

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

DK CROWN HOLDINGS INC.,
Petitioner

v.

DIOGENES LIMITED,
Patent Owner

Case No. IPR2023-00268
U.S. Patent No. 11,200,779

PATENT OWNER'S RESPONSE

TABLE OF CONTENTS

TABLE OF CONTENTS.....	ii
TABLE OF AUTHORITIES	v
RESPONSE TO STATEMENT OF MATERIAL FACTS IN DISPUTE	1
I. INTRODUCTION	2
II. THE '779 PATENT	5
A. Overview of the '779 Patent.....	5
B. Challenged Claims	11
C. Procedural History.....	12
D. Claim Construction	12
III. RELEVANT LEGAL STANDARDS	14
A. Anticipation	14
B. Obviousness.....	14
1. Claims cannot be found obvious if an element is absent.....	15
2. A petition must address the Graham factors.....	15
3. A petition must provide articulated reasoning with rational underpinnings to combine or modify references.	16
IV. PETITIONER HAS NOT SHOWN THAT ANY CLAIM OF THE '779 PATENT IS INVALID.....	17
A. Summary of the Scott reference identified by Petitioner.....	17
B. “continuously retrieve . . . in real time” (Claim 1[e] / Claim 16[i]) ...	19

1.	The plain and ordinary meaning of “continuously retrieve . . . in real time.”	20
a.	The specification and the underlying “wagering event(s)”	21
b.	The DRP’s commentary on “continuously” and “real time”	26
c.	Application of the DRP’s guidance on the claimed system	28
2.	Scott does not disclose or render obvious a system that “continuously retrieve[s] . . . data in real time.”	30
a.	Scott retrieves data only at discrete points in response to triggers.	30
b.	Petitioner mischaracterizes Scott with respect to “continuous” retrieval.	33
c.	Petitioner mischaracterizes Scott with respect to “real time” retrieval.	35
C.	“Plurality” elements (Claim 16)	37
1.	The system of Claim 16	37
2.	Petitioner has not shown (or alleged) that Scott discloses a singular “trading engine module.”	39
3.	Scott does not disclose a “multiplayer configuration,” and the system of Claim 16 is not an “obvious matter of common sense” in light of Scott’s single-player games.	40
D.	Scott does not anticipate or render obvious the dependent claims.	44
E.	“Fixed odds single” (Claims 5, 7, and 23)	44
1.	The plain and ordinary meaning of “fixed odds single.”	45

2.	Scott fails to disclose or render obvious a “fixed odds single” wager.....	50
V.	CONCLUSION.....	52
	CERTIFICATE OF WORD COUNT.....	54
	CERTIFICATE OF SERVICE	55

TABLE OF AUTHORITIES

Cases

<i>3M Innovative Props. Co. v. Tredegar Corp.</i> 725 F.3d 1315 (Fed. Cir. 2013)	13
<i>CFMT, Inc. v. YieldUp Int’l Corp.</i> 349 F.3d 1333 (Fed. Cir. 2003)	15
<i>Connell v. Sears, Roebuck & Co.</i> 722 F.2d 1542 (Fed. Cir. 1983)	14
<i>eBay, Inc. v. Paid, Inc.</i> Case No. CBM2014-00125, Paper 15 (P.T.A.B. Sept. 30, 2014).....	16
<i>Eizo Corp. v. Barco N.V.</i> Case No. IPR2014-00358, Paper 11 (P.T.A.B. July 23, 2014)	15
<i>Graham v. John Deere Co.</i> 383 U.S. 1 (1966).....	15
<i>In re Fine</i> 837 F.2d 1071 (Fed. Cir. 1988)	44
<i>In re Kahn</i> 441 F.3d 977 (Fed. Cir. 2006)	16
<i>In re Rijckaert</i> 9 F.3d 1531 (Fed. Cir. 1993)	15
<i>Innogenetics, N.V. v. Abbott Labs.</i> 512 F.3d 1363 (Fed. Cir. 2008)	16
<i>KSR Int’l Co. v. Teleflex Inc.</i> 550 U.S. 398 (2007).....	16
<i>LG Elecs., Inc. v. Cellular Commc’ns Equip. LLC</i> Case No. IPR2016-00197, Paper 7 (P.T.A.B. Apr. 29, 2016).....	16

<i>Moses Lake Indus., Inc. v. Enthone, Inc.</i> Case No. IPR2014-00243, Paper 6 (P.T.A.B. June 18, 2014)	16
<i>Phillips v. AWH Corp.</i> 415 F.3d 1303 (Fed. Cir. 2005) (en banc)	13, 28
<i>Thorner v. Sony Computer Entm't Am. LLC</i> 669 F.3d 1362 (Fed. Cir. 2012)	13
<i>Toshiba Corp. v. Imation Corp.</i> 681 F.3d 1358 (Fed. Cir. 2012)	14

Statutes & Rules

37 C.F.R. § 42.23(a).....	1
37 C.F.R. § 42.24(a)(1).....	54
37 C.F.R. § 42.24(b)(2).....	54
37 C.F.R. § 42.24(d)	54
37 C.F.R. § 42.6(e).....	55

Other Authorities

Manual of Patent Examining Procedure § 2143.03	44
--	----

RESPONSE TO STATEMENT OF MATERIAL FACTS IN DISPUTE

Petitioner did not submit a specific statement of material facts in its Petition. Accordingly, no response is required under 37 C.F.R. § 42.23(a), and no facts are admitted.

I. INTRODUCTION

Patent Owner Diogenes Limited (“PO”) submits this response to the Petition for *Inter Partes* Review (“IPR”) of U.S. Patent No. 11,200,779 (EX-1001, “the ’779 Patent”) filed by DK Crown Holdings Inc. (“Petitioner”). *See* Paper 2.

The Petition should be denied for three reasons. First, Petitioner’s sole reference, Scott, does not disclose a system that retrieves data “continuously . . . in real time,” as those terms have been interpreted by a Delegated Review Panel in this proceeding, and as required by every claim of the ’779 Patent. Second, Scott is directed to single player, stepwise games; it falls far short of disclosing the complex system of the ’779 Patent which, for “any type of event,” facilitates multiple wagerers betting on the same, single event. This is implicit throughout the disclosure, encompassed by every claim, and expressly required by independent Claim 16. Finally, as to Claims 5, 7, and 23 which relate to sportsbook wagers, Petitioner is simply wrong about what a fixed odds wager means to a POSITA. Petitioner’s argument on these claims is based on this faulty premise and its only assertion—that Scott’s reference to bingo discloses a “fixed odds single”—must fail.

The ’779 Patent claims a versatile system that enables *multiple participants* to wager on a wide variety of sports and other wagering events, with cash-out offers updated *continuously in real time*. More specifically, the ’779 Patent teaches ongoing data collection to capture real-time developments in wagered-upon

competitive events, and that data—retrieved “continuously . . . in real time”—forms the basis for continuously updated cash-out offers made to the system’s wagerers. The system described and claimed in the ’779 Patent is adapted to work for “any type of event.” In particular, it is equipped to function for complex, dynamic wagering events, like sports, which have time-sensitive and fluid developments that must be promptly captured by system to offer up-to-date cash-out opportunities as those developments occur.

Petitioner asserts that the ’779 Patent is invalid in view of one reference: U.S. Patent Application Publication No. 2012/0309489 (“Scott”). But Scott’s operation is fundamentally different from the claimed system of the ’779 Patent, which is adapted for multiparticipant wagering on external (often live) sporting events that progress fluidly. Scott is directed to wagering games that are generated and presented by its gaming machine, that are played by an individual wagerer, and that unfold in discrete steps, like slots (each reel), keno (each number), card games (each card), etc. Scott’s gaming machine may offer its player a “cash value” for their current, non-final set of cards, symbols, or other game indicia at *discrete points within its games*—*i.e.*, when triggered by new game symbols in its stepwise games.

First, Scott does not disclose or suggest the retrieval of data “continuously . . . in real time” in accordance with the DRP’s guidance on construction of this claim element. The DRP’s guidance precludes Scott’s stepwise operation. The DRP held

that “in real time,” as used with “continuously” in the ’779 Patent, denotes retrieving information “with sufficient frequency **to promptly capture developments** that may affect the odds.” Paper 14 at 19. Conversely, “continuously . . . in real time” **excludes** retrieval only at discrete points of an event, which is precisely how Scott operates.

Second, Scott falls far short of the complex, multi-participant wagering system based on continuous and real time data retrieval, as described and claimed by the ’779 Patent. For instance, Claim 16 requires a **single** trading engine module receiving **multiple** wagers, from **multiple** participants via **multiple** input devices, on a **single** wagering event (and facilitating cash out offers). Meanwhile, Scott is directed to single player games that can be suspended at will. Contrary to Petitioner’s submission, Scott does not have a “multiplayer embodiment,” only a “marketplace” where individual players can buy and sell individual sets of “game symbols” (*e.g.*, a partial poker hand). Nothing in Scott discloses or suggests a single trading engine module receiving multiple wagers, from multiple participants via multiple input devices, on a single wagering event.

Finally, Petitioner’s case fails for an additional reason with respect to dependent Claims 5, 7, and 23. Each of those claims is directed to sportsbook wagers. Petitioner’s only assertion regarding these claims is that bingo (one of the stepwise games disclosed in Scott) is a “fixed odds single.” But, bingo is not a “fixed odds single.”

Petitioner's expert (who conceded he lacks expertise in sports) misunderstands "fixed odds single" to refer to a fixed probability of winning, when any POSITA would know it refers to a fixed *payout* based on a multiplier of the amount wagered. The very foundation of Petitioner's assertion is faulty, and bingo does not have a fixed payout. And even using the incorrect definition from Petitioner's expert, bingo is not a "fixed odds single" because the probability of winning a bingo game is not fixed. The Petition should be denied.

