–71, 74, 98 (further citing Ex. 1004 ¶ 48).

As an example of the proposed combination, Petitioner contends it would have been obvious to apply Walker's first and second outcome probability game configurations to a specific game provided at each location in Carter's gaming system. Pet. 23–24; Ex. 1011 ¶¶ 74–75, 78. Carter, particularly, discloses a virtual slot machine game provided at each location,

in which the game's outcome probabilities are determined by the number of reels and the distribution of symbols on each reel. Pet. 23–24; Ex. 1011 ¶¶ 78, 96 (citing Ex. 1018, 30–31); Ex. 1003 ¶ 47. Petitioner contends a person of ordinary skill in the art would have appreciated that “[m]any jurisdictions require minimum payout percentages for slot machine games.” Pet. 25, 36; Ex. 1011 ¶¶ 40, 75, 95 (citing Exs. 1009, 1018, 1019). Thus, Petitioner suggests it would have been obvious to incorporate Walker's first and second outcome probability game configurations into Carter's virtual slot machine game by “simulat[ing] a slot machine having the appropriate number of reels, positions, and symbols on each reel to achieve the desired probability for each winning outcome.” Pet. 23–24; Ex. 1011 ¶ 78. This would have been done to comply with jurisdictional restrictions on slot machine game play. Pet. 25–26; Ex. 1011 ¶¶ 40, 75.

Patent Owner argues Petitioner's case for obviousness establishes only that Carter *could* have been modified in light of Walker as proposed by Petitioner, not that Carter *would* have been so modified, because “the evidence presented does not suggest any advantage to Petitioner's proposed combination.” PO Resp. 23–24; Ex. 2002 ¶¶ 46–56. In Patent Owner's view, “there was no problem with Carter that Walker could solve,” because “Carter already enhanced player experience while ensuring full compliance with the law,” “by giving players access to everything legal in each location,” so Petitioner's case is tainted with hindsight. *Id.* at 24–25, 26–29, 31–32 (citing Ex. 1003 ¶ 15); Ex. 2002 ¶¶ 47–48, 52–54. Patent Owner asserts that incorporating any of Walker's game-specific features into Carter “would only serve to limit the gaming opportunities available in Carter and

thereby hurt the player's experience and lead to decreased casino revenue.”
PO Resp. 26; Ex. 2002 ¶ 49.

Indeed, according to Patent Owner, “Carter could, *without modification*, provide users access to everything legal in each jurisdiction.”
PO Resp. 26 (emphasis added); Ex. 2002 ¶ 50. This would be accomplished by ensuring every legal game of a given jurisdiction is included in Carter's jurisdictional profile for that jurisdiction. PO Resp. 26; Ex. 2002 ¶ 50. For example, if two jurisdictions allow different outcome probabilities for slot machine games, each jurisdiction's profile would include only the game or games with legal outcome probabilities in the jurisdiction. PO Resp. 26; Ex. 2002 ¶ 50. In other words: “Each of the probabilities would have its own game; it would not merely be one of multiple possible configurations of a single game, as required by the claims.” PO Resp. 26–27; Ex. 2002 ¶ 50.

Patent Owner, further, asserts Mr. Kitchen's testimony concerning motivation relies improperly on several publications that were not identified or discussed in the Petition. PO Resp. 29 (citing Ex. 1011 ¶¶ 39–41, 73–78, 94–98 and Exs. 1009, 1017–1019). Patent Owner contends those publications have not been established to be prior art to the '058 patent. *Id.* at 29–30. Patent Owner contends Mr. Kitchen's testimony cannot “fill the gap” left for “the claimed first and second game configurations” when these publications are not considered. *Id.* at 30–31; Ex. 2002 ¶ 55.

Petitioner replies that the Petition properly relied on Mr. Kitchen's testimony and cited evidence. Pet. Reply 17–18 (citing Ex. 1011 ¶¶ 40–41, 73–78, 95). Petitioner further replies that Patent Owner improperly suggests the motivation to combine references must be contained in the references themselves, which is not the law. *Id.* at 16–17.

As discussed above in Section III.B.5.b.ii, we find Walker discloses the claimed determining of first and second game configurations being respectively associated with first and second locations, as a location-varying modified outcome probabilities feature for a particular game played with a gaming system. Therefore, Patent Owner's assertions that Petitioner relies on Mr. Kitchen's testimony to fill a gap between the cited prior art and the invention of claim 1 is not persuasive; there is no gap to fill.

The evidence of record, further, establishes a rational underpinning sufficient to support the legal conclusion of obviousness. *See In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006), *cited with approval in KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007). Petitioner has provided two persuasive lines of reasoning to establish that a person of ordinary skill in the art would have been motivated to modify Carter's mobile gaming system to include Walker's location-varying outcome probability game configurations for a specific game.

