

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AVIAGAMES, INC.,
Petitioner,

v.

SKILLZ PLATFORM INC.,
Patent Owner.

IPR2022-00531
Patent 9,649,564 B2

Before NEIL T. POWELL, TERRENCE W. McMILLIN, and
ARTHUR M. PESLAK, *Administrative Patent Judges*.

McMILLIN, *Administrative Patent Judge*.

DECISION
Denying Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

A. *Background and Summary*

AviaGames, Inc. (“Petitioner”)¹ filed a Petition to institute an *inter partes* review of claims 1–4, 6, 10–14, 16, and 18–21 (the “challenged claims”) of U.S. Patent 9,649,564 B2 (Ex. 1001, the “’564 patent”) pursuant to 35 U.S.C. § 311 *et seq.* Paper 2 (“Petition” or “Pet.”). Skillz Platform, Inc. (“Patent Owner”)² filed a Preliminary Response. Paper 7 (“Preliminary Response” or “Prelim. Resp.”). Pursuant to our authorization, Petitioner filed a Reply, Paper 9 (“Reply”), and Patent Owner filed a Sur-reply, Paper 10 (“Sur-reply”).

We have authority under 35 U.S.C. § 314, which provides that an *inter partes* review may not be instituted unless the information presented in the Petition and the Preliminary Response shows that “there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a) (2018). After considering the Petition, the Preliminary Response, the Reply, the Sur-reply, and the evidence of record, we do not institute an *inter partes* review on the grounds of unpatentability presented.

B. *Related Proceedings*

The parties identify the following related proceeding: *Skillz Platform Inc., v. AviaGames, Inc.*, 5-21-cv-02436 (N. D. Cal.) (the “District Court litigation”). Pet. 3; Paper 5, 2. The parties also indicate that Petitioner filed

¹ Petitioner identifies AviaGames, Inc. as the real party-in-interest. Pet. 3.

² Patent Owner identifies Skillz Platform Inc. as the real party-in-interest. Paper 5, 2.

a petition against Patent Owner's US Patent 9,479,602 B2 (the "'602 patent") in IPR2022-00530.³ Pet. 3; Paper 5, 2.

C. The '564 patent

The '564 patent is titled "Peer-to-Peer Wagering Platform." Ex. 1001, code (54). The '564 patent explains that "[a]n online game is a video game played over a network on some form of computer, mobile device, or on a video game console such as the Xbox 360 and PlayStation 3" and that "[d]ue to their social nature, many online games are inherently competitive." *Id.* at 1:24–26, 42–43. According to one aspect of the '564 patent, "a digital skills based game is provided to a first user." *Id.* at 1:57–58. The '564 patent discloses that via a peer-to-peer wagering platform, the user enrolls in and places a wager on an online skills-based gaming competition. *Id.* at 1:66–2:1. A system that includes a third party gaming server, a plurality of third party game instances, and a transactional server, provides data related to the third party game in which "the plurality of third party game instances are in communication with and receiv[e] game data from the third party gaming server." *Id.* at 2:4–9. The '564 patent discloses that "[t]he transactional server can be configured to generate a pseudo-random number stream for use by at least some of the plurality of third party game instances." *Id.* at 2:52–54.

³ All the claims of the '602 patent were determined to be directed to patent ineligible subject matter under 35 U.S.C. § 101 and, therefore, invalid by the District Court. IPR2022-00530, Exhibit 2011, 44. In the same order, the District Court found that Petitioner "ha[d] not adequately shown that the '564 patent claims are directed to patent ineligible subject matter under §101." *Id.* at 20.

Figure 1, reproduced below, “is a system diagram illustrating a system that facilitates wagering within electronic multiplayer games of skill” in accordance to the ’564 patent. *Id.* at 4:62–64.

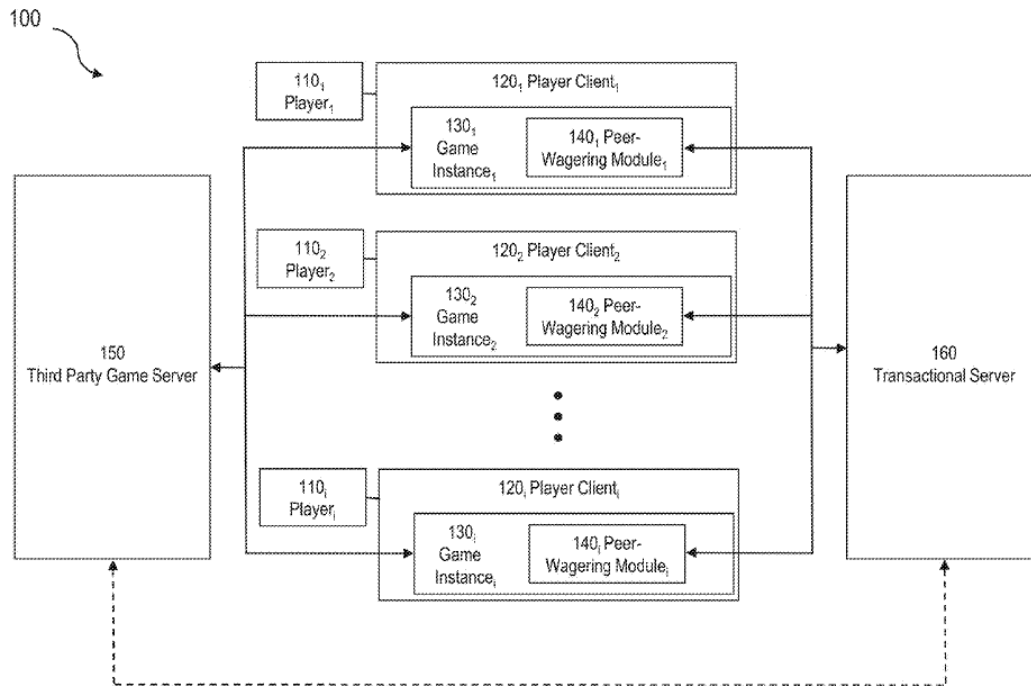


FIG. 1

Figure 1 depicts system diagram 100 “illustrating a system that facilitates wagering within electronic multiplayer games of skill” for a plurality of players 110_i. *Id.* at 5:29–31. The system further includes player clients 120_i operating players 110_i, in which each player client 120_i includes a third party game instance 130_i. *Id.* at 5:31–33. Game instance 130_i “is any online digital game (e.g., video game) in which player skill determines game outcome, not chance, and wherein multiple players 110_i, can compete against one another online.” *Id.* at 5:33–37. Each game instance 130_i is in communication with and receives game data from a third party game server 150. *Id.* at 5:40–41. Each game instance 130_i, includes peer-wagering

module 140_i which integrates into game instance 130_i, and enables players 110_i to wager. *Id.* at 5:45–47. Peer-wagering module 140_i communicates with transactional server 160, which maintains account information for each player 110_i and “generate[s] a stream of pseudo-random numbers for use by the third party game instances.” *Id.* at 5:48–51, 14:49–51. According to the ’564 patent, “random numbers are typically used in gameplay engines to decide game elements and properties (e.g., what obstacles are present can be decided based on the value that a random number generator returns).” *Id.* at 14:51–55. The ’564 patent discloses that “the use of common random numbers can provide a common gameplay experience to a subset of users (e.g., the players involved in a third party game tournament).” *Id.* at 14:55–57. As an example, the ’564 patent discloses that “transactional server 160 returns 722 a unique tournament ID and all entered players 110” (as shown in Figure 7, transactional server 160 providing to peer wagering module 140_i “722 Match ID”). *Id.* at 13:24–26, Fig. 7. Thus, a common stream of pseudo random numbers to each game instance provides “results of a competitive tournament [that] would be based entirely on skill.” *Id.* at 14:63–15:1. The ’564 patent further discloses that transactional server 160 “can use a tournament identification number as a seed to generate pseudo-random numbers, thus causing gameplay to be different between tournaments, but not between game instances involved in a given tournament.” *Id.* at 15:3–7.