II. THE '779 PATENT

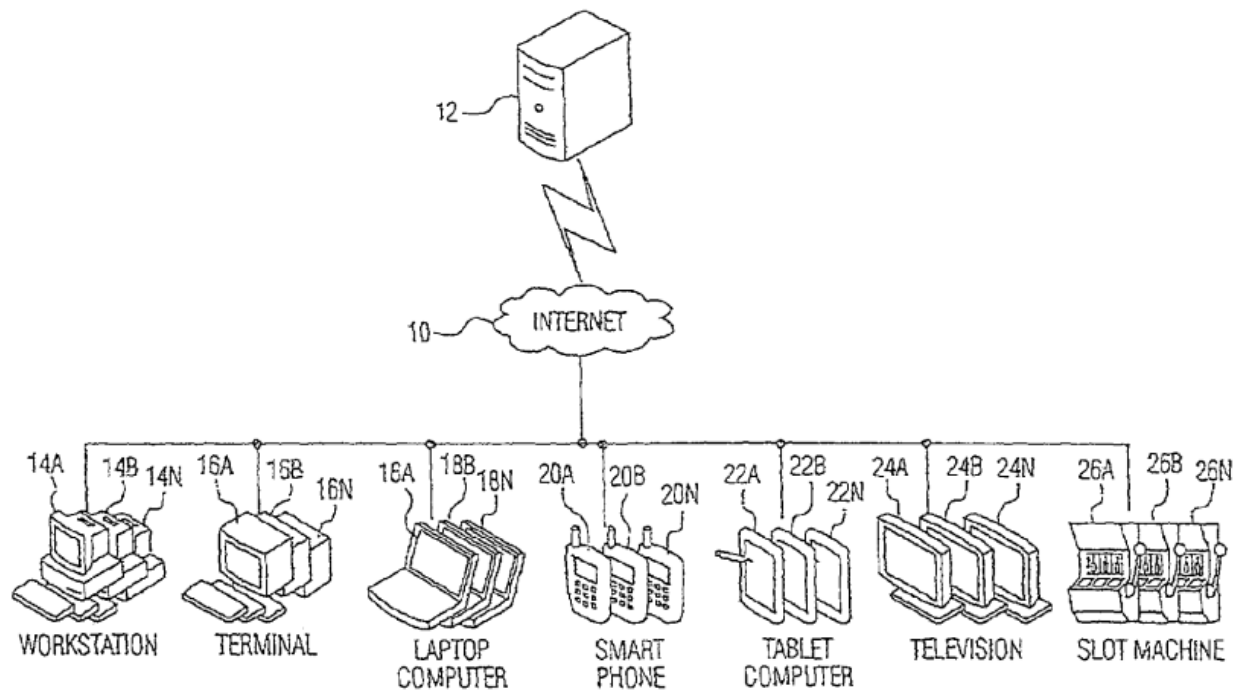
A. Overview of the '779 Patent

The '779 Patent describes a wagering system that enables an operator to generate real-time offers to eligible bettors to settle their wager(s) before the conclusion of the event on which the bettor wagered. *See, e.g.*, EX-1001 at 2:65–3:15. The '779 Patent describes how, at any time after the initiation of an event, any desired number of players who remain eligible for a prize "may be offered a 'buy-out' or an opportunity to sell their tickets (in whole or alternatively may be in part (*i.e.*, a fractional amount) to the game operator." EX-1001 at 35:42–54. For example, "the game operator (or any other entity) may offer the player a fractional amount of the potential Jackpot Pool to buy the ticket for the still pending game(s)." EX-1001 at 35:58–60.

The '779 Patent also describes the components of the claimed system, including servers, networks, and wagering input devices. Figure 1 is a schematic of an exemplary wagering system hardware and network of the '779 Patent. According to the specification:

The system includes a network, including a system controller, for example, such as based on a central server system **12** being interconnected through the internet **10** to a plurality of wager input devices such as wagering stations **14**, wagering terminals (including self-service wagering terminals) **16**, and internet connected computing systems **18**, smart phones **20**, tablet computers **22** and televisions **24** each of which is representative of a plurality of each type of wager input device (*e.g.* wagering stations **14A-N**).

EX-1001 at 5:5–16. The discussion refers to Figure 1 of the '779 Patent, which is reproduced below:



EX-1001 at Figure 1.

The wagering terminals and other wagering input devices “allow a player to place a wager on a series of (or separate discrete) sporting events” or other types of events. EX-1001 at 11:57–58. In accordance with the buy-out option, “[w]hen the player decides to end the game play, he can select the cash out button at which time the player may receive cash or other payout mechanisms such as tickets or credit slips redeemable by a cashier (or other suitable redemption system) or funding to the player’s electronically recordable identification card or the player’s online account.” EX-1001 at 27:48–53.

The ’779 Patent has 30 claims. There are two independent claims—Claims 1 and 16—and 28 dependent claims. Claim 1 contemplates a system comprising a

processor, memory, system controller, and input devices. The processor performs several functions as part of its operation, including:

- i. receiving a wager on a wagering event from one or more input devices;
- ii. storing the wager in a record within a database;
- iii. **continuously retrieving data in real time related to a progress of the wagering event;**
- iv. recalculating the wager information in real time based on the continuously retrieved data;
- v. continuously evaluating the recalculated wager information;
- vi. determining that a participant is eligible to win an award;
- vii. generating an option in real time for the participant to fully or partially cash out of the wager prior to the conclusion of the wagering event;
- viii. causing the option to be presented to the participant via user interface of the input device;
- ix. receiving a selection of the option for the participant prior to the conclusion of the wagering event; and
- x. causing the award to be presented to the participant.

EX-1001 at Claim 1.

The third function, involving the retrieval of data continuously and in real time, is critical to the invention. The system takes wagers, retrieves data on the underlying wagering event “continuously . . . in real time” and, based on that data, generates cash out offers for bettors reflecting a value derived from that real-time

information. EX-2007 at ¶ 49. Thus, the system claimed in the '779 Patent provides bettors with accurate, timely, and consistent offers to cash out of ongoing wagers on a wide variety of wagering events. *Id.*

Claim 3 of the '779 Patent specifies the wagering events to which the system may be applied, including, among other things, one or more probabilistic events, sporting events, slot machines, keno, poker, video games, racing, lotteries, live events, pre-recorded events, online events, broadcast events, card games, politics, stocks, celebrity gossip, movies, and reality TV. *See* EX-1001 at Claim 3.

Given the scope of Claim 3, which is dependent on and therefore subsumed within Claim 1, the events to which the claimed system of the '779 Patent can be applied are diverse and of varied complexity. Most of these events, especially sporting events, comprise time-sensitive, often fluid game changes that affect the odds of a wager (*e.g.*, the current score, which team currently has possession, location on the field, field and weather conditions, how much time remains, in-game momentum (*e.g.*, scoring streaks/runs), team status (power play, man down, shorthanded time remaining, etc.), player status (injuries, ejections, foul trouble, fatigue, etc.)). EX-2007 at ¶ 50.

The claimed system's ability to handle such diverse, complex, and time-sensitive events is made possible by the execution of essential operations in a particular manner. Some of these are "continuous[]" operations, some are "real time"

operations, but only one—“retrieve . . . data . . . related to a progress of the wagering event”—is carried out “continuously” **and** “in real time.” EX-2007 at ¶ 57.

The “retrieve” operation is central to the operation of the ’779 Patent’s system. It allows for implementing cash-out functionality on events where, to determine the value of multiple bettors’ wagers in real time, a large volume of time-sensitive data must be collected and analyzed. *See* EX-2007 at ¶¶ 52, 57. This includes sports wagering, to which the ’779 Patent is primarily directed, and on which both experts focus much of their discussion of the background technology and level of ordinary skill in the art. *See* EX-2007 at ¶¶ 44–46; EX-1007 at ¶¶ 36–39. The collection, evaluation, calculation, and processing of data required by a system to generate real-time cash-out offers for multiple bettors on such wagering events are vastly more complex than simply processing a single-outcome bet made before a game and resolved after a game. *See* EX-2007 at ¶ 50.

The continuous and real-time retrieval of data provides the necessary input (*i.e.*, data related to a progress of the wagering event) for other essential operations, from which the cash out offer is ultimately generated. For instance, the system controller “recalculate[s] . . . the wager information in real time **based on the continuously retrieved data.**” EX-1001 at Claim 1 (emphasis added). Further, the system controller “continuously evaluate[s] . . . the **recalculated wager information.**” *Id.* at Claim 1 (emphasis added); *see also* EX-2007 at ¶ 53.

The continuous and real-time retrieval of information about the wagering event, along with (a) real-time recalculation based on that information and (b) continuous evaluation of this recalculated wager information, allows the claimed system to “make a determination of what the appropriate value would be to make an offer to cash out to one or more players.” EX-1001 at 17:47–49; EX-2007 at ¶ 54; *see also* EX-1001 at Claim 1 (“determine . . . that a participant of the one or more participants is eligible to win an award based on one or more of the wager and a potential outcome of the wagering event”).

The functionality of the claimed system also enables its implementation on simple events, such as probabilistic games and slot machines. EX-1001 at Claim 3. The claimed system can therefore be applied to both simple and complex events, and generate cash out offers whether the developments affecting the odds are time-sensitive or not. This versatility of the claimed system is disclosed in the ’779 Patent: “[T]he present disclosure has application to **any type of event** . . . and further can be applied to any sporting and non-sporting games.” EX-1001 at 4:21–25 (emphasis added).

B. Challenged Claims

Petitioner challenges seventeen claims of the ’779 Patent: independent Claims 1 and 16 and dependent Claims 2–3, 5–10, 17–18, and 21–25 (“challenged claims”). *See* Petition at 1.

C. Procedural History

Petitioner filed the present petition on February 7, 2023. *See* Paper 2. PO filed its Patent Owner Preliminary Response on May 15, 2023. *See* Paper 6. Initially, the Board rejected Petitioner’s arguments in their entirety, denying institution and holding that “Petitioner has not shown sufficiently that Scott’s processor continuously retrieves data related to a progress of a wagering event, recalculates wager information based on the continuously retrieved data, or continuously evaluates the recalculated wager information.” *See* Paper 9 at 19.