As to Petitioner's first motivation, Petitioner correctly points out Carter's jurisdictional profiles contain "*any* information relative to the gambling *restrictions*" of each jurisdiction, as well as the "jurisdictionally permitted gaming *opportunities*." Ex. 1003 ¶¶ 12, 37 (emphases added). Mr. Kitchen credibly testifies that, as of the '058 patent's February 2007 priority date, a person of ordinary skill in the art would have known that "[p]ayout rates for games such as slot machines are . . . frequently regulated by states" in different ways, and it would have been beneficial for a mobile gaming apparatus to ensure compliance with those differing laws. Ex. 1011 ¶¶ 40–41. Mr. Kitchen even cites evidence in support of that seemingly self-evident proposition. *See id.* ¶ 40.

Mr. Kitchen cites Crevelt¹¹ as indicating that “[a] payout rate is the theoretical percentage of money taken in by a gaming device that is paid back in the form of winnings over time.” *Id.* (citing Ex. 1018, 29).

Mr. Kitchen cites Kilby¹² as indicating jurisdictions had regulated “the payout rates of gaming machines ‘in order to prevent casino operators from placing players at too great a disadvantage,’” with Nevada for example requiring slot machines theoretically to pay out at least 75% per coin wagered. *Id.* (citing Ex. 1019, 112). In contrast, Mr. Kitchen cites Cabot¹³ as indicating New Jersey required slot machines to have a minimum payout rate of 83%. *Id.* (citing Ex. 1009, 123).

Patent Owner asserts Crevelt, Kilby, and Cabot have not been established to be prior art to the ’058 patent. *See* PO Resp. 29–30. However, we credit the references’ disclosures as reflecting the knowledge in the art as of the ’058 patent’s February 2007 priority date. *See* Ex. 1009, pages 2–3 (copyright 1999); Ex. 1018, page 3 (copyright 1988, 1989); Ex. 1019, pages 2–3 (copyright 1998).

We find Crevelt, Kilby, and Cabot each support Mr. Kitchen’s testimony concerning why Carter’s disclosure of jurisdictional profiles reflecting information relative to the gambling restrictions and opportunities would have motivated a person of ordinary skill in the art to modify those profiles to include Walker’s location-varying outcome probability game

¹¹ Ex. 1018, Dwight E. Crevelt & Louise Crevelt, *Slot Machine Mania* (1988, 1989).

¹² Ex. 1019, Jim Kilby & Jim Fox, *Casino Operations Management* (1998).

¹³ Ex. 1009, Anthony N. Cabot et al., *International Casino Law* (Third Edition, 1999).

configurations for a specific game, such as a slot machine game. Patent Owner's objection that Crevelt, Kilby, and Cabot are not discussed in the Petition itself is not a persuasive basis to deny relief (*see* PO Resp. 29), under the circumstances presented here. The Petition cites the specific portions of Mr. Kitchen's testimony at issue. *See* Pet. 23–26 (citing *inter alia* Ex. 1011 ¶¶ 40–41, 70–74, 76–78). Moreover, Crevelt, Kilby, and Cabot are cited only in support of Mr. Kitchen's testimony concerning the background knowledge a skilled artisan would have possessed and would have brought to bear in reading Carter and Walker, not as support for finding claim limitations to be found in the prior art. *See* Ex. 1011 ¶¶ 40, 66–78; *see also Ariosa Diagnostics v. Verinata Health, Inc.*, 805 F.3d 1359, 1365 (Fed. Cir. 2015).

Patent Owner's rebuttal argument against a motivation to combine Carter with Walker is not persuasive. Patent Owner correctly points out that Carter “already enhanced player experience while ensuring full compliance with the law.” PO Resp. 24–25, 26–29, 21–32; Ex. 2002 ¶¶ 47–48, 52–54. However, we reject Patent Owner's further assertion that, therefore, a person of ordinary skill in the art would not be motivated to modify Carter. *See* PO Resp. 24–25, 26–29, 21–32; Ex. 2002 ¶¶ 47–48, 52–54. Carter's disclosure for achieving full compliance with the law is provided only at a high level of generalization. Carter indicates its jurisdictional profiles contain “information relative to the gambling restrictions” and “jurisdictionally permitted gaming opportunities.” Ex. 1003 ¶¶ 12, 37. Carter further indicates different jurisdictions may have different gaming “protocols” with different “restrictions.” *Id.* ¶ 49. We are unable to discern, and Patent Owner does not cite, any further detail as to what the

jurisdictionally varying restrictions, opportunities, and protocols might be; Carter leaves such details to the knowledge of a person of ordinary skill in the art. *See id.* ¶¶ 10, 12, 31, 37, 40, 43, 49.

