

Filed: March 27, 2025

Filed on behalf of Activision Blizzard, Inc.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ACTIVISION BLIZZARD, INC.,
Petitioner

v.

MILESTONE ENTERTAINMENT, LLC,
Patent Owner

Case No. IPR2025-00712
U.S. Patent No. 11,393,279

**Petition for *Inter Partes* Review of
U.S. Patent No. 11,393,279**

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1001	U.S. Patent No. 11,393,279 to Katz, et al. (the “’279 Patent”)
1002	File History of U.S. Patent No. 11,393,279
1003	Declaration of Dwight Crevelt (“Crevelt”)
1004	Curriculum Vitae of Dwight Crevelt
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1007	U.S. Patent App. Pub. No. 2005/0153768 to Paulsen (“Paulsen”)
1008	U.S. Patent No. 5,970,143 to Schneier et al. (“Schneier143”)
1009	Reserved
1010	Milestone Entertainment, LLC’s Infringement Contentions, Appendix A
1011	U.S. Patent No. 6,511, 377 to (“Weiss”)
1012	U.S. Patent No. 5,371,345 to (“LeStrange345”)
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1014	U.S. Patent No. 5,326,104 to (“Pease104”)
1015	U.S. Patent No. 5,766,076 to (“Pease076”)
1016	U.S. Patent No. 5,855,515 to (“Pease515”)

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1017	U.S. Patent No. 5,902,983 to (“Crevelt983”)
1018	U.S. Patent No. 6,347,738 to (“Crevelt738”)
1019	U.S. Patent No. 6,547,131 to Foodman (“Foodman”)
1020	Dwight & Louise Crevelt, <u>Slot Machine Mania</u> 186-889, 224-27 (1988-89)
1021	Dwight & Louise Crevelt, <u>Video Poker Mania</u> 120-123 (1991)

I. INTRODUCTION

Activision Blizzard, Inc. (“Petitioner”) respectfully requests *inter partes* review of claims 1, 3-9, 13, 17, 18, 23, 25, 26, 28, and 29 of U.S. Patent No. 11,393,279 (EX1001, “’279 Patent”).

For decades, casinos and game developers have implemented various methods to increase player engagement. One such method enables automatically adjustment to the game so that it is not too difficult (causing frustration) or too easy (causing loss interest). Under this method, the game provider sets “mandated parameters” that must be achieved by the system as a whole, such as prize pay out or win rates. The system will then modify “variable parameters” that characterize the prizing or game structure to achieve the mandated parameters. For example, if the current prize pay out or win rates are too high, the system will decrease the prize costs or make game play more difficult. If too low, the system will increase the prize costs or make game play easier.

By 2003, systems implementing this method were well-known. For example, Kelly683 discloses a system that “provides an operator the ability to...determine the desired prize costs and win ratios” and adjust the system to achieve these objectives accordingly. EX1005, 5:4-5. Similarly, Walker discloses a system that “facilitate[s] adjustment of a game in order to help ensure that a set of results obtained during a plurality of game plays of a game satisfy one or more predetermined criteria.”

EX1006, ¶[0022]. These prior art mandated-parameters systems are what the '279 Patent claims.

Accordingly, Petitioner respectfully requests the Board institute review and find all challenged claims of the '279 Patent unpatentable.

II. MANDATORY NOTICES

A. Real Parties-in-Interest

The real party-in-interest is Activision Blizzard, Inc., which is a wholly-owned subsidiary of Microsoft Corporation.

B. Related Matters

U.S. Patent Office records indicate that the '279 Patent is assigned to Milestone Entertainment, LLC (“PO”), which is currently asserting the '279 Patent in the following concurrent litigation filed on May 15, 2024: *Milestone Entertainment, LLC v. Activision Blizzard, Inc.*, 2:24-cv-04056-AB-MRW (C.D. Cal.)

Petitioner has filed, at substantially the same time that this Petition was filed, petitions for *inter partes* review against related family members U.S. Patent No. 8,529,336; U.S. Patent No. 10,650,635; U.S. Patent No. 10,825,294; U.S. Patent No. 11,335,164; and U.S. Patent No. 11,501,607.

C. Notice of Counsel and Service Information

Petitioner provides the following designation of counsel:

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Pursuant to 37 C.F.R. § 42.10(b), a Power of Attorney accompanies this petition. Petitioner consents to electronic service by e-mail.

D. Fee for *Inter Partes* Review

The Director is authorized to charge the fee specified by 37 C.F.R. § 42.15(a) to Deposit Account 50-2613.