Unhappy with the Board’s denial of institution, Petitioner sought Director review. The Director appointed a Delegated Review Panel (“DRP”), which reviewed the institution decision and reversed, finding that “the Board misapprehended the meaning of the claim term ‘continuously’ and misapprehended both the Petitioner’s mapping of the claim to the prior art and the scope and content of the prior art.” Paper 14 (“DRP Decision”) at 2. The DRP remanded the case to the Board to reconsider its institution decision in light of the DRP’s claim construction guidance. *See id.* at 24. The Board reconsidered its institution decision, granting Petitioner’s request for IPR. *See* Paper 20.

D. Claim Construction

Petitioner does not contend that any term from the ’779 Patent requires construction. *See* Petition at 23. PO agrees that the terms of the ’779 Patent have

their plain and ordinary meaning. The plain and ordinary meaning of a term is the “meaning that the term would have to a person of ordinary skill in the art in question at the time of invention.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (*en banc*). The person of ordinary skill in the art (“POSITA”) is deemed to have read the claim term in the context of the entire patent. *Id.* Therefore, to ascertain the meaning of a claim, the Court must look to the claim, the specification, and the patent’s prosecution history. *Id.* at 1314–17.

The “only two exceptions to [the] general rule” that claim terms are construed according to their plain and ordinary meaning are when the patentee (1) acts as his/her own lexicographer or (2) disavows the full scope of the claim term either in the specification or during prosecution. *Thorner v. Sony Computer Entm’t Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). To act as his/her own lexicographer, the patentee must “clearly set forth a definition of the disputed claim term,” and “clearly express an intent to define the term.” *Id.* at 1365. To disavow the full scope of a claim term, the patentee’s statements in the specification or prosecution history must represent “a clear disavowal of claim scope.” *Id.* at 1366. Accordingly, when “an applicant’s statements are amenable to multiple reasonable interpretations, they cannot be deemed clear and unmistakable.” *3M Innovative Props. Co. v. Tredegar Corp.*, 725 F.3d 1315, 1326 (Fed. Cir. 2013). “Absent disclaimer or lexicography,

the plain meaning of the claim controls.” *Toshiba Corp. v. Imation Corp.*, 681 F.3d 1358, 1369 (Fed. Cir. 2012).

Here, the parties appear to agree that the plain and ordinary meaning of the claim terms governs but disagree as to what that plain and ordinary meaning is. PO addresses the plain and ordinary meaning of certain claim terms in the discussions below. Petitioner otherwise accepts (for purposes of this IPR) the claim construction guidance of the DRP according to the DRP Decision.¹

III. RELEVANT LEGAL STANDARDS

A. Anticipation

“Anticipation requires the presence in a single prior art disclosure of all elements of a claimed invention arranged as in the claim.” *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548 (Fed. Cir. 1983).

B. Obviousness

The Patent Act provides that “[a] patent may not be obtained . . . if the differences between the subject matter sought to be patented 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

¹ PO objects to the DRP’s position on claim construction and reserves its right to appeal the same. Its arguments made herein accept for purposes of argument the claim construction guidance from the DRP Decision without waiving any right to challenge the same.

matter pertains.” 35 U.S.C. § 103(a). The obviousness analysis requires several threshold inquiries identified below.

1. Claims cannot be found obvious if an element is absent.

If a single element of the claim is absent from the prior art, the claim is not obvious. *See CFMT, Inc. v. YieldUp Int’l Corp.*, 349 F.3d 1333, 1342 (Fed. Cir. 2003) (“Obviousness requires a suggestion of all limitations in a claim.”); *In re Rijckaert*, 9 F.3d 1531, 1534 (Fed. Cir. 1993) (reversing obviousness rejection where prior art did not teach or suggest all claim limitations).

2. A petition must address the Graham factors.

An obviousness analysis considers: (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, and (3) the level of ordinary skill in the art. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). Petitions for IPR “must address the Graham factors.” *Eizo Corp. v. Barco N.V.*, Case No. IPR2014-00358, Paper 11 at 29–30 (P.T.A.B. July 23, 2014) (citing *Graham*, 383 U.S. at 17–18). For example, the Board faulted the petitioner in *Eizo Corp.* for failing to identify the differences between the claimed subject matter and the prior art. *Id.* at 29–30. In particular, the Board found insufficient the petitioner’s “conclusory assertion” that “[t]o the extent [the first reference] may not explicitly teach” the limitation, the second reference “explicitly teaches this limitation.” *Id.* at 30. The Board explained that “such an assertion fails to resolve the exact differences

sought to be derived from” the second reference. *Id.* (finding that petitioner had not shown a reasonable likelihood of prevailing on that ground). Other Board decisions have reached the same result. *See, e.g., Moses Lake Indus., Inc. v. Enthone, Inc.*, Case No. IPR2014-00243, Paper 6 at 18 (P.T.A.B. June 18, 2014); *eBay, Inc. v. Paid, Inc.*, Case No. CBM2014-00125, Paper 15 at 21 (P.T.A.B. Sept. 30, 2014).

3. A petition must provide articulated reasoning with rational underpinnings to combine or modify references.

The conclusion of obviousness based on a combination of references must also be supported with explicit analysis of a reason to combine those references. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007). The Federal Circuit has stated that such reasons must be more than “mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006); *accord Innogenetics, N.V. v. Abbott Labs.*, 512 F.3d 1363, 1374 (Fed. Cir. 2008) (agreeing with the district court’s reasoning that “some kind of motivation must be shown from some source, so that the jury can understand why a person of ordinary skill would have thought of either combining two or more references or modifying one to achieve the patented method”); *see also LG Elecs., Inc. v. Cellular Commc’ns Equip. LLC*, Case No. IPR2016-00197, Paper 7 at 7–11 (P.T.A.B. Apr. 29, 2016) (faulting a petition’s obviousness analysis for lack of sufficient articulated reasons

with rational underpinnings for modifying references to achieve particular elements required in the claims).

IV. PETITIONER HAS NOT SHOWN THAT ANY CLAIM OF THE '779 PATENT IS INVALID.

A. Summary of the Scott reference identified by Petitioner.

Petitioner relies on U.S. Patent Application Publication No. US2012/0309489A1 (EX-1006, “Scott”) as its only reference. Scott is a U.S. Patent Application dated December 6, 2012. Scott is directed to a “gaming machine configured to provide value of partial or incomplete game outcomes.” EX-1006 at ¶ [0002]. Scott’s configuration uses a value engine to present a current cash value for “non-final sets of symbols or hands.” EX-1006 at ¶ [0009].

Scott contemplates “that the value engine may be used with any wagering game where game symbols or indicia (e.g., playing card symbols, slot symbols, keno numbers, bingo numbers, etc...) are revealed in subsequent stages or steps of a game” and “determination of a current cash value can be triggered by various events” (the “various events” being the discrete game steps). EX-1006 at ¶¶ [0035]–[0036] (emphases added).

As PO’s expert explains, Scott’s value engine determines a cash value for in-progress games that relies on game “indicia” such as card rank/suit, numeric values, die faces, or slot symbols. Scott’s value engine may be used where indicia are

revealed “in subsequent stages or steps of a game.” EX-2007 at ¶ 94 (discussing EX-1006 at ¶ [0035]). Scott therefore equates stages with steps of a game. A POSITA would understand that the type of gaming device disclosed in Scott would be considered a “state machine” in that regulations require (*e.g.*, upon power recovery after a power failure) that the game resume play at the same state it was in when it lost power. EX-2007 at ¶ 95.

Scott consistently applies its value engine to games that have discrete “stages” or “steps.” *See, e.g.*, EX-1006 at Abstract (“The value engine may determine the cash value for the indicia at various times or stages during a game”), EX-1006 at ¶ [0033] (“In general, the value engine herein is configured to evaluate game outcomes at various stages of a game”). Scott similarly provides examples of stages of various games where the value engine would operate in “stages” or “steps” including in video poker after the initial deal and before a player draws replacement cards. EX-2007 at ¶¶ 97–101. Scott similarly discloses embodiments that use “stages” or “steps” for slot and keno type games, where current cash value is calculated as indicia, like reels or numbers, are revealed. *Id.* at ¶¶ 102–04.

A POSITA, in light of the consistent references to “stages” or “steps,” would understand that Scott is directed to a game that utilizes indicia in determining an outcome and that occurs in stages (or steps, states, or points in the game) that may occur at various times. *Id.* at ¶ 97.

Scott further teaches the use of triggers for determining a cash value that aligns with the discrete stages or steps of its games. *Id.* at ¶ 105. Examples of triggers included in Scott are each subsequent numbered keno ball, “newly presented cards” for video poker, or “one or more new slot symbols” in a slot type game. *Id.*; EX-1006 at ¶¶ [0035]–[0036], [0080]. When triggered, the value engine “may evaluate game information to determine a current cash value,” and that current cash value is “based on the current situation of the game being played”—*i.e.*, the discrete point at which the evaluation is triggered. EX-2007 at ¶¶ 105, 107; EX-1006 at ¶¶ [0058], [0065]. Once current cash value is determined, the value engine presents the value to the player, at which point “the player may then (explicitly) accept or decline (explicitly, or implicitly by continuing to play the game to the next point) the current cash value.” EX-2007 at ¶ 108.

Scott also discloses a marketplace for the sale of symbols from a player. A player’s symbols may only be sold during the suspension of a game. The player selling the symbols can play a new game or wait until their symbols are sold. EX-2007 at ¶ 109. There is no advancement in play during the period of suspension. *Id.* at ¶ 110.

B. “continuously retrieve . . . in real time” (Claim 1[e] / Claim 16[i])

Scott cannot anticipate or render obvious any claim of the ’779 Patent because it fails to disclose or render obvious a system that continuously retrieves data in real time as required by the independent claims of the ’779 Patent.