D. Challenged Claims

Petitioner challenges claims 1–4, 6, 10–14, 16, and 18–21 of the '564 patent.⁴ Pet. 3. Of the challenged claims, claim 1 is an independent method claim, claim 11 is an independent non-transitory computer program product claim, and claim 18 is an independent system claim. Ex. 1001, 16:9–30, 16:57–17:11, 18:1–23. Claim 1 is illustrative and recites:

1. A method comprising:
 - receiving, at a client including an executable game instance, a stream of pseudo random number seeds characterized by a unique match identifier for an online digital gaming competition, the client enrolled in the online competition;
 - receiving, at the client and from a game server, game data for executing the game instance, the game instance requiring one or more random numbers to complete execution of the game instance;
 - generating, using the stream of pseudo-random number seeds, a plurality of pseudo-random numbers; and
 - executing the game instance by the client and using the plurality of pseudo-random numbers to provide the online competition to a player such that a beginning of gameplay experience is common between the game instance and a second game instance executing on a second client enrolled in the online digital gaming competition;
- wherein at least one of receiving, generating, and executing is implemented by at least one data processor forming part of at least one computing system.

Id. at 16:9–30.

⁴ The '564 patent has 21 claims. Ex. 1001, 16:9–18:31. Petitioner challenges all the claims of the '564 patent except claims 5, 7–9, 15, and 17. *See, e.g.*, Pet. 3.

E. The Asserted Grounds

Petitioner challenges claims 1–4, 6, 10–14, 16, and 18–21 of the ’564 patent based on the grounds set forth in the table below.

Claims Challenged	35 U.S.C. §	Reference(s)/Basis
1–4, 6, 10–14, 16, 18–21	103 ⁵	Halliburton ⁶
1–4, 6, 10–14, 16, 18–21	103	Halliburton, Perrone ⁷
1–4, 6, 10–14, 16, 18–21	103	Nguyen ⁸
1–4, 6, 10–14, 16, 18–21	103	Nguyen, Kelly ⁹
1–4, 6, 10–14, 16, 18–21	103	Paradise ¹⁰

Pet. 3. Petitioner supports its showing of unpatentability of the challenged claims of the ’564 patent with the Declaration of Stacy Friedman (Ex. 1003). Patent Owner relies on the Declaration of Michael Zyda, D.Sc. (Ex. 2001, “Zyda Decl.”).

II. ANALYSIS

A. Claim Construction

Claim construction in this proceeding is governed by 37 C.F.R.

⁵ The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284, 285–88 (2011), revised 35 U.S.C. §§ 102, 103 effective March 16, 2013. Because the challenged patent claims priority to continuation applications filed after March 16, 2013, we refer to the AIA version of §§ 102, 103. Our opinions on the present record would not change if the AIA version of §103 was not to apply.

⁶ US 8,152,643 B2, issued Apr. 10, 2012 (Ex. 1004).

⁷ US 8,371,921 B1, issued Feb. 12, 2013 (Ex. 1005).

⁸ US 2006/0068895 A1, published Mar. 30, 2006 (Ex. 1006).

⁹ US 8,678,902 B2, issued Mar. 25, 2014 (Ex. 1007).

¹⁰ US 2014/0045589 A1, published Feb. 13, 2014 (Ex. 1008).

§ 42.100(b), which provides:

In an *inter partes* review proceeding, a claim of a patent, or a claim proposed in a motion to amend under § 42.121, shall be construed using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. 282(b), including construing the claim in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.

Under the standard set forth in *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–19 (Fed. Cir. 2005) (en banc), claim terms are given their ordinary and customary meaning, as would have been understood by a person of ordinary skill in the art at the time of the invention, in light of the language of the claims, the specification, and the prosecution history of record. *See Thorner v. Sony Comput. Ent. Am. LLC*, 669 F.3d 1362, 1365–66 (Fed. Cir. 2012). There is a “heavy presumption,” however, that a claim term carries its ordinary and customary meaning. *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002) (citation omitted).

The Petition states “[n]o construction is necessary to resolve the issues presented herein.” Pet. 21. However, Petitioner asks us to construe the following claim terms: (1) “pseudo random number seed” (in claims 1, 11, 18); (2) “unique match identifier” (in claims 1, 11, 18); and (3) “generating, using the stream of pseudo-random number seeds, a plurality of pseudo-random numbers” (in claims 1, 11, 18). *Id.* at 21–23. In the Preliminary Response, Patent Owner “submits that all terms in the claims should be given their plain meaning.” Prelim. Resp. 18 (citing Ex. 2001 ¶ 45). Nonetheless, Patent Owner takes issue with Petitioner’s proposed constructions. *Id.* at 19–29.

In its Reply, Petitioner contends that “no terms are disputed by the parties in this proceeding” and no construction is necessary for any term and all terms should be given their plain meanings. Reply 1. In its Sur-reply, Patent Owner contends that claim construction of the term “unique match identifier” is necessary. Sur-reply 2. The Sur-reply states,

Patent Owner further explained that Petitioner conflates two claim terms in its analysis of the Halliburton prior art – the “tournament ID” and the “unique match ID”. This argument plainly turns on the proper claim construction for unique match ID—namely, if the unique match ID refers to a match, Halliburton cannot render the claims unpatentable.

Id. (citations omitted). While faulting Petitioner (*see id.* at 3 (quoting Prelim. Resp. 24 (“The unique match identifier must refer to a match and not a game.”))), Patent Owner fails to offer a proposed construction for “unique match identifier.” *See* Prelim. Resp. 23–27; Sur-reply 1–5. But construing “unique match identifier” as referring to a “match” does not clarify or provide any insight into its meaning and is unnecessary to our consideration of whether Halliburton teaches this element. *See infra* II.D.3(a).

We determine we need not explicitly construe any claim terms for purposes of this decision. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (“we need only construe 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))). We consider the showing in the Petition by construing all the claim terms as having their ordinary and customary meanings as requested by Petitioner and not disputed by Patent Owner. *See* Pet. 7, 21; Prelim. Resp. 18; Reply 1–3.

B. Legal Standards

A patent claim is unpatentable as obvious 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 non-obviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

“In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic*, 815 F.3d at 1363 (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify “with particularity . . . the evidence that supports the grounds for the challenge to each claim”)). Petitioners cannot satisfy their burden of proving obviousness by employing “mere conclusory statements.” *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016).

C. Level of Ordinary Skill in the Art

With regard to the level of ordinary skill in the art, Petitioner argues that

[a] person of ordinary skill at the time of the alleged priority date of the ’564 Patent would have had at least a bachelor’s degree in computer science, computer engineering, or electrical engineering (or equivalent work experience) and would have had at least two years or more additional of practical experience

specifically with designing and developing electronic gaming systems.

Pet. 20–21 (citing Ex. 1003 ¶¶ 22–24). Patent Owner states that “[f]or purposes of this preliminary response only, [Patent Owner] does not dispute this definition.” Prelim. Resp. 8.

Petitioner’s undisputed proposal appears consistent with the technology described in the Specification and the cited prior art. In order to determine whether Petitioner has demonstrated a reasonable likelihood of showing the unpatentability of at least one of the challenged claims, we adopt Petitioner’s proposed level of skill in the art.

D. Consideration of Alleged Obviousness over Halliburton and Halliburton and Perrone

Petitioner contends that Halliburton (Ex. 1004) alone, and in combination with Perrone (Ex. 1005), renders claims 1–4, 6, 10–14, 16, and 18–21 of the ’564 patent obvious. See Pet. 2–3, 24–52. For the reasons set forth below, we determine that the challenges based on Halliburton alone and the combination of Halliburton and Perrone fail as inadequately supported in the Petition.

We start with descriptions of the disclosure of Halliburton and Perrone and then consider the arguments and evidence presented by the parties relating to the limitations of claim 1.

1. Halliburton (Ex. 1004)

Halliburton is titled “Solitaire Game Played Over the Internet with Features to Extend Play.” Ex. 1004, code (54). Specifically, Halliburton discloses a method for playing a computer-based solitaire game including the steps of retrieving an input from an internet server to a computer, playing, and scoring the game according to the input. *Id.*, code (57). The

input includes a scoring method and a game pattern which are controlled and predetermined by the internet server. *Id.* The method includes operating a tournament game over the internet via establishing communication between a central server and a player's computer, downloading an input onto the player's computer, re-accessing periodically to the player's computer from the central server, transferring information relating to player's identity, the game, and the result to the central server, comparing scoring results from multiple players in the central server according to the tournament structure, displaying the comparison results on the player's computer, and continuing playing the game according to the results and the tournament structure. *Id.*

Figure 6, reproduced below, shows an exemplary game selection display. *Id.* at 3:60.