Mr. Kitchen persuasively testifies that Walker’s location-varying outcome probability game configurations are the kinds of restrictions or opportunities that Carter’s jurisdictional profiles are designed to reflect. Ex. 1011 ¶¶ 40, 72–75. This recognition by a person of ordinary skill in the art establishes a first basis for the obviousness of modifying Carter’s mobile gaming system to include Walker’s location-varying outcome probability game configurations, for a specific game such as a slot machine game, to account for jurisdictional variations in payout rate requirements.

As to Petitioner’s second motivation, Walker discloses its features, such as its outcome probability game configurations, may vary based upon casino location. Ex. 1004 ¶¶ 20, 48, 51, 283. This is done, according to Walker, to enhance the player’s gambling experience and, thereby, lead to increased casino revenue. *Id.* Carter’s jurisdictional profiles, similarly, may be associated with specific casinos. Ex. 1003, Fig. 2 (different local game servers 208 for “MGM,” Harrahs,” “Park Place,” and “Mandalay Bay”), ¶ 40. We agree with Petitioner that these disclosures would have led a person of ordinary skill in the art to combine Carter with Walker to achieve the invention of claim 1; we disagree with Patent Owner’s assertion that Petitioner’s case for obviousness establishes only that this could have been done. Mr. Kitchen credibly testifies these disclosures would have motivated the modification of Carter’s mobile gaming system to include Walker’s variable outcome probability game configurations for each casino, to

enhance the player's gambling experience and, thereby, lead to increased casino revenue. Ex. 1011 ¶¶ 57, 70–71, 74, 98.

Patent Owner, finally, argues that it was possible to achieve the benefits of Walker's location-varying outcome probability game configurations in Carter without modifying Carter. See PO Resp. 26–27; Ex. 2002 ¶ 50. Even if true, however, this does not negate the obviousness of proceeding as Petitioner has proposed to modify Carter, for the reasons provided by Petitioner and discussed above.

Thus, we determine a preponderance of the evidence provides ample motivation for why a person of ordinary skill in the art would have been led to combine Carter and Walker as proposed by Petitioner.

iv) Conclusion

A preponderance of the evidence establishes Carter discloses the claimed game configuration determinations. Further, even if Carter is lacking in that regard, a preponderance of the evidence establishes Walker discloses the claimed game configuration determinations, and it would have been obvious to modify Carter to include such determinations.

- c) “*generating, by a computer system, a first game outcome using the first game configuration*”
 -- and --
 “*generating, by the computer system, a second game outcome using the second game configuration*”

Petitioner contends Carter's gaming system 200 has software to generate first and second game outcomes in first and second locations. Pet. 26–27, 38 (citing Ex. 1003 ¶¶ 20, 40, 46–47, 49); Ex. 1011 ¶¶ 80, 100. Petitioner contends Walker similarly discloses software to generate first and

second game outcomes in first and second locations, based on location-varying features, which are game configurations as claimed. Pet. 27–28, 38 (citing Ex. 1004 ¶¶ 61, 63, 128, 289, Fig. 1D); Ex. 1011 ¶¶ 80, 100. Patent Owner’s opposition to these contentions has already been discussed above. We find Petitioner’s contentions as to Carter and Walker disclosing these limitations in claim 1 are supported by a preponderance of the evidence. *See, e.g.*, Ex. 1003 ¶¶ 40, 46–47; Ex. 1004 ¶¶ 61, 128, 289.

According to Petitioner, for essentially the same reasons discussed above, it would have been obvious to incorporate Walker’s location-varying outcome probability game configurations into Carter’s jurisdictional profiles to generate game outcomes. Pet. 27–28, 38–39; Ex. 1011 ¶¶ 80–82, 100. Patent Owner’s opposition to these contentions has already been discussed above. We find Petitioner’s contentions as to obviousness are supported by a preponderance of the evidence, for the reasons provided above.

- d) *“instructing a display screen of the mobile gaming device to display an indication of the first game outcome”*
 -- and --
 “instructing the display screen of the mobile gaming device to display an indication of the second game outcome”

Petitioner contends Carter’s mobile gaming unit 102 includes a display screen. Pet. 28–29 (citing Ex. 1003, Fig. 1); Ex. 1011 ¶ 84. Petitioner asserts Carter discloses gaming system 200 “may ‘report the outcome of the event to the mobile gaming unit [102],’ but does not expressly disclose that reporting an outcome includes displaying an indication [of] the outcome on the display screen.” Pet. 29, 39 (citing Ex. 1003 ¶ 12); Ex. 1011 ¶ 84. Petitioner cites Walker as similarly disclosing a mobile gaming device having a display screen, wherein

Walker's display screen displays an indication of a game outcome such as a slot machine game to the user. Pet. 29–30, 39 (citing Ex. 1004 ¶¶ 233–234, 289, 333, Fig. 11A); Ex. 1011 ¶ 85. Patent Owner does not dispute these contentions, which we find to be supported by a preponderance of the evidence. *See, e.g.*, Ex. 1003 ¶ 12; Ex. 1004 ¶¶ 233–234, 289.