1. The plain and ordinary meaning of “continuously retrieve . . . in real time.”

The parties disagree as to the plain and ordinary meaning of the phrase “continuously retrieve . . . in real time” as used in the challenged claims. This language, which is found in Elements 1[e] and 16[i] of the ’779 Patent, is the only claimed instance of an element that requires both “continuously” and “in real time” conjunctively. The data “continuously retrieve[d] . . . in real time” forms the basis for much of the remaining functionality in each claim (*e.g.*, “recalculate,” “evaluate,” “determine . . . eligib[ility],” “generate . . . an option [to cash out],” etc.). *See* EX-2007 at ¶¶ 53, 75–76; *see also* EX-1001 at Claim 1.

PO’s expert explains that the POSITA would understand “continuously retrieve . . . data in real time related to a progress of the wagering event” to require data retrieval by a repeated, regular polling operation that is sufficiently frequent to promptly capture relevant developments in the wagering event as they occur, and that a system that retrieves data only at discrete time points of the wagering event, such as by a trigger, does not satisfy this element. EX-2007 at ¶¶ 73–74.

As described below, this explanation (i) is consistent with the specification of the ’779 Patent, (ii) embraces the guidance in the DRP Decision, and (iii) is logical in view of the claimed functionality as a whole.

a. The specification and the underlying “wagering event(s)”

First, the meaning of “continuously retrieve . . . data in real time related to a progress of the wagering event” must account for the underlying “wagering event[s]” for which the system retrieves relevant data “continuously . . . in real time.”

According to the specification, the ’779 Patent system is highly versatile. It applies to “**any** type of actual or virtual sporting event or any type of game.” EX-1001 at 4:2–3 (emphasis added). This versatility is reflected in the claims. *See, e.g.*, EX-1001 at Claim 3. Central to the system’s versatility is that it can be applied to sporting events, including live sporting events. The specification emphasizes this application: “[t]he concept . . . may be applied to other types of sporting events (i.e., American football, horse racing, car racing, hockey, baseball, basketball, lacrosse, wrestling, just as a few examples)” and allows for “cash-in . . . during live play.” EX-1001 at 4:6–11, 23:5–7; EX-2007 at ¶¶ 51, 71.

The parties’ experts agree the ’779 Patent is primarily directed to sports wagering. The Petitioner’s expert’s declaration, in its discussion of the “Background of the Technology,” is replete with sports wagering references. *See, e.g.*, EX-1007 at ¶¶ 36–39 (citing twelve third-party sports wagering references²). PO’s expert

² EX-1018, EX-1019, EX-1020, EX-1022, EX-1023, EX-1024, EX-1025, EX-1026, EX-1028, EX-1029, EX-1030, EX-1031, EX-1032, EX-1033, EX-1034.

similarly testifies that based on the “bet types” and “sports wagering-specific” examples throughout its specification, “the ’779 Patent is directed primarily to sportsbook and racebook wagering.” EX-2007 at ¶ 45.

The claims of the ’779 Patent—including the disputed phrase “continuously retrieve . . . data in real time related to a progress of the wagering event”—should therefore be understood in view of their application to a “wagering event” that includes a sporting event.

Given this context, two key considerations must inform the meaning of “continuously retrieve . . . in real time”: (1) the claimed system must be suitable for events that are external to the system (externality), and (2) the claimed system must capture time-sensitive, fluid developments in wagering events (fluid developments).

Externality: the system is adapted for “wagering event[s]” external to the claimed system. A wagering event like a soccer match is not running on or generated by the claimed system—the system does not control (and is not inherently aware of) the pace, status, or developments in the underlying wagering event. *See* EX-2007 at ¶ 71. The underlying wagering event unfolds independently. The system must track the underlying wagering event by “continuously retriev[ing] data . . . in real time” related to its progress as it unfolds.

Fluid Developments: the “wagering event[s]” for which data is “continuously retrieve[d] . . . in real time” have time-sensitive, often fluid, game developments that

affect the odds of a wager, such as the current score, what team currently has possession, the location of play on the field, field and weather conditions, how much time remains, in-game momentum, team status, and players' status including injuries, fatigue, ejections, fouls, etc. *See* EX-2007 at ¶ 50.

Importantly, the game clock itself is a relevant consideration for the probability of any wager winning. For example, where Team A leads Team B by 5 points with one minute left in a game of basketball, Team B's chances of coming back decrease fluidly as the game clock counts down (and Team A's chances of winning correspondingly increase)—time is a fluid in-game metric that continuously affects the odds (for each participant³), even without the occurrence of any discrete in-game events (a basket, a foul, a change in possession, etc.). *See* EX-2007 at ¶ 72. The system does not have inherent information about the in-game time—the system's time frame of reference is separate from the event's game clock. *See* EX-2007 at ¶ 74.

A POSITA would understand that the claimed system is adapted to capture these types of fluid developments (like in-game time, player fatigue or injury, in-game momentum, field and weather conditions) in an underlying wagering event,

³ Mathematically, the sum of the probabilities of each team winning must always equal 100%, a concept that appeared to be lost on Petitioner's expert during his deposition. EX-2014 at 57:13-58:20.

such that the claimed system achieves the “extremely time sensitive” cash out functionality. *See* EX-1001 at 23:40–43; *see also* EX-2007 at ¶¶ 50, 72–73. Fluid in-game developments can be highly relevant to the odds of an ongoing wagering event, but they are not suitable for “triggered” data retrieval—there are no discrete developments to trigger retrieval and be assured all relevant developments are accounted for. *See* EX-2007 at ¶ 73.

Knowing this context from the specification, a POSITA would understand that “continuously retrieve . . . data in real time” requires retrieving data by a **repeated, regular polling operation**, at regular intervals, that is sufficiently frequent to promptly capture relevant developments in the wagering event as they occur. *See* EX-2007 at ¶ 74.

Petitioner’s expert agreed that in-game time is an ongoing and relevant consideration for the odds where the “wagering event” is, for example, a football game. He further agreed that a system, to capture the effect of in-game time, would have to “check extremely frequently” on the wagering event. *See* EX-2014 at 58:23–59:12 (emphasis added):

Q. And in a game situation, in order to capture the sense of timing -- in essence, you agree with me that **timing affects the odds in sports of one team winning or one team losing, how much time is left in the game?**

A. **Yes.**

Q. And to capture that type of effect on the odds, you really have to check very frequently on the amount of time left like any kind of gaming system has to check extremely frequently?

[...]

A. Yes. It would have to check in an appropriate frequency to capture anything of significance.

Q. And that includes time itself?

A. Yes.

Petitioner's expert describes, in essence, a polling operation. *See* EX-2007 at ¶ 73. Because Petitioner's expert confirmed that in-game time is itself a "relevant development" (*i.e.*, one that affects the odds), according to the DRP Decision, it must be promptly captured by the system claimed in the '779 Patent.

In describing his own patent on a computer-based wagering system, Petitioner's expert also confirmed that polling happens "regardless of events actually occurring" and was helpful "to capture the data as fast as possible." EX-2014 at 22:16–23:8 (discussing EX-2017).

For the '779 Patent, a repeated, regular polling operation at a sufficient frequency to capture relevant developments (*i.e.*, "continuously retrieve . . . in real time") ensures that relevant developments in any wagering event—including varied external sporting events—are accounted for, and that the claim language is fairly understood in light of the '779 Patent's specification and claims (*e.g.*, Claim 3).

b. The DRP’s commentary on “continuously” and “real time”

The DRP Decision is consistent with this meaning. The DRP Decision comments specifically upon “continuously” and “in real time.”

First, the DRP Decision states that “continuously retrieve . . . data . . . related to a progress of the wagering event” means “repeatedly retrieving data related to the progress of the wagering event as developments occur that may affect the odds of the wager.” *See* DRP Decision at 14; *see also* EX-2007 at ¶ 66.

The DRP makes two clarifications in its construction of “continuously”:

- (1) First, “continuously” **excludes** performing tasks at predetermined time points **of the wagering event** that are independent of developments that may affect the odds, such as at halftime of a sporting event.⁴
- (2) Second, “continuously” **does not exclude** performing tasks at “discrete time points” altogether, since “computers necessarily perform tasks at discrete time points” based on the computer’s clock.⁵

⁴ The DRP Decision states: “This construction does not encompass retrieving data on a pre-determined time schedule (*i.e.*, discrete time points of the wagering event) that is independent of the occurrence of developments that may affect the odds, such as capturing data at halftime of a sporting event.”

⁵ The DRP Decision states: “We disagree with the construction of “continuously” performing a task, which ‘exclude[s] performing that task at discrete time points.’ . . . This construction does not specify what is meant by ‘discrete time points,’ which may create confusion because, as the Dissent points out, operations

See EX-2007 at ¶ 67; DRP Decision at 14–15.

The DRP Decision also comments upon “in real time.” The DRP states that “in real time” “relates to the **time and frequency** of the data retrieval . . . during the wagering event.” EX-2007 at ¶ 68; DRP Decision at 19 (emphasis added).

The DRP Decision finds that “in real time,” as used with “continuously” in the ’779 Patent,⁶ denotes retrieving information “**with sufficient frequency** to promptly capture developments that may affect the odds.” EX-2007 at ¶ 70; DRP Decision at 19 (emphasis added).

The use of “frequency” and “capture” is important. As PO’s expert explains, “frequency” suggests a repetitive operation at regular intervals (*i.e.*, frequency refers to cycles per unit of time in computing and can be measured in Hertz (Hz)); performing the “retrieve” operation at a sufficient frequency to “capture” suggests a **polling operation**, at regular intervals. See EX-2007 at ¶ 70.

Importantly, the DRP Decision carves out from actions undertaken “continuously . . . in real time” any actions undertaken **only** at discrete points of an event, stating that “determinations ‘in real time’ . . . **cannot cover only discrete**

performed by a computer necessarily perform tasks at discrete time points based on executing instructions according to the computer’s clock speed.”

⁶ These terms appear together in the ’779 Patent specification once, at 17:52–57.

determinations, such as the end of a period or halftime during a sporting event.”

DRP Decision at 19 (emphasis added); EX-2007 at ¶ 69.

Understanding “continuously retrieve . . . data in real time related to a progress of the wagering event” as a repeated, regular polling operation at a sufficient frequency to capture relevant developments as they occur is wholly consistent with the DRP Decision. Per the DRP Decision, this “retrieve” function cannot be only at discrete points of the wagering event.