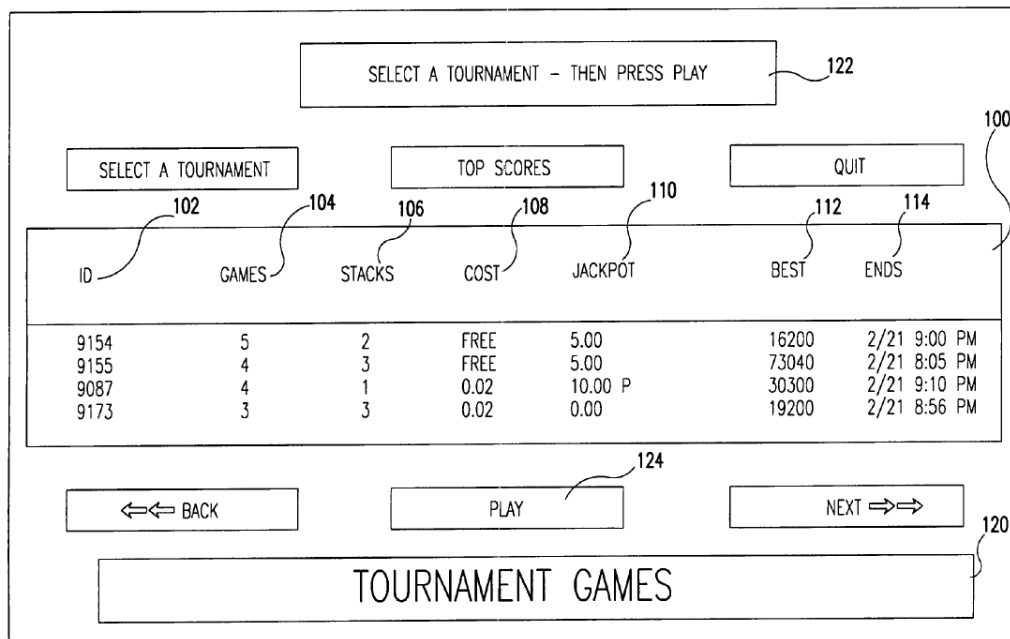


FIG.6

Figure 6 depicts a screen display “which sets forth information regarding the tournaments in progress and scheduled games.” *Id.* at 7:23–25. Window 100 contains data, which is updated by a server, such as column 102 having

an identification number for each game and column 104 having the number of games each player must play in the tournament. *Id.* at 7:25–31. Other data includes column 106 having the number of play stacks in the game, column 108 having the cost of playing the game, column 110 having the jackpot for the tournament, column 112 having the current high score, and column 114 having the ending date and time of each tournament. *Id.* at 7:31–36. Halliburton discloses that “[u]pon selection of a game, the player moves the cursor to the play button 124 and depresses the selection button on the mouse” and “[u]pon activating the play button the program is instructed to contact the web server with information relating to the selected game.” *Id.* at 7:39–43. Halliburton further discloses the web server then provides the cards “by providing a seed number and other information relating to the features, which are to be activated in the particular game.” *Id.* at 7:44–46. Halliburton describes that “[t]he sequence of the cards provided to the player for each game is determined by the transfer of a ‘seed’ consisting of a random number, which is generated by the server,” that “[t]his concept is well known in the art,” and that “[t]he sequence of cards is not technically preselected but is computed on the players computer by an algorithm dependant on the seed.” *Id.* at 8:60–65.

Halliburton discloses that communications between a personal computer and a server host include the server sending a list of currently available tournaments, a user making a selection and requesting the server to start a game session, and the server sending packets of information such as current game leaders, game features, a card deck seed, a card back graphics URL, and a background graphics URL (shown as steps 1008 and 1010 in

Figure 8a and step 1026 in Figure 8b, respectively). *Id.* at 3:62–65, 13:19–14:30, Figs. 8a–8b.

2. *Perrone (Ex. 1005)*

Perrone is titled “Keno Game with Poker Hands Using Deterministic Card Placements.” Ex. 1005, code (54). Specifically, Perrone discloses a method, apparatus, and computer readable storage for implementing a wagering game in which a first payout is made based on a number of matches between player selected numbers and computer-generated numbers on a keno grid. *Id.*, code (57). Perrone discloses that “card values are associated with values in the grid” and “[t]hese can be determined by using a hashing algorithm to determine a card layout predicated on a game ID (or other game seed).” *Id.* at 4:13–16. Perrone explains that “[e]ach game has a unique ID,” “[t]he game ID can be considered a ‘seed value’ in that the game ID is used as a seed for the deterministic process to determine the card associations,” and that “[i]n addition to game IDs, other values can be used such as a date, time, location, user inputted numbers, lottery card number, etc.” *Id.* at 4:26–27, 33–38. Perrone discloses that consequently, “the card layout is not generated randomly, but [is] based on the game ID.” *Id.* at 4:29–30.

3. *Consideration of the Petition’s Showing of Obviousness Based on Halliburton*

a) *Discussion of Claim 1*

First Limitation of Claim 1

The first limitation of claim 1 of the ’564 patent recites:

*receiving, at a client including an executable game instance, a stream of pseudo random number seeds characterized by a **unique match identifier** for an online digital gaming competition, the client enrolled in the online competition*

Ex. 1001, 16:10–14 (emphasis added). For the “*unique match identifier*” element, the Petition relies on the disclosure in Halliburton of “tournament game identifier numbered 9154” as depicted at reference number 102 in Figure 6. Pet. 29–31. Figure 6 of Halliburton as annotated in the Petition is reproduced below.

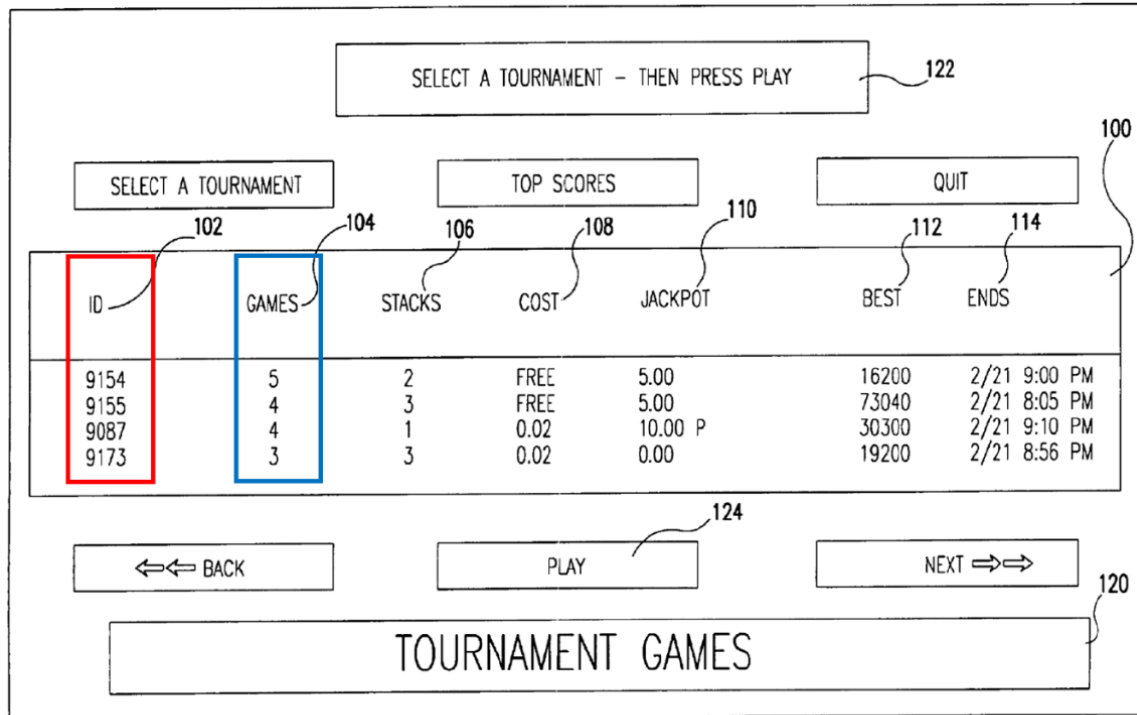


FIG.6

Id. at 31. Figure 6 depicts “an example of a game selection display.”