According to Petitioner, it would have been obvious, in light of Walker, to enable Carter's gaming system 200 to instruct the display screen of mobile gaming unit 102 to display an indication of first and second game outcomes of a game played on unit 102. Pet. 30–31, 39; Ex. 1011 ¶¶ 86, 102. This would have been done, according to Petitioner, "in order to effectively communicate to the user an indication of the outcome of the game." Pet. 31; Ex. 1011 ¶¶ 86, 102. We find Petitioner's contentions as to obviousness, which Patent Owner does not dispute, are supported by a preponderance of the evidence as cited by Petitioner.

- e) *“determining a first payout associated with the first game outcome; crediting a player account with a first amount based on the first payout”*
 -- and --
 “determining a second payout associated with the second game outcome; and crediting the player account with a second amount based on the second payout”

Petitioner contends Carter's gaming system 200 “determines the amount of the gambler's winnings (i.e., ‘payout’) based on the outcome of the game,” and credits the gambler's financial account accordingly. Pet. 31–32, 33, 39 (citing Ex. 1003 ¶¶ 12–13, 33, 47); Ex. 1011 ¶¶ 88, 104. Petitioner cites Walker as disclosing “determining a payout for a generated game outcome as a separate step” from generating the game outcome. Pet. 32, 39–40 (citing Ex. 1004 ¶¶ 128, 289, Fig. 1D); Ex. 1011 ¶¶ 88, 104.

Patent Owner does not dispute these contentions, which we find to be supported by a preponderance of the evidence. *See, e.g.*, Ex. 1003 ¶¶ 12–13, 33, 47; Ex. 1004 ¶¶ 128.

According to Petitioner, it would have been obvious, in light of Walker, to enable Carter’s gaming system 200 to determine first and second payouts based on first and second game outcomes, based on Walker’s location-varying outcome probability game configurations. Pet. 32–34, 40; Ex. 1011 ¶¶ 89, 91, 104, 106. This would have been done, according to Petitioner, “in order to ensure the payout accurately matched the game outcome” and “to credit the correct amount to the player’s account.” Pet. 32–34, 40; Ex. 1011 ¶¶ 89, 91, 104, 106. We find Petitioner’s contentions as to obviousness, which Patent Owner does not dispute, are supported by a preponderance of the evidence as cited by Petitioner.

f) Conclusion

A preponderance of the evidence establishes claim 1 of the ’058 patent would have been obvious to a person of ordinary skill in the art, in view of Carter and Walker, at the time the invention was made. Therefore, claim 1 is unpatentable under 35 U.S.C. § 103(a).

6. Dependent Claims 7–9

Claim 7 depends from claim 1, and adds “transmitting to the mobile gaming device, after determining the second location, an indication of the second game configuration.” Ex. 1001, 60:52–55. Claim 8 depends from claim 7, and adds “instructing the mobile gaming device to display the indication of the second game configuration.” *Id.* at 60:56–58. Petitioner contends Carter and Walker, combined, disclose the limitations recited in

claims 7 and 8, and it would have been obvious to combine these disclosures to reach the claimed inventions, because it is beneficial to the player to display the active game configurations on the display of the mobile gaming device, based on the player's current location. Pet. 40–43 (citing Ex. 1003 ¶¶ 43–44, Fig. 3; Ex. 1004 ¶¶ 45, 116, 240, 293, 338, Figs. 1A and 11A); Ex. 1011 ¶¶ 107–111. We find Petitioner's contentions as to obviousness, which Patent Owner does not dispute, are supported by a preponderance of the evidence as cited by Petitioner.

Claim 9 depends from claim 1, and adds “transmitting to the mobile gaming device software for rendering the second game outcome according to the second game configuration.” Ex. 1001, 60:59–61. Petitioner contends Walker discloses the limitation recited in claim 9, and it would have been obvious to combine the disclosures of Carter and Walker to reach the claimed invention, in order to improve Carter's gaming system in the same way that the recited transmission of software improves Walker's gaming system. Pet. 43–45 (citing Ex. 1004 ¶¶ 61, 80, 221–222, 234, 333); Ex. 1011 ¶¶ 112–114. We find Petitioner's contentions as to obviousness, which Patent Owner does not dispute, are supported by a preponderance of the evidence as cited by Petitioner.

Thus, we determine claims 7–9 of the '058 patent are unpatentable under 35 U.S.C. § 103(a) as having been obvious over Carter and Walker.