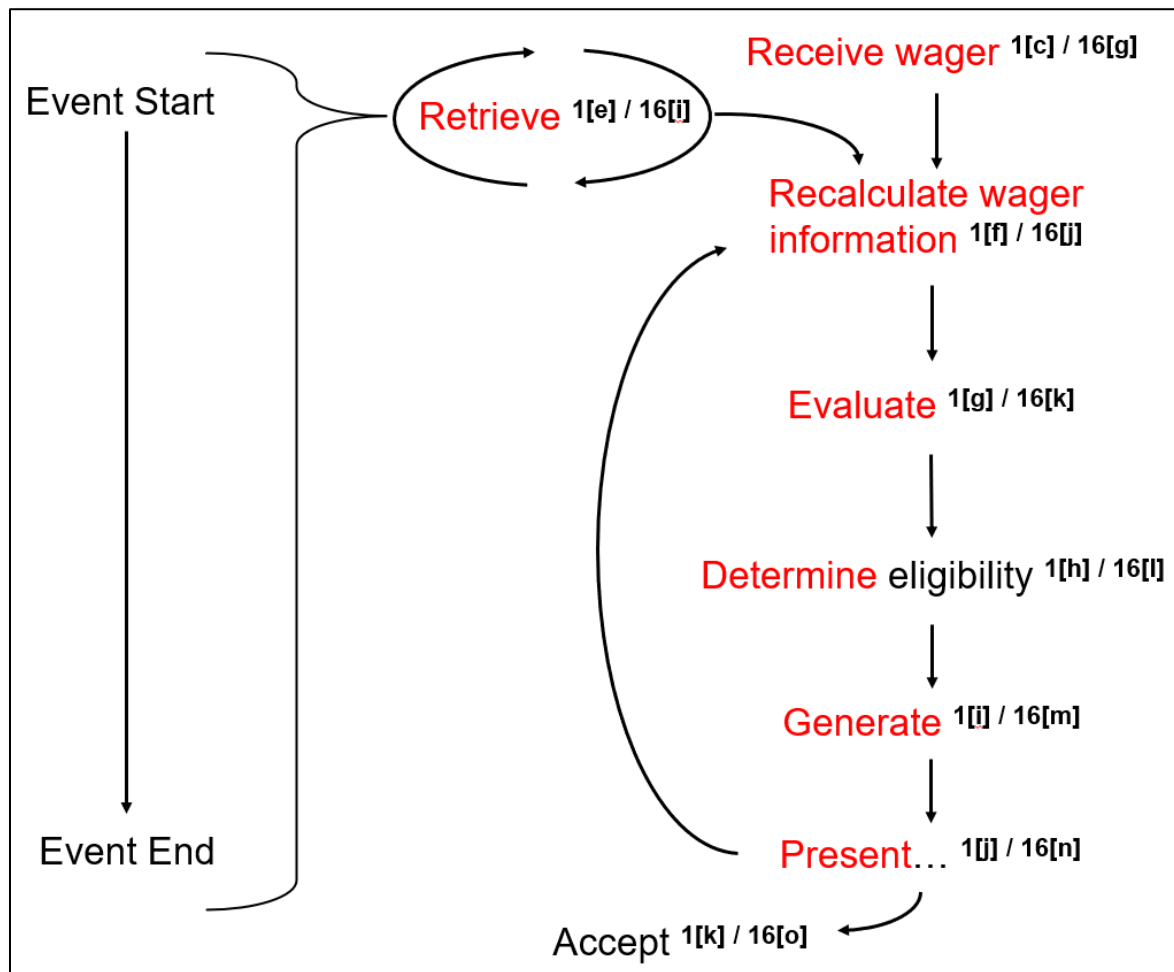
c. Application of the DRP’s guidance on the claimed system

Finally, interpreting “continuously retrieve . . . data in real time related to a progress of the wagering event” as the polling operation described above is consistent with the structure of the claims of the ’779 Patent as a whole. *See, e.g., Phillips*, 415 F.3d at 1314 (“[T]he context in which a term is used in the asserted claim can be highly instructive.”).

The “retrieve” function is the basis for the ’779 Patent’s claimed functionality; it retrieves often “extremely time sensitive” information on the progress of the wagering event that is the input for the balance of the claims’ core functionality (*e.g.*, “recalculate . . . **based on** the continuously retrieved data”). EX-1001 at Claim 1; EX-2007 at ¶¶ 53, 75–76. Importantly, as explained by PO’s expert, the “retriev[al]” of data related to the progress of the wagering event is **ongoing regardless of these**

other elements—it does not pause while other functions are carried out. *See* EX-2007 at ¶ 75.

Visually, the relationship between the “retrieve” element and other elements in Claims 1 and 16 can be represented as follows:



EX-2007 at ¶ 76.

As a matter of plain and ordinary meaning, the “retrieve” functionality is a repeated, regular polling operation (as described above) and is consistent with the structure of each claim as a whole.

2. Scott does not disclose or render obvious a system that “continuously retrieve[s] . . . data in real time.”

Scott does not “continuously retrieve . . . data in real time related to a progress of the wagering event” as required by the challenged claims of the ’779 Patent. Scott’s gaming machine only implements games that unfold in discrete steps (or stages), and any retrieval of data is exclusively tied to discrete points of those games. The DRP’s guidance makes clear that this type of operation is excluded from the scope of the ’779 Patent’s claims.

a. Scott retrieves data only at discrete points in response to triggers.

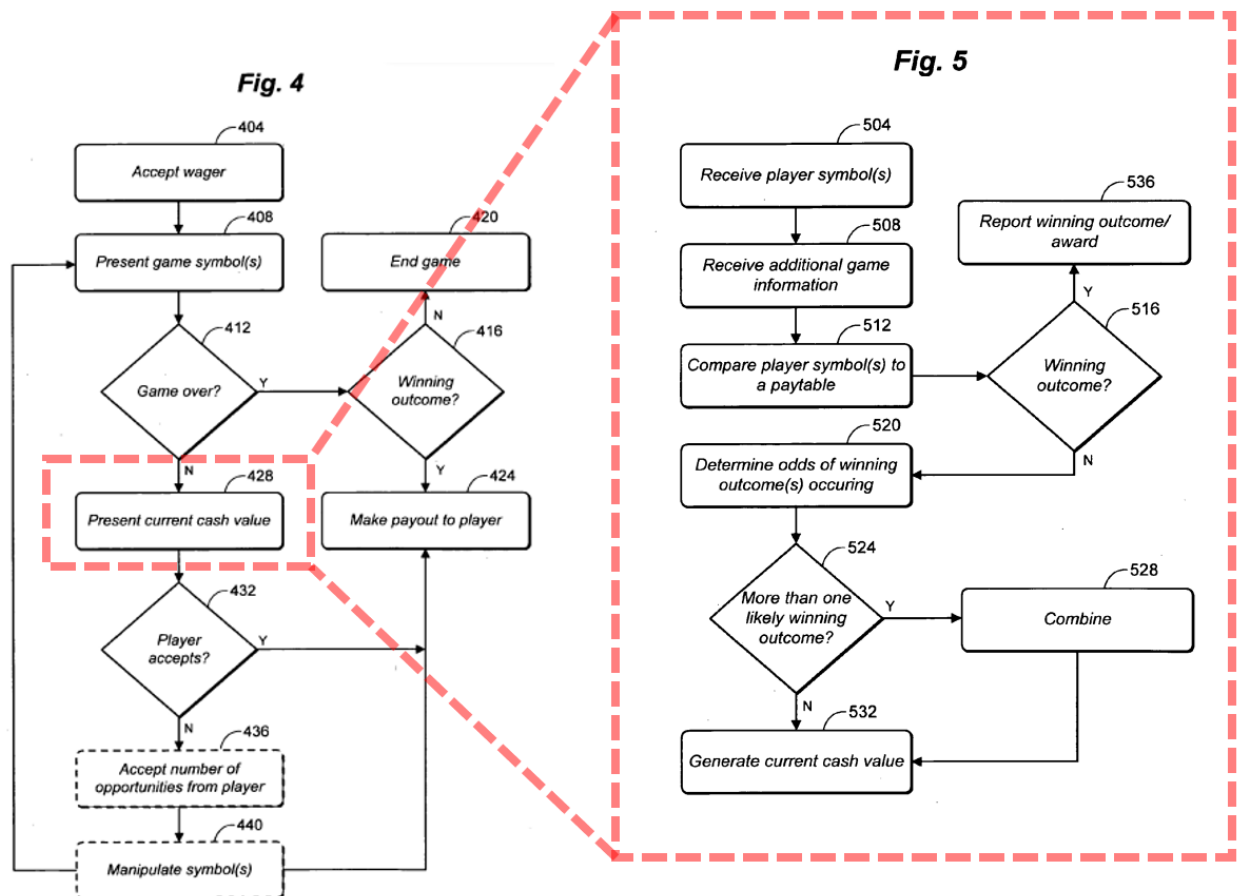
Petitioner asserts that Scott’s “value engine” “may retrieve game information,” including information “identifying the game symbols the player currently has,” among other things. Petition at 38–39 (citing EX-1006 at ¶¶ [0058], [0083]).⁷ Petitioner argues that the purported “retrieve” functionality in Scott equates to Scott’s Step 504 (“receive player symbol(s)”) and 508 (“receive additional game information”), each of which appears in Figure 5 of Scott. *See* Petition at 41–42; EX-1007 at ¶¶ 103–04. Thus, Scott’s alleged “retrieve”

⁷ Paragraph [0058] of Scott describes its value engine “determin[ing] a current cash value.” EX-1006 at ¶ [0058]. The operation of that value engine is described in Figure 5, which “illustrat[es] how current cash value may be determined by an exemplary value engine.” *Id.* at ¶ [0082]. Scott specifically describes Step 508 in Figure 5, where “additional game information may be received or retrieved by the value engine.” *Id.* at ¶ [0083].

functionality is **confined to Figure 5**. Petitioner does not identify any other alleged “retrieve” functionality in Scott.