Ex. 1004, 3:60. The Petition states:

Halliburton teaches that the above-mentioned *stream of pseudo random number seeds* is characterized by a *unique match identifier*. As noted above, multiple (or single) deck seeds (the claimed *stream of pseudo random number seeds*) are sent to players for each tournament, and Halliburton shows that this stream is *characterized by a unique match identifier*. Excerpted [above] is a game selection screen where multiple solitaire games are required (blue) for a given tournament (red). EX1004 at FIG. 6; 7:23-52. For example, tournament game identifier numbered 9154 requires 5 games itself (*id.* at 7:29-31;

11:39-43) which would require at least 5 decks. EX1003 at ¶235; EX1004 at 3:47-50; 8:1-3; 11:46- 48; 13:55-62; 8:55-65. Single seeded decks are also used. *Id.* at 3:53-55. Consequently, a POSITA would understand that Halliburton teaches the *stream of pseudo random number seeds* is *characterized by a unique match identifier*.

Pet. 29–30 (footnote omitted). We find this purported showing that Halliburton teaches a “unique match number” to be inadequately supported or explained and to be conclusory.

Patent Owner contends that “Petitioner does not provide any explanation why Halliburton’s disclosure of a deck seed is disclosure of a seed ‘characterized by a unique match identifier,’ required by the independent claims of the ’564 patent.” Prelim. Resp. 29–30. Patent Owner argues:

[I]t can be seen that Petitioner is mapping Halliburton’s ***tournament*** ID to the unique ***match*** ID required by the claims. *See* Pet. at 29-31. Indeed, on page 31, Petitioner argues the unique match ID can “include the tournament identifier” (red) “depicted in FIG. 6.” *Id.* at 31; Ex. 2001 at ¶¶ 78-79. . . . At most, as argued by Petitioner, Halliburton discloses a ***tournament*** ID. Ex. 2001 at ¶ 80. But as described in the ’564 Patent, a tournament is comprised of multiple matches. *See, e.g.,* Ex. 1001 at 10:14-25; Ex. 2001 at ¶ 80. Halliburton’s disclosure of a tournament ID is not sufficient to render obvious a ***match*** ID.

Prelim. Resp. 30–31. We agree with Patent Owner.

The Petition provides no explanation or reasoning as to how or why the “tournament game identifier number[]” as disclosed in Halliburton

teaches the “unique match number” as recited in claim 1 of the ’564 patent.¹¹ Petitioner fails to explain what relationship, if any, the “tournament game identifier number[]” bears to the stream of pseudo random number seeds allegedly taught by Halliburton. Because each tournament in Halliburton has an identifier number does not support the conclusion that the “tournament game identifier number[]” characterizes the stream of pseudo random number seeds or otherwise supports concluding that the “tournament game identifier number[]” is a “unique match number” as recited. The Petition provides no support for concluding that Halliburton’s depiction of a “tournament game identifier number[]” teaches a “unique match number” as recited in claim 1 of the ’564 patent.

We determine that the Petition fails to show that Halliburton teaches or suggests the first limitation of claim 1 of the ’564 patent.

Third Limitation of Claim 1

The third limitation of claim 1 of the ’564 patent recites:

*generating, using the stream of pseudo-random number seeds,
a plurality of pseudo-random numbers*

¹¹ Paragraph 235 of Exhibit 1003 (Declaration of Stacy Friedman) is cited in the Petition without any description or explanation of the testimony or how or why it supports the conclusions reached. Nonetheless, we have considered this cited testimony which provides: “Halliburton’s FIG. 6 shows that its tournament IDs are for the decks provided and consequently, the claim language is met.” Ex. 1003 ¶ 235. We find this testimony to be conclusory and not helpful to understand how Halliburton’s tournament IDs meet the claim language. 37 C.F.R. § 42.65(a) provides, “[e]xpert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight.” We accord little or no evidentiary weight to the cited paragraph of Exhibit 1003.

Ex. 1001, 16:19–20. The entire presentation on this limitation in the Petition states:

As noted immediately above in [1.B], Halliburton teaches transferring a seed to the client, which the client in turn uses to algorithmically generate a card sequence. EX1004 at 8:60-65; 16:37-38; 17:65-65. Claim 1 of Halliburton recites the client using “data” (which is the seed (*id.* at 8:55-65; 13:57-58)), to “generate a random card sequence.” *Id.* at 16:37-38. As noted above in [1.A], a *stream of seeds* is sent for one or more decks, to generate a plurality of one or more card deck sequences (*a plurality of pseudo random numbers*) for solitaire tournaments. *Id.* at 3:47-50; EX1003 at ¶245.

Therefore, Halliburton teaches this limitation.

Pet. 38–39. This passage in the Petition states that, as described in Halliburton, a “seed” is used to “generate a card sequence.” There is no explanation or reasoning as to how or why this passage establishes Halliburton teaches generating, using seeds, pseudo-random numbers. The Petition never explains how or why “a plurality of one or more card deck sequences” meet the claim recitation of “*a plurality of pseudo-random numbers*.” All the passages in Halliburton cited in this passage from the Petition are quoted below.¹²

FIG. 1 is a first screen display according to a first embodiment of the present invention showing an example of a version of the game employing multiple discard decks, the wild card feature and the target feature.

* * *

Upon the selection of a tournament by a player and after activating the play button, the server transfers data including

¹² “17:65-65” is included in the cites to Halliburton from this section of the Petition. *See* Pet. 38. This appears to be a typographical error. In order to include the complete phrase and concept found in column 17, line 65, of Halliburton, we interpret this citation to mean 17:64–65.

instructions on which features will be activated for that selected game, the card sequence, the location of the target bonus, and any screen updates such as graphics or advertising material. The sequence of the cards provided to the player for each game is determined by the transfer of a “seed” consisting of a random number, which is generated by the server. This concept is well known in the art. The sequence of cards is not technically preselected but is computed on the player’s computer by an algorithm dependent on the seed.

* * *

retrieving input over the internet regarding said tournament event including data to generate a random card sequence

* * *

game pattern comprising data to generate a random sequence of cards

Ex. 1004, 3:47–50, 8:55–65, 16:37–38, 17:64–65. These passages refer to generating a random card sequence. None of the cited passages in Halliburton refer to “*generating . . . a plurality of pseudo-random numbers.*” There is no reasoning or explanation in the Petition of how or why generating a random card sequence meets the claim language of “*generating . . . a plurality of pseudo-random numbers.*”

We determine that the Petition contains an inadequate showing that the third limitation of claim 1 is taught or suggested by Halliburton.

Fourth Limitation of Claim 1

The fourth limitation of claim 1 of the ’564 patent recites:

executing the game instance by the client and using the plurality of pseudo-random numbers to provide the online competition to a player such that a beginning of gameplay experience is common between the game instance and a second game instance executing on a second client enrolled in the online digital gaming competition

Ex. 1001, 16:21–27. The entire presentation in the Petition as to this limitation states:

[This limitation] describes providing like-seeds to players competing in the competition. Halliburton teaches this.

As described in [1.A]-[1.C], the *executing the game instance by the client and using the plurality of pseudo-random numbers* is satisfied by the client receiving deck-seeds which it uses to generate random card sequences. EX1004 at 8:60-65; 13:55-62; 15:58-63; 7:44-46; 2:58; FIG. 8b.

Halliburton further teaches a tournament mode where identical decks are presented to multiple players in a tournament, which satisfies: *to provide the online competition to a player such that a beginning of gameplay experience is common between game instances*. Specially, Halliburton teaches a solitaire tournament where identical seeds for decks are sent to multiple players within the same tournament—so that they receive the same card sequence in a deck—to emphasize player skill. EX1004 at 12:36-43; 7:44-46; 8:55-65; EX1003 at ¶¶247-248. Providing like-sequences for gameplay elements (*e.g.*, cards) matches the disclosure of the '564 Patent which provides like-sequences for Tetris. EX1001 at 14:63-67.

Pet. 39–40. In this passage from the Petition, there is no explanation or reasoning to support the statement that “*using the plurality of pseudo-random numbers*” is satisfied by “the client receiving deck-seeds which it uses to generate random card sequences.” The cited passages in Halliburton provide no support for finding that Halliburton teaches generating a plurality of pseudo-random numbers for use in generating random card sequences.

In the previously recited “generating” limitation, claim 1 recites that seeds are used to generate “a plurality of pseudo-random numbers.” In its showing with regard to the “generating” limitation, Petitioner contends that Halliburton describes using a “seed” to “generate a card sequence.” *See* Pet.