E. Grounds for Standing

Petitioner certifies pursuant to 37 C.F.R. § 42.104(a) that the '279 Patent is available for *inter partes* review and that Petitioner is not barred or estopped from requesting an *inter partes* review challenging the patent claims on the grounds identified in this Petition.

III. IDENTIFICATION OF CHALLENGES

Ground 1: Claims 1, 3-9, 13, 17, 18, 23, 25, 26, 28, and 29 are obvious under 35 U.S.C. § 103 over Kelly¹ in view of the knowledge of a person of ordinary skill in the art.

¹ U.S. Patent No. 8,172,683 to Kelly et al. (EX1005, “Kelly683”) is §§102(a) and (e) prior art.

Ground 2: Claims 1, 3, 5-9, 13, 17, 18, 23, 25, 26, 28, and 29 are obvious under 35 U.S.C. § 103 over Walker² alone or in view of the knowledge of a person of ordinary skill in the art.

Ground 3: Claim 4 is obvious under 35 U.S.C. § 103 over Walker in view of Schneier143.³

IV. BACKGROUND

A. Technology Overview

Wide area networked gaming systems have been around as late as the 1980s. Crevett^{¶28}. One of the first networked gaming machines was IGT's Megabucks. *Id.* A central server system was connected via phone lines to a controller in each system. *Id.* By the mid-1990s, cashless gaming, Internet gaming, and downloadable gaming functions were well on their way. *Id.* Initially, Internet gaming used software clients downloaded to a player's personal computer to access the network and provide rich graphics. *Id.* Many companies like Boss Media produced and ran these sites as early as 1996. *Id.* As Internet technology advanced with JavaScript and Flash, these Internet sites were able to operate without a downloaded client, and instead allowed users to play through an Internet browser. *Id.*

² Walker is §§102(a) and (e) prior art.

³ Schneier143 is §§102(a) and (e) prior art.

B. '279 Patent

The challenged claims are entitled to an effective filing date of no earlier than September 2, 2003.⁴

The '279 Patent describes well-known systems and methods to enhance player participation. The '279 Patent recognized that “various forms of game play, as well as the suggestions for implementing those games on a mass communication network, such as through the telephone or Internet,” exist. EX1001, 4:56-59. But the '279 Patent endeavored to address “a need for improved game of chance, which provide excitement for the player.” *Id.*, 4:60-62. The patent did so using mandated and variable parameters.

The '279 Patent discloses a networked gaming system with a play server and remote terminals. “The system and method ... permit greatly enhanced flexibility in game play and the prizing experience for a player, while globally achieving the mandated parameters.” *Id.*, 5:34-37. The '279 Patent explains “the mandated parameters are generally input to the system, and preferably stored in memory within the system.” *Id.*, 5:16-17. “Exemplary mandate parameters may consist of prize pay

⁴ Petitioner does not concede that any challenged claim is entitled to this priority date. For the purpose of this Petition, it is unnecessary to break the priority chain to a later date.

out and win rates, and may include such factors as the minimum payout amount, the maximum payout amount, a defined percentage payout, the number of prizes, and/or the form of prizes.” *Id.*, 5:11-15.

The ’279 Patent also discloses “variable parameters available for game play ultimately serving to achieve the mandated parameters and/or provide for enhanced or optimized game play and prizing experience.” *Id.*, 5:49-52. “[A] variable parameter may be the game structure itself, such as in the use of decision points, numbers of levels of game play, and/or duration of game play.” *Id.*, 5:54-57. Variable parameters may also be “the prizing structure parameters may include the desired payout amount, GLEPS or other allocation variables, the frequency of wins (1:X), overall number of winners and prizing structure and allocation of prizes.” *Id.*, 6:17-21.

The ’279 Patent further teaches that frequent player’s club information may be utilized by the system, “where points are rewarded for game play,” or “to participate in additional features or functionalities.” *Id.*, 9:40-41; 31:59-60.

V. THE PRIOR ART

A. Kelly683 (EX1005)

Kelly683 discloses each limitation of independent claim 1 of the ’279 Patent, except for the *player’s club information* limitations of [1.b.iii], [1.b.iii.B], and [1.e]

which was well-known and ubiquitous at the relevant time (Crevelt ¶¶29-39; EX1020, 186-188; EX1021, 120-121).

Like the '279 Patent, Kelly683 discloses a networked gaming system that enables a game provider “to optimize user enjoyment” to “help retain current users” and “attract even greater numbers of new users” by providing “an operator the ability to adjust prizes and determined the desired prize costs and ratios.” EX1005, 6:15-19, 5:4-5.