Petitioner concedes that Steps 504 and 508 are only “invoked during step 428” (Figure 4), which illustrates the overall operation of Scott’s value engine. *See* Petition at 42; EX-1007 at ¶ 70. Petitioner’s expert confirms this, characterizing Figure 5 as a “sub-process” of Step 428 in Figure 4. *See* EX-1007 at ¶¶ 60, 103, 113, 124; *see also* EX-2014 at 33:2–4 (Petitioner’s expert confirming the same on deposition). Thus, according to both Petitioner and its expert, Scott’s alleged “retrieve” functionality is **confined to Step 428** of Figure 4.

The relationship between Figures 4 and 5 of Scott can be visualized as follows:



EX-2007 at ¶ 119 (citing EX-1006 at Figures 4, 5 (annotation added)). Together, Figures 4 and 5 demonstrate that Scott’s functionality—including its purported “retriev[al]”—is based entirely on **predetermined discrete points** of its games, and its operations are **only conducted at those discrete points**. *Id.* at ¶¶ 107, 114, 121–22. Scott teaches triggered operations that correspond to known, predetermined steps or stages of its games. EX-2007 at ¶¶ 105, 114; *see also* EX-1006 at ¶¶ [0035]–[0036] (“determination of a current cash value can be triggered by various events,” such as “additional numbers [being] marked” in a game of keno). Step 408 comprises

those “various events,” which trigger Scott’s operations: new symbols, whether they are keno balls, cards, or slot symbols. *See* EX-2007 at ¶¶ 105, 121; EX-1006 at ¶¶ [0035], [0080]. Scott’s alleged “retrieval” (at Steps 504 and 508) thus requires a form of triggering. As PO’s expert explains, once that triggering occurs, it does not repeat again until other sequential steps are carried out, leading (potentially) to another “retrieval,” **only if triggered**. *See* EX-2007 at ¶¶ 121–22.

b. Petitioner mischaracterizes Scott with respect to “continuous” retrieval.

Petitioner incorrectly suggests that the “retrieve” function of Scott is “continuous.” According to Petitioner, Scott’s alleged retrieval is “continuous” because it is part of one step (Step 428, “Present Current Cash Value”) in what Petitioner says is a “continuous loop” within Figure 4 (*i.e.*, from Step 408 to Step 440 and back). *See* Petition at 39–42; EX-1007 at ¶¶ 102–04. Petitioner’s argument is inconsistent with the DRP’s guidance on “continuously retrieve . . . in real time.” The “loop” in Scott’s Figure 4 is executed only at **discrete points** in Scott’s games—*i.e.*, at predetermined stages, such as when a new symbol is drawn. *See* EX-2007 at ¶¶ 114–21.

Additionally, contrary to Petitioner’s arguments, a step that is part of a purported “continuous loop” is not necessarily continuous itself. That is certainly the case for Scott’s alleged “retrieve” function, which—as Petitioner and its expert

concede—is merely one of several sequential steps (Steps 504 and 508) in a multi-step sub-process (Figure 5, with Steps 504, 508, 512, 516, 520, 524, 528, 532, 536) of one triggered step (Step 428) within a larger “loop” (Figure 4, from Step 408 to Step 440 and back). *See* Petition at 39–42; EX-1007 at ¶¶ 102–04. Importantly, Scott’s receipt of game information is **not ongoing** while other steps in the “sub-process” (*e.g.*, “compare,” “determine,” “combine,” “generate”) are carried out, let alone the other steps in the main process. *See* EX-2007 at ¶ 116. Simply put, there is no “retrieval” in Scott without a trigger—meaning it is not “continuous . . . in real time” as claimed in the ’779 Patent.

Further, Petitioner’s expert evidence as to the plain and ordinary meaning of “continuous” demonstrates that the operation of Scott’s value engine operates differently. In his own patent related to computer-based wagering, Petitioner’s expert describes a system that has a “continuous loop” with certain functionality described as “part of the . . . continuous loop.” EX-2015 at 15:34–16:9. Certain functions he describes as “part of” the continuous loop are only executed because of an “interrupt”; they are “prompted” by “some action happening,” such as a player card being inserted into a gaming terminal or a draw in the game, as confirmed by Petitioner’s expert at his deposition. EX-2014 at 18:11–23. Petitioner’s expert describes these prompted functions as “periodic”—something he conceded during deposition has a different meaning than “continuous.” *Id.* Scott’s purported

“retrieve” function—even if it were part of a “continuous loop” (it is not)—is not itself continuous. It is one step within Step 428, and it is only executed when prompted by a trigger—*i.e.*, a game symbol or indicia being revealed in Step 408. *See, e.g.*, EX-1006 at ¶ [0071].

c. Petitioner mischaracterizes Scott with respect to “real time” retrieval.

Petitioner also mischaracterizes the operation of Scott with respect to its alleged “real time” retrieval of data. Petitioner claims that Scott retrieves data “in real time” based on Scott’s isolated use of the phrase “in real time.” *See* Petition at 39–40 (citing EX-1006 at ¶ [0067]). However, this paragraph of Scott does not relate to its alleged “retrieve” function at all. Instead, paragraph [0067] of Scott relates to the determination and presentation of a current cash value. EX-1006 at ¶ [0067]; *see also* EX-2007 at ¶ 101. This paragraph further makes clear that Scott is describing a stage-based (or stepwise) implementation, with presentation of a current cash value expressly tied to the known “stages of the game,” such as “after each card or other game symbol is dealt to a player.” EX-1006 at ¶ [0067]. Thus, the functionality described in paragraph [0067] of Scott occurs **only at discrete points in Scott’s games**. It is not “in real time” (much less in real time **and** continuously) as required by the ’779 Patent, based on the guidance in the DRP Decision.

As PO's expert explains, Scott's use of a triggered retrieval⁸ of information (as opposed to continuous retrieval in real time) makes sense in the context of Scott, where games comprise discrete, well-known game states (or stages). EX-2007 at ¶¶ 113–14, 122. The value engine described in Scott is **only suitable for stepwise games**. *See id.* at ¶ 123; *see also* EX-1006 at ¶ [0035] (“[T]he value engine may be used with any wagering game where game symbols or indicia (*e.g.*, playing card symbols, slot symbols, keno numbers, bingo numbers, etc . . .) are revealed in subsequent stages or steps of a game.”).

Thus, for Scott's application, a triggered retrieval at known steps or game states is sufficient. There is no need for (and Scott does not teach or suggest) continuous retrieval of data in real time as described and claimed in the '779 Patent. Moreover, unlike the '779 Patent, Scott cannot operate for “any type of event.” Scott's triggered routines do not allow the value engine to capture relevant developments promptly during the progress of a sporting event, where fluid developments (like in-game time) must be monitored. EX-2007 at ¶ 123. This distinction renders Scott fundamentally different from the system described and claimed in the '779 Patent. Scott does not disclose or render obvious a system that

⁸ Scott's only reference to “retriev[ing]” anything is from its own memory device, which also “implements and/or operates” its games. *See* EX-1006 at ¶¶ [0051], [0058], [0082].

“continuously retrieve[s] . . . data in real time related to a progress of the wagering event.”

C. “Plurality” elements (Claim 16)

Petitioner’s arguments regarding independent Claim 16 fail for the additional reason that Scott fails to teach or suggest a system that permits multiple bettors (or participants) to place wagers on the same wagering event (*e.g.*, a football game or horse race) and allows individual bettors to cash out in real time before the end of the wagering event. This multi-participant, single-event functionality enables modern online sportsbooks to receive wagers from (and make real-time cash-out offers to) thousands or millions of bettors on the same event at the same time. Nothing in Scott teaches or suggests such a multi-participant, single-event system according to Claim 16.

1. The system of Claim 16

Claim 16 is directed to a “system for conducting a wagering event among one or more participants in real time” (Element 16[a]), the system comprising: “a system controller comprising a trading engine module (Element 16[b]); “a database” (Element 16[c]); “a plurality of input devices each having a user interface” (Element 16[d]); and “a communications interface for facilitating communications between the system controller and the plurality of input devices” (Element 16[e]).

The system controller is configured to perform certain functions, including “receiv[ing], by the trading engine module, a plurality of wagers on the wagering event from the plurality of input devices via the communications interface, the plurality of wagers input by a plurality of participants via the user interfaces of respective input devices from the plurality of input devices.” EX-1001 at Element 16[g] (emphases added).

As a matter of ordinary grammatical construction, “the wagering event” of Element 16[g] must refer to the antecedent “a wagering event” of Element 16[a]. Both terms refer on their face to a singular wagering event, upon which multiple (“a plurality of”) participants place wagers according to Element 16[g]. Petitioner’s expert agreed that the “wagering event” in Claim 16 is singular (and that the various subsequent references to “the wagering event” denote the same wagering event recited in Element 16[a]), and that the “plurality of input devices” through which wagers are placed means “multiple input devices.” *See* EX-2014 at 35:17–37:13, 37:17–24. PO’s expert agrees. *See* EX-2007 at ¶ 139.

Similarly, “the trading engine module” of Element 16[g] necessarily refers to “a trading engine module” as recited in Element 16[b]. Again, this trading engine module is singular by its express language. As discussed below, Petitioner’s expert agrees.

2. Petitioner has not shown (or alleged) that Scott discloses a singular “trading engine module.”

As a preliminary matter, Petitioner’s allegations regarding Claim 16 should be dismissed because Petitioner has not even attempted to meet its burden regarding the “trading engine module” of Element 16[g].

Disregarding the plain and unambiguous language of the claims (“a” or “the trading engine module”), both Petitioner and its expert allege that Scott discloses a system having **multiple (plural)** “trading engine modules,” which they attempt to read onto Claim 16. *See* Petition at 81–82; EX-1007 at ¶ 197 (emphasis added). Even if this position were correct (which it is not), it would be irrelevant, because it addresses something other than the claimed system.