38–39. With regard to this limitation, the Petition states that “*using the plurality of pseudo-random numbers* is satisfied by the client receiving deck-seeds which it uses to generate random card sequences.” *See id.* at 39. The Petition contains no reasoning or explanation as to how Halliburton describes using a plurality of pseudo-random numbers that are generated using seeds to provide gameplay experiences.

The Petition fails to show that Halliburton teaches or suggests the fourth limitation of claim 1 of the ’564 patent.

Summary as to Challenge to Claim 1 Based on Halliburton

We determine that, based on the showing in the Petition, Petitioner is not reasonably likely to establish that Halliburton teaches or suggests all the limitations of claim 1 of the ’564 patent and that a conclusion that claim 1 of the ’564 patent would have been obvious based upon Halliburton is unsupported in the Petition.

b) Discussion of Claims 2–4, 6, 10–14, 16, and 18–21

For the other claims of the ’564 patent that are challenged in the Petition as obvious in view of Halliburton (claims 2–4, 6, 10–14, 16, and 18–21), the Petition relies upon the showing as to claim 1 of the ’564 patent. *See* Pet. 40–44. For the same reasons stated above as to claim 1, we determine that the challenges to claims 2–4, 6, 10–14, 16, and 18–21 based on Halliburton fail as inadequately supported in the Petition.

4. Consideration of the Petition’s Showing of Obviousness Based on Halliburton and Perrone

The Petition argues that to the extent Patent Owner argues that Halliburton alone does not teach the first limitation of claim 1 of the ’564 patent because “*characterized by* must mean that the *unique match identifier*

be used as the seed,” the Halliburton-Perrone combination teaches this limitation. Pet. 46–47. In this regard, the Petition states:

As described in Ground 1, [1.A], Halliburton teaches these limitations.

The Halliburton-Perrone combination further teaches these limitations even to the extent Patent Owner argues that the claimed *characterized by* must mean that the *unique match identifier* be used as the seed. As noted in Ground 1, [1.A], Halliburton’s seed is used to generate random card sequence and can be any number (EX1004 at 7:44-46; 8:55-65), and teaches identification numbers for tournaments. *Id.* at 7:27-28. Perrone teaches using its match numbers as seeds to pseudo randomly generate elements. EX1005 at 4:13-17; 4:33-38; 8:16-23; claim 17. Perrone’s game ID (which is its seed) can be calculated randomly, or based on the value of a previous game ID. *Id.* at 4:39-54. Consequently, a POSITA would have found it obvious and would have been motivated (§VI.B.2) to use *unique match identifier* as a seed.

Id. Patent Owner does not argue that the claims of the ’564 patent require that the recited “unique match identifier” be used as the seed. *See* Prelim. Resp. 29–31 (arguing that Petitioner has failed to show that Halliburton’s tournament ID is the “unique match identifier” because Halliburton provides that the cited ID number is an identifier for a tournament not a match). Therefore, as a contingent alternative to its obviousness grounds based on Halliburton alone, it is unclear whether, under the circumstances presented, the Petitioner relies on this ground (Halliburton-Perrone) as set forth in the Petition.

However, as we agree with Patent Owner that the challenge in the Petition based on the Halliburton-Perrone combination fails because Petitioner’s showing as to motivation to combine is conclusory and inadequate, we reject this challenge for this reason. We further reject the

challenge based on the Halliburton-Perrone combination because no reasonable expectation of success is alleged or shown in the Petition.

Petitioner proposes to modify Halliburton's teachings with those of Perrone in order to meet the "stream of pseudo random number seeds characterized by a unique match identifier" language in claim 1 of the '564 patent. *See* Pet. 46–47. The Petition first argues that it would have been obvious to combine Halliburton and Perrone because "picking a number for the seed is a design choice; it is merely a starting point for a pseudo random number generator." *Id.* at 45. But, the Petition never provides any reason why a skilled artisan would make the choice of using the match identifier as the seed for a random number generator. *See id.* The Petition states:

Perrone demonstrates this design choice by choosing its match identifier as the seed. EX1005 at 4:32-38. Perrone also notes that "[i]n addition to game IDs, other values can be used such as a date, time, location, user inputted numbers, lottery card number, etc.," (*id.* at 4:46-[4]8) thus confirming a POSITA's knowledge that many values (including a game ID) can be used as a seed for a pseudo-random number generator. EX1003 at ¶255.

Id. Thus, while the Petition establishes based on Perrone that using the match identifier as the seed may have been an available choice that was known in the art, there is no reasoning or explanation as to why or how a skilled artisan would make this choice. We agree with Patent Owner that "there is no such reason articulated in the Petition." *See* Prelim. Resp. 32.

Next, Petitioner argues that "[a] POSITA [person of ordinary skill in the art] would have been motivated to combine Halliburton and Perrone

because they are both in the same field^[13] and provide like-teachings.” Pet. 45. Here again, we determine that this statement fails to provide any specific reason for combining Halliburton and Perrone by using the match identifier as the seed.

Lastly, the Petition argues that “a POSITA would have been motivated to use a game identifier as the seed number because doing so would have been obvious to try and would have provided predictable results.” Pet. 46. Once again, we determine that this statement fails to provide any specific reason why a skilled artisan would have been motivated to use a match identifier as the seed. With regard to motivation to combine, Patent Owner counters that “Petitioner merely recites *KSR*^[14] buzzwords such as ‘design choice,’ ‘obvious to try,’ and ‘predictable results’ instead of articulating *why* a POSITA would have made this particular change.” Prelim. Resp. 32. We agree with Patent Owner.

Petitioner was required to show a reasonable expectation of success in combining the teachings in the prior art. *Regents of Univ. of Cal. v. Broad Inst., Inc.*, 903 F.3d 1286, 1291 (Fed. Cir. 2018) (“An obviousness determination requires finding that a person of ordinary skill in the art would have been motivated to combine or modify the teachings in the prior art and would have had a reasonable expectation of success in doing so.”). To the extent that Petitioner sought to address this issue with the phrase “would have provided predictable results” (*see* Pet. 46), we find this allegation to be unsupported and conclusory.

¹³ The Petition does not identify or describe the field or otherwise show that Halliburton and Perrone are “in the same field.” *See* Pet. 45–46.

¹⁴ *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007).

We determine that the challenge to claims 1–4, 6, 10–14, 16, and 18–21 based on the Halliburton-Perrone combination fails as inadequately supported in the Petition.

*E. Consideration of Alleged Obviousness over Nguyen
and Nguyen and Kelly*

Petitioner contends that Nguyen (Ex. 1006) alone and in combination with Kelly (Ex. 1007), renders claims 1–4, 6, 10–14, 16, and 18–21 of the '564 patent obvious. See Pet. 2–3, 52–77. For the reasons set forth below, we determine that the challenges based on Nguyen alone and the combination of Nguyen and Kelly fail as inadequately supported in the Petition.

We start with descriptions of the disclosure of Nguyen and Kelly and then consider the arguments and evidence presented by the parties relating to the limitations of claim 1.

1. Nguyen (Ex. 1006)

Nguyen is titled “Apparatus for Pre-determined Game Outcomes.” Ex. 1006, code (54). Nguyen discloses a portable memory apparatus that includes a player identification and game outcomes associated with the player identification. *Id.*, code (57). The portable memory apparatus is communicatively coupled to a gaming apparatus and provides a game outcome to the gaming apparatus. *Id.* Nguyen explains that “[t]he portable memory apparatus may have a plurality of seed values associated with a player identification stored thereon” and “[e]ach of the seed values may relate to an outcome of a game play.” *Id.* ¶ 5. Nguyen further explains that a seed generator “may provide the seed values to a gaming unit” and “[t]he

gaming unit may use the seed value as a starting value for [a] random number sequence.” *Id.* ¶ 39.

Figure 1, reproduced below, is a block diagram of Nguyen’s gaming system. *Id.* ¶ 11.