7. *Independent Claim 19*

Petitioner contends Carter's game controller 204, home gaming register system 206, and local gaming servers 208, together, form a computer system comprising a processor and a memory, as recited in

claim 19. Pet. 45–46 (citing Ex. 1003, Figs. 1–2, ¶¶ 12, 20, 25, 30, 35).
Petitioner otherwise relies on the analysis in relation to claim 1 (*see supra*
Section III.B.5) in proposing the unpatentability of claim 19. *Id.* at 46–47.

Patent Owner argues “Petitioner fails to point to any memory in
[Carter’s gaming system 200] that instructs [system 200] to *determine*
location, as required by claim 19.” PO Resp. 11, 20–23; Ex. 2002 ¶ 42.
Patent Owner contends it is not sufficient for Carter’s mobile gaming
unit 102 to determine its own location, because in that event the memory
containing instructions for determining location is part of unit 102 rather
than system 200. PO Resp. 21; Ex. 2002 ¶ 43. Patent Owner also maintains
it is not sufficient for gaming system 200 merely to receive location
information from mobile gaming unit 102, because claim 19 additionally
“requires that the memory in [system 200] include instructions that *cause*
[system 200] to complete the location determinations.” PO Resp. 21–23;
Ex. 2002 ¶¶ 44–45.

Patent Owner’s rebuttal relies on Patent Owner’s construction of
claim 19 which, for reasons provided above (*see supra* Section III.A.2), we
determine to be unpersuasive. Therefore, Patent Owner’s attempt to
distinguish the disclosure of Carter from claim 1 on this basis similarly is
unpersuasive. We find a preponderance of the evidence establishes Carter’s
gaming system 200 has a memory storing instructions to cause system 200
to determine first and second locations of Carter’s mobile gaming unit 102,
because system 200 receives such location information from unit 102. *See,*
e.g., Ex. 1003 ¶¶ 12, 20, 37, 40. Thus, as otherwise discussed above in
relation to claim 1, a preponderance of the evidence establishes claim 19 of
the ’058 patent would have been obvious to a person of ordinary skill in the

art, in view of Carter and Walker, at the time the invention was made. Therefore, claim 19 is unpatentable under 35 U.S.C. § 103(a).

C. Obviousness over Carter, Walker, and the Slot Payouts Webpage

Petitioner asserts claims 1 and 6 of the '058 patent are unpatentable under 35 U.S.C. § 103 as having been obvious over Carter, Walker, and the Slot Payouts Webpage. Pet. 47–51. Petitioner cites the Declaration of Mr. Garry Kitchen in support. Ex. 1011. Patent Owner opposes Petitioner's assertions. PO Resp. 33–42. Patent Owner cites the Declaration of Dr. Robert Akl in support. Ex. 2002. We have reviewed the arguments and evidence of record. We conclude Petitioner has not established, by a preponderance of the evidence, that claims 1 and 6 are unpatentable as having been obvious over Carter, Walker, and the Slot Payouts Webpage, for the following reasons.

1. Independent Claim 1

The Petition's analysis in support of obviousness based on Carter, Walker, and the Slot Payouts Webpage does not address claim 1. *See* Pet. 47–51. In particular, the Petition's analysis does not indicate how the Slot Payouts Webpage might pertain to the proposed unpatentability of claim 1. *See id.*

In the Institution Decision, we stated our understanding that “Petitioner meant to rely on the combination of Carter and Walker for claim 1, as set forth above in Petitioner's first ground of unpatentability [*supra* Section III.B], and to rely on the Slot Payouts Webpage for claim 6.” Inst. Dec. 25.

Petitioner's Reply, like the Petition, does not indicate how the Slot Payouts Webpage might pertain to the proposed unpatentability of claim 1. *See* Pet. Reply *passim*. Petitioner's Reply, further, does not address the Institution Decision's understanding of Petitioner's case for claim 1. *See id.*

For the reasons provided above in Section III.B., we conclude claim 1 would have been obvious in view of Carter and Walker, and is therefore unpatentable under 35 U.S.C. § 103(a) on that ground. Because Petitioner does not address how the Slot Payouts Webpage pertains to the proposed unpatentability of claim 1, or otherwise demonstrate how this ground may differ from the ground based solely on Carter and Walker as discussed above, we determine Petitioner has failed to establish that claim 1 would have been obvious based additionally on the Slot Payouts Webpage.

2. *Dependent Claim 6*

Claim 6 recites:

6. The method of 1, in which determining the first game configuration includes:
 - accessing a lookup table which contains an ordered list of locations and associated game configurations;
 - finding within the lookup table the first location; and
 - determining that the first game configuration is associated with the first location.

Ex. 1001, 60:45–51.