Petitioner’s expert conceded this point during his deposition (EX-2014 at 48:7–25):

Q. So the single controller receives a plurality of wagers, right?

A. Yes.

Q. And the plurality of wagers is inputted by a plurality participants?

A. Yes.

Q. Via the user interfaces of the respective input devices?

A. Yes.

Q. And then at the beginning of that, the language is, receive by the training [sic] engine module. Do you see that?

A. Yes.

Q. So there’s a single trading engine module?

A. I'll refer back to 1(c). It's referring to the trading module on the system that's doing the calculations. **So it would be one of those, yes.**

Q. So it's singular, a trading engine module?

A. For a given system, yes.

For this reason alone, Petitioner's arguments as to invalidity of Claim 16 fail.

- 3. Scott does not disclose a “multiplayer configuration,” and the system of Claim 16 is not an “obvious matter of common sense” in light of Scott’s single-player games.**

Petitioner's entire argument regarding the remainder of Element 16[g] is premised on a single paragraph of Scott. However, it fails because it misrepresents that paragraph and ignores the context in which it appears.

The Petition alleges that “Scott discloses that the wagering event may be ‘*among one or more participants*’ because it discloses that there may be ‘**a number of players electronically connected**’ to the system including at least ‘**a player**’ and ‘**another player.**’” Petition at 78 (citing EX-1006 at ¶ [0096]; emphases in Petition). Petitioner refers to this as the “multiplayer embodiment” or “multiplayer configuration” of Scott, and argues that it discloses, *inter alia*, Element 16[g]. Petition at 82.

Petitioner’s expert relies on the same excerpt of Scott—paragraph [0096]—for his opinion that Scott discloses the “plurality” elements of Claim 16. EX-1007 at ¶ 182.⁹

Paragraph [0096] refers to Scott’s concept of allowing a wagering game player to purchase, win, or sell sets of non-final game symbols (such as an incomplete video poker hand, *e.g.*, one with four out of five cards dealt). Scott explains this concept beginning at paragraph [0092]:

It is contemplated that the player may need to purchase the select set(s) of symbols before he or she may play them to completion. . . . The purchase price may be based on or equal to the current cash value associated with the set of symbols. . . . [T]he current cash value game could be periodically or constantly displayed as a secondary game on a gaming machine’s display. . . . In this way, if a particular set of symbols

⁹ During Petitioner’s expert’s deposition, Petitioner’s counsel invited Mr. Crevelt to bolster this evidence by referring to paragraph [0055] of Scott, as well. *See* EX-2014 at 63:23–65:14. Mr. Crevelt also provided new evidence regarding Figure 1B of Scott, which is described, in part, in paragraph [0055]. *See, e.g.*, EX-2014 at 38:25–39:5. While paragraph [0055] and Figure 1B are cited in the Petition (and in Mr. Crevelt’s declaration) for, *inter alia*, a background point regarding system architecture and for the propositions that Scott discloses certain other claim elements, such as the “processor” of Element 1[b] and “communications interface” of Elements 1[c] and 16[e] and Claim 2, they are **not** cited for any allegation regarding a “multiplayer embodiment” or the “plurality” elements of Claim 16. *See, e.g.*, Petition at 24, 28–31, 35–36, 65–66, 80–81; EX-1007 at ¶¶ 57, 64–65, 69–71, 83–84, 155–56, 193–94. To the extent Petitioner seeks to argue that paragraph [0055], Figure 1B, or any other portion of Scott (apart from paragraph [0096]) discloses or renders obvious the “plurality” elements of Claim 16, any such argument is improper because it exceeds the scope of the allegations in the Petition.

catches the player's eye, he or she may purchase the set to attempt to win from it. . . . In a similar vein, it is contemplated that **a player may sell his or her symbols** in one or more embodiments. For example, a player having achieved a particular set of symbols (*e.g.*, playing card or slot symbols) may decide that he or she is better off **selling the hand to another player** than to take the current cash value or to attempt to achieve a winning outcome from the symbols. It is contemplated that **the player may engage a 'sell' button or the like to suspend the current game** and solicit wagers or credits from other players who may purchase the symbols from the player. The player's symbols may then enter an electronic marketplace for sets of symbols. **The player may play a new game at this point, while awaiting the sale of the symbols. Alternatively, the player could simply wait for the symbols to be sold before playing again.** *With a number of players electronically connected, it can be seen that a substantial marketplace for non-final sets of game symbols may be constructed.*

EX-1006 at ¶¶ [0092]–[0096] (emphases added).

Critically, only a few words from the final (italicized) sentence of this passage appear in either the Petition or in Petitioner's expert's evidence. In context, and contrary to Petitioner's characterization, paragraph [0096] of Scott is not describing a *system* where multiple participants wager on the same wagering event—as is required by Claim 16—but, rather, a *marketplace* where individual players playing

individual electronic games can exchange (buy or sell) sets of non-final symbols with other players playing their own games.¹⁰ *See* EX-2007 at ¶¶ 142–43.

The players in Scott’s marketplace are “electronically connected” for the purpose of this trading exercise, and they may even be playing separate instances of the same game (*e.g.*, a particular slot game), but they are not connected to or participating in the same, singular wagering event. A player in Scott who wants to sell his symbols can “suspend the current game” and “play a new game” while awaiting a purchaser, or simply “wait for the symbols to be sold before playing again”. *Id.* This functionality makes sense in the context of Scott’s state-based gaming machines, but it is incompatible with the system of Claim 16, which contemplates multiple wagerers placing wagers on a single underlying wagering event and being offered the option to cash out of one or more of their wagers **while the common wagering event is ongoing**. *See* EX-1001 at Claim 1 (“generate . . . an option in real time for the participant to . . . cash out of the wager **prior to a conclusion** of the wagering event” (emphasis added)). *See also* EX-2007 at ¶¶ 144–45. Necessarily, a bettor on an ongoing football game—or even a game of multiplayer keno—cannot simply “suspend” the action while he waits for someone else to buy his wager. *See* EX-2007 at ¶ 144.

¹⁰ Indeed, contrary to Petitioner’s and its expert’s framing, Scott never uses the word “system” to describe its electronic marketplace.

Finally, contrary to Petitioner’s expert’s conclusory opinion, it is not “merely a matter of common sense” to “take a system that can be for use by one player and put it to use for multiple players” by simply “repeat[ing] everything for another player so that there are now a ‘plurality’ of players.” EX-1007 at ¶¶ 182–83. “Repeating” or “reproducing” the single-player games of Scott might be a suitable way to fill a casino with slot machines, but it would not approach constructing a multi-participant wagering system according to Claim 16. *See* EX-2007 at ¶¶ 146–48.

D. Scott does not anticipate or render obvious the dependent claims.

Scott does not anticipate or render obvious independent Claims 1 or 16 of the ’779 Patent for the reasons explained above. Additionally, because Petitioner has failed to establish that Claims 1 or 16 are invalid, it cannot carry its burden to prove that any of the challenged dependent claims are invalid. *See In re Fine*, 837 F.2d 1071, 1076 (Fed. Cir. 1988) (“Dependent claims are nonobvious under 35 U.S.C. § 103 if the independent claims from which they depend are nonobvious.”); Manual of Patent Examining Procedure § 2143.03.

E. “Fixed odds single” (Claims 5, 7, and 23)

Even if Scott anticipated or rendered obvious independent Claim 1 or 16 (it does not), it fails to disclose or render obvious the additional limitations related to “fixed odds single” in dependent Claims 5, 7, and 23. Petitioner argues that Scott discloses these elements because it discloses a wager on a “bingo” game, which

Petitioner contends “is a known fixed odds game in that all bingo cards have the same odds of winning no matter what numbers are on them at the initiation of the game.” Petition at 68 (citing EX-1006 at ¶ [0044], EX-1007 at ¶ 160); *see also id.* at 68–70, 71–72, 83. Petitioner is wrong. As explained below, Petitioner’s argument is based on a complete misunderstanding of the term “fixed odds single” and how a POSITA would understand its use in the claims of the ’779 Patent.

1. The plain and ordinary meaning of “fixed odds single.”

Neither Petitioner nor its expert provides any construction for “fixed odds single,” acknowledging that the plain and ordinary meaning applies. However, Petitioner then ignores what a POSITA would understand about the term, instead (i) arguing that a wager on a “bingo” game is a fixed odds single because all bingo cards have the same odds of winning at the initiation of the game, and (ii) alluding to other “fixed odds game[s]” where all players have an equal chance of obtaining a winning outcome at the initiation of the game. *See* Petition at 68 (citing EX-1006 at ¶ [0044], EX-1007 at ¶ 160). Petitioner’s expert confirmed at his deposition that he interpreted “fixed odds” to mean “fixed probability” (as opposed to “fixed payout”). *See* EX-2014 at 35:10–12.

“Fixed probability of winning” is not the plain and ordinary meaning of “fixed odds single.”¹¹ As PO’s expert explains, “fixed odds” refers to wagers where a bettor is offered a fixed multiplier for wagering on a given outcome, and the multiplier (and therefore the potential payout) is fixed at the time the bettor places the wager. *See* EX-2007 at ¶ 135. Petitioner does not allege that there is any unique lexicography or disavowal of claim scope that would justify departing from this plain and ordinary meaning and adopting Petitioner’s manufactured definition of “fixed odds single.” PO’s interpretation is grounded in the ’779 Patent’s specification, which discusses the types of competitive events that may be wagered upon, including soccer, football, car racing, hockey, baseball, basketball, lacrosse, and wrestling (“just as a few examples”). *See* EX-2007 at ¶ 88 (citing EX-1001 at 4:4–11).

¹¹ Petitioner’s interpretation is also inconsistent with prior art cited by Petitioner’s expert, and with Petitioner’s expert’s own testimony in a related matter. *See, e.g.*, EX-1026 at 2 (confirming that (i) “[w]hen placing a bet with a bookmaker ..., the better is quoted fixed odds that will not be changed by the subsequent bets on their or other choices” and (ii) fixed odds quoted by a bookmaker to a bettor may not actually reflect the true probability of an outcome occurring, including, *e.g.*, when bookmakers offer “odds shorter than the true probabilities,” and when bookmakers “misjudge the probabilities and offer over-generous odds”). *See also* Petitioner’s declaration in a related proceeding: EX-2018 at ¶ 102 (citing EX-1005) (“For example, on a \$100 wager, where the wagered upon team is a +900 longshot (i.e., 9:1 odds), the potential reward for the outcome is calculated to be “\$900.” Schugar ¶ [0126]. [...] Based upon these examples, a POSITA would understand, for example, that if the player only placed a \$10 wager where the wagered upon team was a +900 longshot (i.e., 9:1 odds), the potential reward would only be \$90.”).