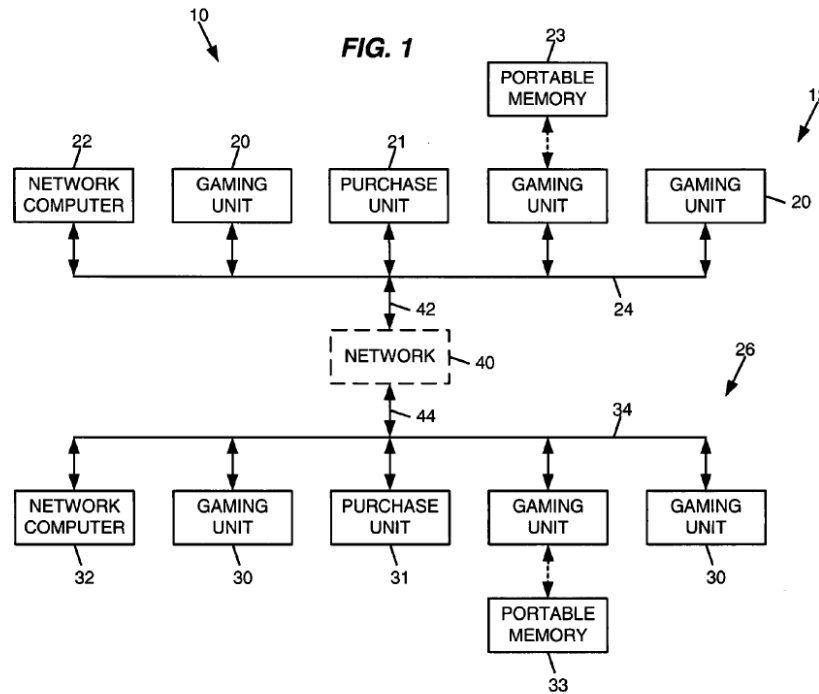


Figure 1 depicts Nguyen’s gaming system 10 including first group or network 12 of casino gaming units 20 operatively coupled to network computer 22. *Id.* ¶ 41. Gaming system 10 may also include second group or network 26 of casino gaming units 30 operatively coupled to network computer 32. *Id.*

Nguyen discloses that a main routine that is performed during operation of the gaming units includes generating a game selection display (block 223 shown in Figure 5B), selecting a game by a player (block 224), reading a seed value (block 225), generating a random number (block 226), and generating a random number as part of a plurality of gaming routines (gaming routines 227–31). *Id.* ¶¶ 21, 93–97, Fig. 5B. Nguyen also discloses

that “[t]he seed value may be selected randomly from a plurality of unused seed values” that are stored in a portable memory. *Id.* ¶ 94. Nguyen’s gaming system allows multiple people to play a game such as keno. *Id.* ¶ 154.

2. *Kelly (Ex. 1007)*

Kelly is titled “System Gaming.” Ex. 1007, code (54). Kelly “relates generally to . . . a player tracking system and system gaming apparatus.” *Id.* at 1:27–30. Kelly discloses a game called “Skill Score” in which “an all-skill method of game play and scoring is used in a redemption game that awards prizes.” *Id.* at 91:58–60. Kelly discloses a system that allows a player’s game score to be compared against other players’ game scores “who played the exact same game with the same scoring potential.” *Id.* at 91:60–63. Kelly describes that “[t]he skillful actions of the player determine the player’s game score” and “[t]he skill score removes all elements of chance within the game.” *Id.* at 91:63–67. In this game, a seed is used, which is a “value that determines in which order a deck of cards are dealt, what the starting play field for each round looks like in a puzzle-style game, or any value that determines the initial state of a game.” *Id.* at 92:1–4. Kelly discloses that “[a]ll players have equal opportunity for the highest score available for that seed” and “[t]he game score table per seed includes the all-time high score and low score within the most recent scores.” *Id.* at 92:4–12.

3. *Consideration of the Petition’s Showing of Obviousness Based on Nguyen*

a) *Discussion of Claim 1*

First Limitation of Claim 1

The first limitation of claim 1 of the ’564 patent recites:

*receiving, at a client including an executable game instance, a stream of pseudo random number seeds characterized by a **unique match identifier** for an online digital gaming competition, the client enrolled in the online competition*

Ex. 1001, 16:10–14 (emphasis added). For the “*unique match identifier*” element, the entire presentation in the Petition provides:

Nguyen teaches that the *stream of pseudo random number seeds* is *characterized by a unique match identifier*. Nguyen uses seeds to identify games—its match identifier is characterized by its seed and vice-versa. EX1003 at ¶280. Nguyen claims that “each ... seed value[] [is] related to an outcome of a gameplay.” EX1006 at Claim 1; [0005]. Nonetheless, as described in Ground 1, [1.A], the selection of a seed’s number is a design choice and is obvious under any prosecutive interpretation by Patent Owner. EX1003 at ¶¶278, 236-237; EX1028 at 276 (“any initial ‘seed’ choice... is as good as any other: the sequence just takes off from that point”).

Pet. 57. It is not apparent and the Petition provides no persuasive explanation or reasoning to support finding that because “Nguyen uses seeds to identify games—its match identifier is characterized by its seed and vice-versa.”¹⁵ We determine that the Petition fails to adequately show that Nguyen teaches or suggests the “*unique match identifier*” element or the first limitation of claim 1 of the ’564 patent.

¹⁵ In the Petition, paragraph 280 of Exhibit 1003 (Declaration of Stacy Friedman) is cited to support this conclusion. See Pet. 57. Exhibit 1003, paragraph 280, states, “Nguyen teaches that seeds, the random numbers generated therefrom, and the gaming outcomes determined by those random numbers may all be stored. Nguyen at [0110], [0112], [0114]. Therefore, the seed identifies the game outcome.” We find the conclusion stated in this paragraph to be unexplained and unsupported by adequate reasoning or explanation. We accord this testimony little or no weight. See 37 C.F.R. § 42.65(a).

Third Limitation of Claim 1

The third limitation of claim 1 of the '564 patent recites:

*generating, using the stream of pseudo-random number seeds,
a plurality of pseudo-random numbers*

Ex. 1001, 16:19–20. The entire presentation on this limitation in the Petition states:

Nguyen teaches *generating, using the stream of pseudo-random number seeds, a plurality of pseudo-random numbers*. As depicted above in [1.B], Nguyen teaches generating random numbers based off seeds in order to play certain games. EX1006 at [0039]; [0096]-[0097]; [0134]; [0140]; [0156]; [0164]. And, as noted in [1.A], Nguyen also teaches providing one or more seeds for the generation of multiple random numbers. *Id.* at [0099]; [0126]; EX1003 at ¶287.

Pet. 60–61. We determine that this presentation as to this limitation is too conclusory and inadequately explained. Petitioner does not explain how the claim language “the stream of pseudo-random number seeds” is met by Nguyen. Without some explanation or supported reasoning, we determine that showing that Nguyen teaches “providing one or more seeds” is inadequate to show that Nguyen teaches “the stream of pseudo-random number seeds.”

Fourth Limitation of Claim 1

The fourth limitation of claim 1 of the '564 patent recites:

executing the game instance by the client and using the plurality of pseudo-random numbers to provide the online competition to a player such that a beginning of gameplay experience is common between the game instance and a second game instance executing on a second client enrolled in the online digital gaming competition

Ex. 1001, 16:21–27. With regard to this limitation, the Petition provides:

Nguyen teaches *such that a beginning of gameplay experience is common between the game instance and a second game instance executing on a second client enrolled in the online digital gaming competition*. As described in FIG. 5B, games of bingo and keno are provided, where “multiple players are playing a single ... game.” EX1006 at [0154] (describing multiple keno players playing the same game); [0162] (describing multiple bingo players playing same game). A POSITA understands that multiplayer bingo and keno require the same numbers be distributed. EX1003 at ¶289. Nguyen teaches generating those numbers—client-side—based on a transmitted seed. EX1006 at [0156] (stating that the seed is used to generate the game number in keno); [0164] (stating that the seed is used to generate the bingo number in bingo). For multiplayer keno or bingo, each client instance would use an identical seed for a shared number to start gameplay. *Id.* at [0154], [0162] (stating same distribution flowchart is used for a client to receive a seed). For example, bingo gameplay would begin by everyone playing the same exact number (which is client-side seed generated in Nguyen). EX1003 at ¶289. As such, Nguyen teaches that *a beginning of gameplay experience is common* amongst game instances.

Pet. 61–62 (footnote omitted). If, as the Petition states, “an identical seed” is used “to start gameplay” and “bingo gameplay would begin by everyone playing the exact same number,” we do not understand how Nguyen teaches or suggests “**a plurality** of pseudo-random numbers” is used to provide “a beginning of gameplay experience [that] is common.” If a plurality (two or more) random numbers were used to start gameplay, the gameplay experience should not be the same.