Notably, Kelly683 discloses mandated parameters for the system as a whole to achieve in the form of prize pay out (here, “global payout percentage,” *id.*, 5:20-29, 37:27-38:15, 38:58-39:7, Fig. 9a) and “win ratios” (*id.*, 5:3-5, 5:30-43, 5:55-6:3). The Kelly683 system achieves these mandated parameters by modifying variable parameters of the game or prizing structure.

For game structure, Kelly683 explains that “[t]he difficulty and thus the average prize credits awarded per game can be adjusted using a variety of techniques that depend on the type of game being played.” *Id.*, 38:63-65. This can include adjusting the “speed of controlled objects,” “frequencies of winning combinations,” “difficulty of the questions,” or “[d]urations of games.” *Id.*, 38:65-39:7. For prizing structure, Kelly683 recognizes that the “average global payout percentages can be obtained by adding all the individual payout percentages and dividing by the number

of prizes.” *Id.*, 41:65-67. Thus, the Kelly683 system can adjust the prize costs and prizes available. *Id.*, 41:45-55, 42:59-62.

B. Walker (EX1006)

Walker discloses each limitation of the challenged claims of the '279 Patent, except the *non-cash item* limitation of claim 4.

Like the '279 Patent, Walker discloses a game system that “maximize[s] the chances that the players will return in the future to play games.” EX1006, ¶[0002]. Walker recognizes that “a player that does not come anywhere near to winning a valuable prize or whose score is particularly low (as compared to scores achieved by other players) is likely to be so discouraged as to avoid playing the game again.” *Id.*, ¶[0003]. On the other hand, “[p]layers may also become bored and discouraged if they achieve substantially the same result each time they play a game.” *Id.*, ¶[0005]. Thus, Walker is a system that “facilitate[s] adjustment of a game in order to help ensure that a set of results obtained during a plurality of game plays of a game satisfy one or more predetermined criteria.” *Id.*, ¶[0022].

Walker discloses mandated parameters for the system as a whole in the form of predetermined criteria. *Id.*, Abstract, ¶[0022]. The Walker system achieves these predetermined criteria by modifying variable parameters of the game structure or prizing structure.

For game structure, the predetermined criteria can be achieved by adjusting “one or more game parameters” that “may be variables that affect the performance, scoring, difficulty, outcome, or other aspects of the game.” EX1006, ¶[0155]. These game parameters include “factors that affect the difficulty of a game (e.g., complexity of a game, hints provided, the sensitivity of controls, difficulty of trivia questions, number of opponents)” (EX1006, ¶[0156]), “rules of a game (e.g., number of strikes allowed in a baseball game, cost of vowels in a word guessing game)” (*id.*, ¶[0159]), “factors that affect the duration of a game (e.g., a number of rounds, a number of lives)” (*id.*, ¶[0160]) and “an amount of time that a player is allowed to achieve an event in a game or complete a game play of the game” (*id.*, ¶[0166]). See generally EX1006, ¶¶[0155]-[0166], Fig. 8.

800

GAME IDENTIFIER: G-5327		802
AVAILABLE ADJUSTMENT		806
804		
R-8-01 → INCREASE SPEED OF SPACESHIP BY 10-20%		+ 20 POINTS
R-8-03 → DECREASE SPEED OF SPACESHIP BY 10-20 %		- 30 POINTS
→ INCREASE NUMBER OF LIVES FROM 3 TO 5		- 50 POINTS
R-8-05 → INCREASE NUMBER OF HITS NEEDED TO DESTROY A SMALL METEORITE BY 30-50% AND INCREASE SPEED OF SMALL METEORITE BY 20-30%		+ 90 POINTS
→ INCREASE POINTS AWARDED FOR DESTROYING LARGE METEORITE BY 20-30%% AND DECREASE POINTS AWARDED FOR DESTROYING SMALL METEORITE BY 20-30%		- 100 POINTS
R-8-07 → INCREASE TEMPO OF BACKGROUND MUSIC BY 5%		- 5 POINTS
→ ADD "SLOW DOWN / REVERSE DIRECTION" CAPABILITY TO SPACESHIP		+ 30 POINTS
R-8-09 → DECREASE PRECISION OF SPACESHIP HEADING CONTROLS BY 2 DEGREES		- 40 POINTS
→ INCREASE SPEED OF MISSILES BY 10-20%		+ 15 POINTS

R-8-02
R-8-04
R-8-06
R-8-08

FIG. 8

EX1006, FIG. 8

For prizing structure, Walker explains that the predetermined criteria can be achieved by adjusting “what prize is awarded.” EX1006, ¶[0028]. Walker further discloses “[a]n operator of a gaming establishment may desire to, for example, raise a median or mean score of a game in order to further motivate players by enabling more players to achieve a score that corresponds to a prize (e.g., a more valuable prize) or that is closer to a score that corresponds to a prize.” EX1006, ¶[0028].