A POSITA would understand a “fixed odds single” to be a wager type most commonly associated with sportsbooks, where a bettor places a wager on a competitive underlying event that is independent of the bettor (*i.e.*, an event where the bettor is not a participant).¹² *See* EX-2007 at ¶ 81. This understanding is supported by the specification of the ’779 Patent, which contemplates the use of the claimed system in a “sports or event-based wagering environment.” EX-1001 at 19:45–47. A fixed odds single is not a wager on a game being played *by the bettor* (as in Scott). Thus, a POSITA would not associate the “fixed odds single” claimed in the ’779 Patent with Scott’s slot, poker, keno, or bingo type games. *See* EX-2007 at ¶ 83.

A POSITA would understand that the term “fixed odds” refers to the fact that a bettor can “lock in” (*i.e.*, “fix”) a price of a wager (*i.e.*, the multiplier, which may vary from time to time) at the time of the wager. Thus, although the multiplier may vary, the bettor can lock it in when placing a wager, and the multiplier for that bettor’s wager will remain the same regardless of what happens before or after the wager is placed. The bettor’s payout will then scale with the amount of the wager—*i.e.*, if you wager more, you win more. *See* EX-2007 at ¶¶ 80, 82–84.

A POSITA would understand that the term “single” in “fixed odds single”

¹² Petitioner’s expert acknowledges he is “not an expert in sports,” which may explain his misunderstanding of this common sports wagering terminology. EX-2014 at 57:20–22.

refers to the fact that the wager is on a single outcome of or within a competitive event. The bettor is offered a fixed multiplier for wagering on a given outcome, where the multiplier and thus the potential payout are fixed at the time the bettor places the wager (as discussed immediately above). The bettor chooses the amount of the wager, and the winning payout is calculated by multiplying the payout odds (*i.e.*, the multiplier, fixed at the time of the wager) by the amount of the wager. *See* EX-2007 at ¶ 85–86.

The '779 Patent provides examples of the types of wagering events on which a bettor might place a wager, including an entire sporting event (*e.g.*, hockey game or wrestling match), an occurrence within an event (*e.g.*, a particular player scoring a goal in a hockey game), or “any other statistical performance factors of a player or players and/or team that may be tracked with any sporting event(s),” or “a combination of games or events such as the World Series in baseball or any other sports playoff series.” EX-2007 at ¶ 89 (citing EX-1001 at 5:28–41). It also recognizes different types of payouts, including those that may be “fixed (*e.g.* payout determined in advance and independent of the number of players participating or amounts paid in by participants.” EX-2007 at ¶ 136 (citing EX-1001 at 32:40–48).

In addition to being grounded in the specification, this understanding is also consistent with how a POSITA would understand the terms “fixed odds” or “fixed

odds wagering” generally. For example, Congress itself has commented on the plain and ordinary meaning of “fixed-odds wagering”:

In pari-mutuel wagering (common in horse racing), odds and payouts are determined by the aggregate bets placed. The money wagered is placed into a pool, the party maintaining the pool takes a percentage of the total, and the bettors effectively bet against each other. Pari-mutuel wagering may be contrasted with **fixed-odds wagering (common in sports wagering), in which odds (or perhaps a point spread) are agreed to by the bettor and the party taking the bet and are not affected by the bets placed by other bettors.**

EX-2010 at H8518 (emphasis added).

Standard GLI-33 from Gaming Laboratories International (“GLI”), which has been testing gaming devices since 1989 and has developed numerous technical standards used in jurisdictions all over the world, is also consistent with this understanding. GLI describes “fixed odds wagering” as follows:

Fixed Odds Wagers – Wager types where the payout is to be fixed at the time the wager is placed. If the predictions are correct, the odds are first multiplied by each other and then by the amount of the wager.

EX-2008 at 7, 80.

In short, every relevant source of interpretive aid—the POSITA’s general understanding, the ‘779 Patent’s specification, and the extrinsic evidence as to the

meaning of “fixed odds wagering” generally—supports this understanding of the plain and ordinary meaning of “fixed odds single”.

2. Scott fails to disclose or render obvious a “fixed odds single” wager.

Under the proper understanding of the plain and ordinary meaning of “fixed odds single,”¹³ Scott cannot anticipate or render obvious any of Claims 5, 7, or 23. Scott does not disclose or even contemplate a “fixed odds single” wager.¹⁴

Petitioner’s sole argument on these claims is that bingo (the only game to which Petitioner and its expert refer) is a “fixed odds single.” Petition at 68 (citing EX-1007 at ¶ 160). This argument is premised on Petitioner’s incorrect understanding of “fixed odds single,” which, as explained above, has no support in the claims, the specification, or any extrinsic evidence.

There is no evidence (apart from the opinion of Petitioner’s expert, which, as noted, is based on an incorrect understanding of the term) that a POSITA would have understood a wager on a bingo game to be a “fixed odds single”. According to PO’s expert, prior to this matter, he had never heard anyone refer to a wager on a bingo game as a “fixed odds single.” EX-2007 at ¶ 132.

¹³ Namely, a wager on a single outcome of or within a competitive event, where a bettor is offered a multiplier for wagering on a given outcome, where the multiplier (and therefore the potential payout) is fixed at the time the bettor places the wager. *See* EX-2007 at ¶ 82.

¹⁴ Notably, the words “fixed odds” do not appear in Scott.

A wager on bingo is not a “fixed odds single” under the plain and ordinary meaning of that term since: (a) bingo does not have a “fixed odds” payout—it has a “pot” available to be won, which is either pre-determined by the operator, or depends on the number of cards in play; and (b) in bingo, a bettor’s potential winnings do not scale with their wager (as they would if a wager on a game of bingo was a “fixed odds” wager)—a player may increase the amount wagered in only one way, by purchasing more cards, but while this increases the probability of winning, it does not change the potential payout. EX-2007 at ¶¶ 136–37.

Even under Petitioner’s manufactured definition of “fixed odds single” (*i.e.*, “fixed probability of winning”), its analysis is fundamentally flawed. The probability of winning a wager on bingo is not fixed, it is simply calculable at a point in time; it is still subject to change.

Petitioner’s expert states:

A POSITA would know that all bingo cards have the same odds of winning no matter what numbers are on them at the initiation of the game, and therefore the wager on a bingo game would be a “fixed odds single” wager when placed because the odds of winning are fixed, and the wager is on a single outcome—obtaining “BINGO.”

EX-1007 at ¶ 160 (emphases added). However, a player’s chance of winning in bingo is a function of (a) how many cards the player has purchased; (b) how many other cards are in play; and (c) what letter/number combinations are drawn over the

course of the bingo game. A given card's probability is subject to all other cards purchased (by all players) both before and after the wager is placed. It is not "fixed." See EX-2007 at ¶ 134.

Thus, regardless of whether the Board applies the proper plain and ordinary meaning of "fixed odds single" (where "fixed odds" refers to a fixed payout) or Petitioner's flawed interpretation (where "fixed odds" refers to a fixed probability), Petitioner has failed to show that Scott discloses a system "wherein the wager comprises one or more of . . . fixed odds single." Petitioner has therefore failed to carry its burden of showing that Scott anticipates or renders obvious any of Claims 5, 7, or 23.

V. CONCLUSION

For the foregoing reasons, the Board should find that Petitioner has not carried its burden of proving that any claim of the '779 Patent is invalid.

Date: August 9, 2024

Respectfully Submitted,

By: /Matthew C. Juren/

Matthew C. Juren

Reg. No. 68,233

Stephens Juren, PLLC

2500 Tanglewilde St., Suite 320

Houston, Texas 77063

Main: 832-344-5400

Direct: 832-990-2707

Paper No. 28
IPR2023-00268
U.S. Patent No. 11,200,779
Fax: 832-476-5460
Email: mjuren@patent-lawyers.com

***Counsel for Patent Owner
Diogenes Limited***

CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. § 42.24(d), I certify that this Response complies with the type-volume limits of 37 C.F.R. § 42.24(b)(2) because it contains **12,532** words, excluding the parts of this Patent Owner's Response that are exempted by 37 C.F.R. § 42.24(a)(1), according to the word processing system used to prepare this Patent Owner's Preliminary Response.

/Matthew C. Juren/
Matthew C. Juren

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), I hereby certify that on this 9th day of August, 2024, I electronically filed the foregoing document and served a copy of the same on counsel for Petitioner at the following e-mail addresses, as authorized in the Petition:

Elliot Williams – Eliot.Williams@BakerBotts.com
Jamie Lynn – Jamie.Lynn@BakerBotts.com
Tommy Martin – Tommy.Martin@BakerBotts.com
Brad Bowling – Brad.Bowling@BakerBotts.com
Andrew Wilson – Andrew.Wilson@BakerBotts.com
Petitioner Service E-mail – DLDraftKingsvDiogenes@BakerBotts.com

Baker Botts LLP
700 K Street Northwest, Suite 900
Washington, DC 20001-5692
202-639-7700 (telephone)

G. Hopkins Guy III – Hop.Guy@BakerBotts.com

Baker Botts LLP
1001 Page Mill Road
Building One, Suite 200
Palo Alto, California 94304-1007
650-739-7500 (telephone)

Dated: August 9, 2024

/Matthew C. Juren/
Matthew C. Juren

Law Firm: Stephens Juren, PLLC
Address: 2500 Tanglewilde Street, Suite 320
City, State, ZIP: Houston, Texas 77063
Telephone: 832-344-5400
Fax: 832-476-5460
E-mail Address: mjuren@patent-lawyers.com