The Petition contends that Nguyen’s teachings related to poker and blackjack also support finding that this limitation would have been obvious. *See* Pet. 62–64. But, here again, the Petition points to no teaching or

suggestion in Nguyen related to the use of “**a plurality** of pseudo-random numbers” is used to provide “a beginning of gameplay experience [that] is common.”

With regard to this limitation, the Patent Owner counters:

Nguyen does not render obvious “provide the online competition to a player such that a beginning of gameplay experience is common between the game instance and a second game instance executing on a second client enrolled in the online digital gaming competition.” As Petitioner notes, Nguyen teaches multiple players playing a single keno (Ex. 1006 at [0154]) or bingo (*id.* at [0162]) game. Ex. 2001 at ¶ 90. The difference between the system described in Nguyen and the ’564 Patent is that in the multiplayer bingo embodiment described in Nguyen, depicted in Figure 15, the bingo numbers are drawn **randomly**. *See* Ex. 1006 at [0164] (“[T]he player may select a bingo card, which may be generated randomly based on a seed value”), *id.* (“[A]t block 634 a bingo number may be randomly generated ... based on the seed value”). Similarly, in keno game numbers are chosen **randomly**. *See id.* at [0156]. Petitioner’s assertion that “each client instance would use an identical seed for a shared number to start gameplay” (*see* Pet. at 61-62) misses the point entirely—***each player must have a different starting bingo (or keno) board or every player’s outcome would be the same***. The ’564 Patent, in contrast, teaches (and claims) a multiplayer game where players compete with each other—i.e., where skill and not the luck of the draw is the determining factor. Ex. 2001 at ¶ 91.

The same is true for poker and blackjack (*see* Pet. at 62-63) where each player draws a different hand. And while Petitioner asserts that a POSITA would have been aware of “common gameplay modes” of blackjack and poker such as “duplicate poker” and “match-play blackjack,” no such mode is disclosed in Nguyen. *See* Pet. 63-64; Ex. 2001 at ¶ 92. Here, Petitioner relies heavily on Nguyen’s statement that “a different number of routines could be included to allow play of a different number of games.” *See*

Ex. 1006 at [0099]. Petitioner, however, provides no explanation why this does not refer to the ***non-common*** blackjack and poker embodiments already disclosed in Nguyen. Ex. 2001 at ¶ 93. In any case, this generic disclosure is not a panacea for obviousness. It does not even mention what the other kinds of games are, and Petitioner's obviousness arguments stretch this vague disclosure a step too far.

Prelim. Resp. 36–37. We agree with Patent Owner and determine that the Petition fails to show Nguyen teaches or suggests “using the plurality of pseudo-random numbers” that, as recited in the previous limitation, are generated from seeds, to “provide an online competition” in which “a beginning of gameplay experience is common between the game instance and a second game instance executing on a second client.”

The Petition fails to show that Nguyen teaches or suggests the fourth limitation of claim 1 of the '564 patent.

Summary as to Challenge to Claim 1 Based on Nguyen

We determine that, based on the showing in the Petition, Petitioner is not reasonably likely to establish that Nguyen teaches or suggests all the limitations of claim 1 of the '564 patent and that a conclusion that claim 1 of the '564 patent would have been obvious based upon Nguyen is unsupported in the Petition.

b) Discussion of Claims 2–4, 6, 10–14, 16, and 18–21

For the other claims of the '564 patent that are challenged in the Petition as obvious in view of Nguyen (claims 2–4, 6, 10–14, 16, and 18–21), the Petition relies upon the showing as to claim 1 of the '564 patent. *See* Pet. 64–67. For the same reasons stated above as to claim 1, we

determine that the challenges to claims 2–4, 6, 10–14, 16, and 18–21 based on Nguyen fail as inadequately supported in the Petition.

4. *Consideration of the Petition’s Showing of Obviousness Based on Nguyen and Kelly*

The Petition states that a skilled artisan would have been motivated to combine Nguyen and “Kelly’s skill score as an improvement.” Pet. 68. Patent Owner counters that “Petitioner’s motivation to combine analysis is conclusory and riddled with hindsight bias.” Prelim. Resp. 38. For the reasons set forth below, we determine that the Petition fails to show that a skilled artisan would be motivated to combine Nguyen and Kelly with a reasonable expectation of success.

The Petition states:

Nguyen teaches online gaming, and Kelly teaches refined mechanisms in online gaming to provide skill-based rankings. EX1003 at ¶¶300-305. A POSITA—looking at Nguyen—would understand that more gameplay modes to encourage gameplay is desirous. *Id.* at ¶301. Nguyen teaches that more gameplay modes should be used. EX1006 at [0099]; [0136]. Kelly provides a gameplay mode that emphasizes player skill, where players test their ability to generate higher scores. EX1007 at 91:58-67. This is an expected and desired gameplay mode for a player: achieving higher scores based on higher skill was commonplace, known, and expected in gaming. EX1003 at ¶301. A gaming provider would have found it desirous to provide these elements to Nguyen.

Pet. 68. Dissecting this argument, Petitioner appears to be arguing that a skilled artisan would understand it would be “desirous” to add “more gameplay modes” including Kelly’s “gameplay mode that emphasizes player skill” to Nguyen because “Nguyen teaches that more gameplay modes should be used.”

Patent Owner counters that “Petitioner’s motivation to combine analysis for Nguyen and Kelly rests on a foundation of a misrepresentation of Nguyen’s teachings,” because Nguyen does not teach that more gameplay modes should be used. Prelim. Resp. 38. The Preliminary Response states:

The Petition states: “Nguyen teaches that more gameplay modes *should be used*.” See Pet. at 68 (emphasis added). Not so. Instead, Nguyen merely states: “It should be note although five game routines are shown in FIG. 5B, a different number of routines *could be included* to allow play of a different number of games.” Ex. 1006 at [0099] (emphasis added). This difference is key, because it means that contrary to Petitioner’s assertion, Nguyen does not include any affirmative teaching that would motivate a POSITA to attempt to use gameplay modes other than those disclosed in Nguyen—poker, blackjack, slots, keno, and bingo . . . A POSITA would not have been motivated to modify Nguyen’s *casino gaming system* to provide skill-based gaming. Such a modification would defeat the very purpose of casino gaming: wagering against the house. Ex. 2001 at ¶ 96.

Petitioner’s proposed combination is also based on the flawed premise that “gameplay mode[s] that emphasize[] player skill, where players test their ability to generate higher scores” are “expected and desired ... for a player.” See Pet. at 68. While this may be true for gaming generally, it is not true for *casino* gaming, which is what Nguyen is unequivocally directed to. See Ex. 1006 at [0002] (“A gaming apparatus of the type used in casinos....”). Indeed, the games described in Nguyen are referred to as “wagering games.” See *id.* at [0006]. Skill does not factor in. Ex. 2001 at ¶ 97.

Id. at 38–40. We agree with Patent Owner that Petitioner’s showing in this regard is not supported, as suggested in the Petition, by Nguyen. We additionally find that this argument for combining the teachings of Nguyen

and Kelly to be too general and non-specific. For example, the Petition does not provide any specific reasoning as to why incorporating Kelly's teachings into Nguyen would be an improvement or desirable.

Petitioner also argues that "[a] POSITA would have been motivated to combine Nguyen and Kelly because doing so would yield predictable results" and "would have been obvious to try." Pet. 68–69. We determine these unexplained and unsupported allegations of "yield[ing] predictable results" and "be[ing] obvious to try" are too non-specific and general to support finding a motivation to combine the relevant teachings of the Nguyen and Kelly.

Petitioner further alleges that a skilled artisan would combine the teachings of Nguyen and Kelly because these two first-named inventors work for competitors. *See* Pet. 69 ("A POSITA looking at Nguyen (and Kelly) would have looked at competitor patents.").¹⁶ The Petition states:

Nguyen is from IGT, a major supplier of casino games (EX1006) and Kelly is from Bally Gaming, another major supplier of casino games and competitor to IGT. EX1007. A POSITA looking at Nguyen's suggestion to provide additional games (EX1006 at [0099]) would have motivated them to look at other competitor gameplay modes, such as Kelly's skill score, in order to attract more players. EX1003 at ¶305.