Petitioner asserts: “Carter’s jurisdictional profiles are stored in a database, which ‘may employ . . . **look-up tables**, and the like.’” Pet. 48–49 (citing Ex. 1003 ¶¶ 10, 20, 31, 37); Ex. 1011 ¶ 116. Petitioner then relies on Walker for associating locations and game configurations, as discussed above in Section III.B.1.5 in connection with parent claim 1, to contend that

Carter and Walker combine to disclose a look-up table containing locations and associated game configurations. Pet. 49; Ex. 1011 ¶ 116. Petitioner concludes this combination of Carter and Walker lacks only the “ordered list” requirement of claim 6, which Petitioner contends would have been obvious to implement based on the Slot Payouts Webpage. Pet. 49–51; Ex. 1011 ¶¶ 117–118.

Specifically, Petitioner describes the Slot Payouts Webpage as “teach[ing] an ordered list of jurisdictions (cities/states) in alphabetical order with each jurisdictional entry including a sub-list of locations within the jurisdiction and their associated slot payout percentages.” Pet. 49–50; Ex. 1011 ¶ 117. Petitioner contends: “It would have been *an obvious design choice* to similarly store Carter’s jurisdictional profiles in alphabetical order based on the name of the jurisdiction/location.” Pet. 50–51 (emphasis added); Ex. 1011 ¶ 118.

In our Institution Decision, we concluded the record presented at that time sufficiently supported Petitioner’s contentions to demonstrate a reasonable likelihood of prevailing. *See* Inst. Dec. 25–26; 35 U.S.C. § 314(a). Now, after full consideration of the entire record developed during trial, we determine a preponderance of the evidence does not support Petitioner’s contentions as to obviousness. *See* 35 U.S.C. § 316(e); *see also TriVascular, Inc. v. Samuels*, 812 F.3d 1056, 1068 (Fed. Cir. 2016) (“[T]he Board is not bound by any findings made in its Institution Decision. At that point, the Board is considering the matter preliminarily without the benefit of a full record. The Board is free to change its view of the merits after further development of the record, and *should do so* if convinced its initial inclinations were wrong.”).

First, we determine that a preponderance of the evidence does not support Petitioner’s contention that Carter discloses jurisdictional profiles being stored in a database employing look-up tables. The cited disclosure in Carter indicates generally that “the present invention may employ various integrated circuit (IC) components, e.g., memory elements, processing elements, logic elements, *look-up tables*, and the like, which may carry out a variety of functions under the control of one or more microprocessors or other control devices.” Ex. 1003 ¶ 20 (emphasis added). This does not disclose that the jurisdictional profiles, specifically, employ a look-up table. The cited disclosure also indicates “database 116 may suitably contain distinct location information correlative to the physical location of the gaming unit 102 and the gaming opportunities permitted in the jurisdiction in which the unit 102 is located.” *Id.* ¶ 31. This does not disclose that a look-up table, specifically, provides the correlation between the location information and the jurisdictionally permitted gaming opportunities. In short, Carter discloses look-up tables (for unspecified purpose(s)), and a database which correlates location information with jurisdictionally permitted gaming opportunities, but Carter does not disclose a look-up table correlating location information with jurisdictionally permitted gaming opportunities. Petitioner, further, does not provide any reason(s) why it would have been obvious to use a look-up table as the specific method for correlating location information with jurisdictionally permitted gaming opportunities, based on Carter’s disclosure or otherwise. *See* Pet. 48–51; Ex. 1011 ¶¶ 115–118.

Indeed, concerning motivation for obviousness, Petitioner offers only the conclusory assertion of “design choice,” in asserting that it would have

been obvious to organize Carter’s jurisdictional profiles in an alphabetized list. Pet. 50–51 (emphasis added); Ex. 1011 ¶ 118. However, “[t]he Board must support its finding that there would have been a motivation to combine with a reasoned explanation to enable [Federal Circuit] review for substantial evidence.” *Outdry Techs. Corp. v. Geox S.P.A.*, 859 F.3d 1364, 1368–69 (Fed. Cir. 2017) (citing *In re NuVasive, Inc.*, 842 F.3d 1376, 1382 (Fed. Cir. 2016)). “This necessitates that the Board ‘not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency’s conclusion.’” *Id.* (quoting *In re Lee*, 277 F.3d 1338, 1344 (Fed. Cir. 2002)). Thus, a statement that a proposed modification “is a design choice and is obvious . . . alone is not enough to explain” a finding of obviousness, and instead “[t]he Board must offer a reason for why a person of ordinary skill in the art would have made the specific design choice” at issue. *Cutsforth, Inc. v. MotivePower, Inc.*, 636 F. App’x 575, 578 (Fed. Cir. 2016) (unpublished).

Here, neither Petitioner nor Petitioner’s witness offers any reason(s) why it would have been beneficial to organize Carter’s database of jurisdictional profiles in alphabetical order. In this regard, it is significant that the Slot Payouts Webpage is meant for human reading and understanding, not for use by a machine such as Carter’s gaming system 200 when it accesses the jurisdictional profile database. Indeed, it appears that the reason Petitioner relies upon the Slot Payouts Webpage is that the ’058 patent discloses “an ordered list of locations . . . may be listed . . . in alphabetical order.” Ex. 1001, 12:18–22; *see* Pet. 49; Ex. 1011 ¶ 117. Such reasoning represents impermissible hindsight in an obviousness analysis.