C. Schneier143 (EX1008)

Schneier143 (which shares the same inventors as Walker) discloses the *non-cash item* of claim 4 absent in Walker. Schneier143 discloses how game credits can

be used to advance levels or to obtain special items to advance levels in a game.
EX1008, 63:13-19.

VI. LEVEL OF ORDINARY SKILL

A person of ordinary skill in the art (“POSITA”) in 2003 would have had at least a bachelor’s degree in computer science or computer engineering, with at least three years of experience in game development. Crevelt ¶67. Additional experience could substitute for less education, and additional education could likewise substitute for less experience. *Id.*

This Petition does not turn on this precise definition, and the challenged claims would be unpatentable from the perspective of any reasonable person of ordinary skill in the art at the relevant time. *Id.*, ¶68.

VII. CLAIM CONSTRUCTION

The Board construes the claims “using the claim construction standard that would be used” in district courts. 37 C.F.R. § 42.100(b). This Petition establishes the prior art meets each claim limitation under any reasonable construction.⁵ Therefore, no express construction is necessary.

⁵ Petitioner reserves the right to argue alternative constructions in other proceedings, including that the claims are indefinite where such a defense is available.

**VIII. GROUND 1: KELLY683 IN VIEW OF THE KNOWLEDGE OF A
POSITA RENDERS OBVIOUS THE CHALLENGED CLAIMS**

A. Motivation to Modify

A POSITA would have been motivated to modify the teachings of Kelly683 to include a player tracking program. Crevelt¶¶94-101.

First, a POSITA would have recognized that the player tracking system would have promoted player engagement in Kelly683. Crevelt¶¶96-97. A POSITA would have understood that player tracking programs were well-known marketing methods by 2003. Crevelt ¶¶29-39; EX1020, 186-188; EX1021, 120-121. A POSITA would have understood “it is desirable to encourage players to use their player tracking cards during game play.” EX1007, ¶[0010]; *see also id.*, ¶[0009].

Second, a POSITA would have been motivated to include the player tracking system to advance the objective of Kelly683 to increase revenue. Crevelt¶¶98-99. Kelly683 explains, “[t]he availability of specific prizes and tournament play on the game unit 10 tends to cause greater player interest and involvement and thus increases the game's earnings.” EX1005, 25:10-12. By encouraging players to continue game play through incentives, these programs also increase the amount of money that players spend on game play, thus increasing revenue. Crevelt¶¶99.

Third, a POSITA would have been motivated to implement a player tracking program in the system of Kelly683 to improve the user experience. Crevelt¶¶100-101. For example, “the traditional player tracking programs can be used even more

effectively to maintain player interest in the games, and to provide gaming establishments with valuable information that allows them to better serve their players.” EX1007, ¶[0010].

B. Reasonable Expectation of Success

A POSITA would have been able to implement the well-known player tracking system into the game system of Kelly683 with a reasonable expectation of success. Crevelt¶¶102-104.

First, Kelly683 already tracks information specific to the player. Including player’s club information would have merely required associating additional information to the player’s account, for example, by adding another row or table to a database. Crevelt¶103.

Second, it would have involved a combination of known technologies (processors, memory) according to known methods (programming) to yield the predictable result of adding more functionality to an object in the game—namely, player information. Crevelt¶104.