Id. The alleged motivation "to look at other competitor gameplay modes . . . in order to attract more players" is too general and conclusory to show a skilled artisan would combine the teachings of Nguyen and Kelly. The cited

¹⁶ The Petition points to no disclosure in Nguyen of any of the inventors' employers or of any other basis why a skilled artisan would know or could determine Nguyen's "competitor patents." *See generally* Ex. 1006. No assignee is disclosed in Nguyen. *Id.*

paragraph 305 in Exhibit 1003 (Declaration of Stacy Friedman) contains nothing of significance to support or explain this argument.

This section of the Petition does not discuss reasonable expectation of success. *See* Pet. 68–69. This deficiency by itself provides a sufficient basis for determining that the showing in the Petition related to the Nguyen-Kelly combination fails.

F. Consideration of Alleged Obviousness over Paradise

Petitioner contends that Paradise (Ex. 1008)¹⁷ renders claims 1–4, 6, 10–14, 16, and 18–21 of the ’564 patent obvious. *See* Pet. 2–3, 77–82. For the reasons set forth below, we determine that the challenges based on Paradise fail as inadequately supported in the Petition.

We start with a description of the disclosure of Paradise and then consider the arguments and evidence of the parties relating to claim 1.

1. Paradise (Ex. 1008)

Paradise is titled “Dynamic Gameplay Advertisements.” Ex. 1008, code (54). Paradise was filed on April 8, 2013 and is the grandparent of the application that matured to the ’564 patent. *Id.*, codes (21), (22); Ex. 1001,

¹⁷ Paradise is the published version of US Patent Application No. 13/858,581. (Ex. 1008, code (21)) that is the grandfather application to the application on which the ’564 patent issued and the ’564 application claims priority to the filing date of Paradise. Ex. 1001, code (63), 1:5–12. Petitioner contends that the claims of the ’564 patent do not find written description support in Paradise and Paradise qualifies as prior art. Pet. 13–19. Patent Owner contends that Paradise does not qualify as prior art. Prelim. Resp. 16, 42–47. We do not reach the issue of whether Paradise qualifies as prior art to the challenged claims of the ’564 patent, because the Petition fails to show that all the limitations of any challenged claim of the ’564 patent are taught or suggested by Paradise. The challenges to the claims of the ’564 patent in the Petition fail as inadequately supported by Paradise no matter the prior art status of Paradise.

codes (10), (63). Petitioner points out that Paradise “is a publication of one of the ’564 Patent’s priority support documents . . . and provides identical specification disclosure as the ’564 Patent.” Pet. 77; *see also* Prelim. Resp. 16. Thus, the discussion above as to what the ’564 patent discloses applies to Paradise. *See* section I.C. above; Ex. 1008. For example, Paradise similarly discloses Figs. 1 and 7 and similarly discloses random numbers as discussed in that section. *See* Ex. 1008 ¶¶ 80–82, Figs. 1, 7.

2. *Consideration of the Petition’s Showing of Obviousness Based on Paradise*

a) *Discussion of Claim 1*

First Limitation of Claim 1

The first limitation of claim 1 of the ’564 patent recites:

receiving, at a client including an executable game instance, a stream of pseudo random number seeds characterized by a unique match identifier for an online digital gaming competition, the client enrolled in the online competition

Ex. 1001, 16:10–14. For this limitation, the Petition states:

Paradise teaches these limitations, but does so server-side, *i.e.*, the server uses seeds to generate random numbers that it sends to the client. EX1008 at [0082]; [0080]-[0081]. In view of Paradise, it would have been obvious to take the server-side pseudo random number generation and move it client-side. EX1003 at ¶335.

Pet. 77–78. The Petition then provides two reasons to support the obviousness conclusion: (1) “[a] POSITA would have been motivated to do so to save bandwidth” and (2) “[a] POSITA would have been motivated to move the random number generator to the client because it would have been obvious to try.” *Id.* at 78.

Accepting everything the Petition states with regard to this limitation as accurate and proven, it fails to provide any showing that Paradise teaches any element of the first limitation of claim 1. There is no showing that Paradise teaches that the “a client includ[es] an executable game instance;” that Paradise teaches “receiving, at a client . . . a stream of pseudo random number seeds characterized by a unique match identifier for an online digital gaming competition;” or that Paradise teaches “the client [being] enrolled in the online competition.” Petitioner’s showing for this limitation appears to be directed to the third limitation of claim 1 (“generating, using the stream of pseudo-random number seeds, a plurality of pseudo-random numbers”) rather than any element of the first limitation of claim 1. We determine that the Petition contains no showing that the first limitation of claim 1 is taught or suggested by Paradise.

Second Limitation of Claim 1

The second limitation of claim 1 of the ’564 patent recites:

receiving, at the client and from a game server, game data for executing the game instance, the game instance requiring one or more random numbers to complete execution of the game instance

Ex. 1001, 16:15–18. The entire presentation in the Petition as to this limitation states, “Paradise teaches these limitations. EX1008 at [0082]; [0080]-[0081]; [0007]; [0034]; EX1003 at ¶338.” Pet. 79. Thus, the Petition fails to include any specifics as to how or why Paradise teaches any of the elements of the second limitation of claim 1.

Fourth Limitation of Claim 1

The fourth limitation of claim 1 of the ’564 patent recites:

executing the game instance by the client and using the plurality of pseudo-random numbers to provide the online competition to a player such that a beginning of gameplay experience is common between the game instance and a second game instance executing on a second client enrolled in the online digital gaming competition

Ex. 1001, 16:21–27. The entire presentation in the Petition as to this limitation states, “Paradise teaches these limitations. EX1008 at [0082]; [0080]-[0081]; EX1003 at ¶340.” Pet. 79. Here again, the Petition fails to include any specifics as to how or why Paradise teaches any of the elements of this limitation of claim 1.

Last Limitation of Claim 1

The last limitation (the “wherein” clause) of claim 1 of the ’564 patent recites:

wherein at least one of receiving, generating, and executing is implemented by at least one data processor forming part of at least one computing system

Ex. 1001, 16:28–30. The entire presentation in the Petition as to this limitation states, “Paradise teaches these limitations. EX1008 at [0080]-[0082]; [0007] and [0034]; EX1003 at ¶341.” Pet. 79. Once again, the Petition fails to include any specifics as to how or why Paradise teaches any of the elements of this limitation of claim 1.

Summary as to Challenge to Claim 1 Based on Paradise

With regard to, at least, the first, second, fourth, and last limitations of claim 1 of the ’564 patent, the Petition provides no explanation or reasoning as to how or why Paradise teaches or suggests these limitations or any of the elements of these limitations. And, there is no description of any of the cited evidence or any application of the evidence to these limitations or any of the

elements of these limitations.¹⁸ 37 C.F.R. § 42.22(a)(2) requires that a petition “include[e] a detailed explanation of the significance of the evidence including the material facts.” We determine that the Petition fails to show that the first, second, fourth, and last limitation of claim 1 of the ’564 patent are taught or suggested by Paradise. The challenge as to claim 1 of the ’564 patent based on Paradise fails as inadequately supported in the Petition.

b) Discussion of Claims 2–4, 6, 10–14, 16, and 18–21

For the other claims of the ’564 patent that are challenged in the Petition as obvious in view of Paradise (claims 2–4, 6, 10–14, 16, and 18–21), the Petition relies upon the showing as to claim 1 of the ’564 patent. *See* Pet. 79–82. For the same reasons stated above as to claim 1, we determine that the challenges to claims 2–4, 6, 10–14, 16, and 18–21 based on Paradise fail as inadequately supported in the Petition.

G. Conclusion

For the reasons detailed herein, we determine that the Petition fails to show a reasonable likelihood that Petitioner would prevail as to any challenged claim on any of the grounds presented. We do not find the Petition to be persuasive or to establish that any of the challenged claims of the ’564 patent would have been obvious or unpatentable.

¹⁸ We have considered the cited paragraphs of Exhibit 1003 (Declaration of Stacy Friedman). Each of the cited paragraphs in Exhibit 1003 consists of a conclusory sentence declaring “Paradise teaches these limitations” and cites to the same paragraphs cited in the Petition. There is no explanation or reasoning provided as to how or why the cited paragraphs in Paradise teach or suggest the limitations. We accord little or no evidentiary weight to the unexplained and unsupported conclusions in the cited paragraphs of Exhibit 1003. *See* 37 C.F.R. § 42.65(a).

III. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that the Petition is denied and an *inter partes* review of the '564 patent is not instituted.

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