See InTouch Techs. Inc. v. VGo Comms., Inc., 751 F.3d 1327, 1348–49 (Fed. Cir. 2014) (“Dr. Yanco’s testimony was nothing more than impermissible hindsight; she opined that all of the elements of the claims disparately existed in the prior art, but failed to provide the glue to combine these references.”).

Thus, we determine a preponderance of the evidence presented here does not establish claim 6 of the ’058 patent would have been obvious to a person of ordinary skill in the art, in view of Carter, Walker, and the Slot Payouts Webpage, at the time the invention was made. Therefore, claim 6 has not been shown to be unpatentable under 35 U.S.C. § 103(a).

D. Obviousness over Luciano and Alcorn

In the Petition, Petitioner initially asserted claims 1, 7–9, and 19 of the ’058 patent are unpatentable under 35 U.S.C. § 103 as having been obvious over Luciano and Alcorn. Pet. 51–67. The Institution Decision denied institution of trial on this ground as to all of the challenged claims. Inst. Dec. 27–28, 29. After SAS, Petitioner elected to go forward with this ground as to all of the challenged claims. *See* Paper 22, 2.

As described in the Petition, Petitioner advances this challenge because, according to Petitioner, Patent Owner has asserted in District Court litigation “that permitting access to or restricting use of *different types of games* based on the location of a mobile device is determining a game configuration associated with a location,” even though Petitioner “disagrees” with that claim construction. Pet. 51 (citing Ex. 1032, 6, 12) (emphasis added). Petitioner proposes obviousness over Luciano and Alcorn on the basis that, “[t]o the extent determining a game configuration associated with

a location is broad enough to encompass determining *a type of game* associated with a location,” Luciano “discloses the ‘game configuration’ limitations.” *Id.* (emphasis added). Petitioner, particularly, asserts Luciano teaches “only allowing participation in lottery games (i.e., ‘a first game configuration’)” in Massachusetts, and “allowing participation in ‘full Nevada-style games (Class III games), lottery and lottery-style games (central-determination based games), bingo-based games (Class II games), or any other classification allowed by U.S. jurisdictions (such as the Texas hybrid games)’ (i.e., ‘a second game configuration’)” in Nevada. *Id.* at 54–55, 60 (citing Ex. 1006, 1:65–67, 2:11–22, 4:20–33).

Patent Owner responds that “Patent Owner — like Petitioner — agrees that ‘a type of game associated with a location’ is not a game configuration associated with a location under any reasonable construction of ‘game configuration.’” Supp. PO Resp. 6–8. Patent Owner asserts that Patent Owner did not assert, during District Court litigation, that a type of game is a game configuration. *Id.* at 5.

In reply, Petitioner correctly points out that in the Institution Decision, we construed the claim term “game configuration” to “include[] ‘any rules or algorithms according to which resolutions or outcomes are generated in the game,’ . . . as well as the other items identified in” column 11, line 60 to column 12, line 1 of the ’058 patent. Supp. Pet. Reply 1–2; Inst. Dec. 5–6. Those other items include “any other rules or algorithms which influence . . . any other aspect of the game” (Ex. 1001, 11:66–12:1), which Petitioner cites in arguing: “Defining a *particular type of game* that is *allowed to be played* in a jurisdiction is perhaps the most holistic ‘aspect of a game,’ defining the game itself.” Supp. Pet. Reply 2 (emphasis added). Petitioner therefore

contends Luciano satisfies the game configuration determination limitations because “Luciano’s betting configuration includes allowing only certain games based on the jurisdiction, and restricting others,” and “Luciano’s configurations define games that are allowed in a certain jurisdiction, i.e., a game configuration.” *Id.* at 1, 3–4.

In view of the foregoing, we conclude that Petitioner has impermissibly changed its position from what was set forth in the Petition. The Petition asserts Carter discloses the claimed game configuration determinations, via Carter’s determination of what game(s) are legally permitted to be played in that jurisdiction. *See* Pet. 14–18; Tr. 47:24–49:19. As discussed above in Section III.B.5.b.i, we agree with Petitioner on that point. There is no indication, in the Petition, that Petitioner’s contentions as to Carter’s disclosure in this regard were based on a claim construction being disputed by Petitioner. *See* Pet. 14–18.

By contrast, the Petition asserts obviousness over Luciano and Alcorn, based on a claim construction being expressly disputed by Petitioner — namely, that “permitting access to or restricting use of different types of games based on the location of a mobile device is determining a game configuration associated with a location.” Pet. 51. Whatever is meant by that proposed claim construction, it is clear it does not refer to determining what game(s) are legally permitted to be played in that jurisdiction, because that is how the Petition contends Carter discloses the game configuration determination limitations, without indicating any disagreement.

We denied institution as to obviousness based on Luciano and Alcorn, because we saw no compelling reason to adopt a claim construction that was not being urged by either party in the present proceeding. *See* Inst. Dec. 27–

28, 29. This ground nonetheless became part of the trial following *SAS*. *See* Papers 20 & 22. However, *SAS* is not a license for Petitioner to use our Institution Decision and the Patent Owner Response as a roadmap to recast the originally-proposed obviousness ground based on Luciano and Alcorn to be based on the same claim construction as the obviousness ground based Carter and Walker. Tr. 54:18–56:21 (Luciano is “very similar to Carter” in relation to the claimed game configuration determinations, “[a]nd it is really the same issue”). As set forth in the Petition, these two grounds were based on two different claim constructions — one of which Petitioner supported, and the other of which Petitioner did not support.

Petitioner has the “burden of proving a proposition of unpatentability by a preponderance of the evidence.” 35 U.S.C. § 316(e). Our Rules correspondingly require a Petition to “[p]rovide a statement of the precise relief requested,” including “[h]ow the challenged claim is to be construed.” 37 C.F.R. § 42.104(b)(3). In this case, Petitioner has not presented a persuasive reason to adopt the claim construction which undergirds, and is an integral part of, the proposed obviousness of claims 1, 7–9, and 19 over Luciano and Alcorn, as originally set forth in the Petition.

We are presented with the curious situation of a ground of unpatentability based on a claim construction (as originally set forth in the Petition) that both parties contend is not the broadest reasonable construction of the claim. *See* Pet. 51; Supp. PO Resp. 5–6; Tr. 74:14–75:10. We see no compelling, independent reason to adopt the construction in this proceeding, absent a proposal by either party supported by reasoned analysis.¹⁴

¹⁴ It is, further, not clear to us that Patent Owner took the claim construction position in District Court that Petitioner now contends was taken.

Thus, because application of the claim construction at issue here is an integral part of Petitioner's case for obviousness as originally set forth in the Petition, we determine a preponderance of the evidence does not establish claims 1, 7–9, and 19 of the '058 patent would have been obvious to a person of ordinary skill in the art, in view of Luciano and Alcorn, at the time the invention was made. Therefore, the claims have not been shown to be unpatentable on that basis.

E. Obviousness over Luciano, Alcorn, and the Knowledge of a Person of Ordinary Skill in the Art or the Slot Payouts Webpage

In the Petition, Petitioner initially asserted claim 19 of the '058 patent is unpatentable under 35 U.S.C. § 103 as having been obvious over Luciano, Alcorn, and the knowledge of a person of ordinary skill in the art; and claims 1 and 6 of the '058 patent are unpatentable under 35 U.S.C. § 103 as having been obvious over Luciano, Alcorn, and the Slot Payouts Webpage. Pet. 7, 64–68. These assertions were based on the same claim construction position as the ground based on Luciano and Alcorn alone. *See id.* For the reasons provided above, we determine a preponderance of the evidence does not establish the unpatentability of these claims as asserted by Petitioner in the Petition.

F. Patent Owner's Motion to Exclude Evidence

Patent Owner moves to exclude the Slot Payouts Webpage from evidence. Paper 28. Petitioner opposes. Paper 31. For the reasons set forth above, even considering the Slot Payouts Webpage, we have determined a preponderance of the evidence does not establish claim 6 of the '058 patent

is unpatentable as asserted by Petitioner. We, therefore, deny Patent Owner's Motion as moot.

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED claims 1, 7–9, and 19 of the '058 patent have been shown to be unpatentable under 35 U.S.C. § 103 based on Carter and Walker;

FURTHER ORDERED claims 1 and 6 of the '058 patent have not been shown to be unpatentable under 35 U.S.C. § 103 based on Carter, Walker, and the Slot Payouts Webpage;

FURTHER ORDERED claims 1, 7–9, and 19 of the '058 patent have not been shown to be unpatentable under 35 U.S.C. § 103 based on Luciano and Alcorn;

FURTHER ORDERED claim 19 of the '058 patent has not been shown to be unpatentable under 35 U.S.C. § 103 based on Luciano, Alcorn, and the knowledge of a person of ordinary skill in the art;

FURTHER ORDERED claims 1 and 6 of the '058 patent have not been shown to be unpatentable under 35 U.S.C. § 103 based on Luciano, Alcorn, and the Slot Payouts Webpage;

FURTHER ORDERED Patent Owner's Motion to Exclude Evidence is denied; and

FURTHER ORDERED, because this is a final written decision, the parties to this proceeding seeking judicial review of our decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

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