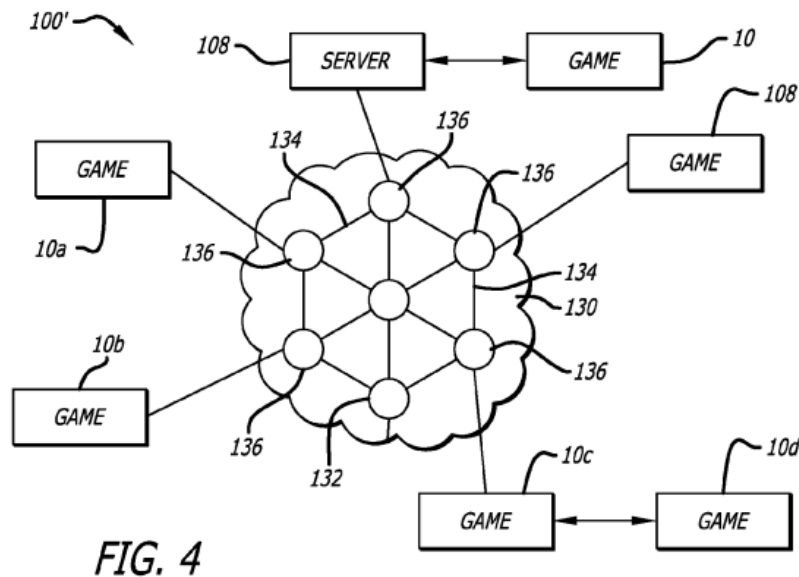
C. Independent Claim 1

1. Preamble

To the extent limiting, Kelly683 discloses the preamble. Crevelt¶¶105-115.

Kelly683 discloses a “gaming system [that] includes a casino game server and a plurality of casino game units connected via a network” (*system...in an electronic*

environment, over a communication network). EX1005, Abstract, Fig. 4. A POSITA would have understood that the server and game units are a *system ... in an electronic environment* because these components are electronic. Crevelt¶107. The server and the game units communicate over the network (*over a communications network*). Crevelt¶108.



EX1005, Fig. 4

Kelly683 discloses that its gaming system is *for dynamically varying game play parameters*. Crevelt¶109; EX1001, 6:5-21, 16:11-15. PO takes the position that this limitation is met when the “game structure alters to enable the player to pass the level.” EX1010, 12. Kelly683 similarly discloses altering the game structure to allow the player to advance at various times. *See, e.g.*, EX1005, 39:2-5 (“the difficulty of the questions at various times during the game can be adjusted so that average

players will typically win a certain number of prize credits per game”). A POSITA would have understood that these adjustments can be made during the game, between levels, and between games. Crevelt¶110; EX1005, 38:55-39:7. This adjustment will force certain outcomes to achieve a global payout or win ratio. EX1005, 38:55-39:7.

Kelly683 discloses that “[p]layers from gaming environments in several different locations can thus interact or compete simultaneously in offered games” (*between multiple users of the system at multiple locations*) using the game units. EX1005, 31:15-17; Crevelt¶111. Kelly683 discloses that the players in different locations communicate over the network with remote server 108 (*a remote location*). EX1005, 39:14-16 (“game data can be stored in...a remote apparatus such as server 108.”); Crevelt¶112.

Kelly683 discloses *including a play engine* because, as discussed in [1.c]-[1.c.iii] below, the gaming processor 12 of the game units include a software module for implementing, modifying, and utilizing variable parameters such as the game and prizing structure. Sections VIII.C.8-11; Crevelt¶113.

Kelly683 discloses *the users utilizing communication devices, the communication devices having input capability* because the players utilize game units with inputs. Crevelt¶114 ; EX1005, 9:62-63 (“Input devices 16 are used by a player or user to provide input to the game unit 10.”); 10:43-45 (“Also, input devices

such as buttons, switches, and the like allow the player of the game to make various selections concerning game play.”); *see also id.*, 9:66-10:15.

The game units of Kelly683 include “[g]ame output devices 18 [that] may influence the game and/or provide feedback to the player about the current state of the game process.” EX1005, 10:49-51; *see also id.*, 11:6-9, 11:10-15. A POSITA would have understood that the output provided to the user is influenced by the input (*the communication devices...generate an output corresponding to the input*). Crevelt¶115; EX1005, 9:62-66 (“Input devices 16 are used by a player or user to provide input to the game unit 10 to influence game events during a game process and to achieve one or more predetermined goals or tasks for scoring points and winning prizes or other types of awards.”).

2. [1.a]

Kelly683 discloses this limitation. Crevelt¶¶116-118. PO asserts this limitation is met by the processor in the communication devices. EX1010, 17. Kelly683 discloses a game processor 12 in the game units which “includes a digital microprocessor or a similar controller device.” EX1005, 9:10-32; *see also* 18:36-38; 15:42-48.

3. [1.b]

Kelly683 discloses this limitation. Crevelt¶¶119-121.

Kelly683's game processor 12 "includes...random access memory (RAM) 30, read-only memory (ROM) 32" EX1005, 15:38-40. *See also id.*, Fig. 1a, 11. Kelly683 discloses that "[m]icroprocessor 28 executes a process, described by software instructions stored in memory, which recognizes a game command from player input devices 16." EX1005, 15:48-51.

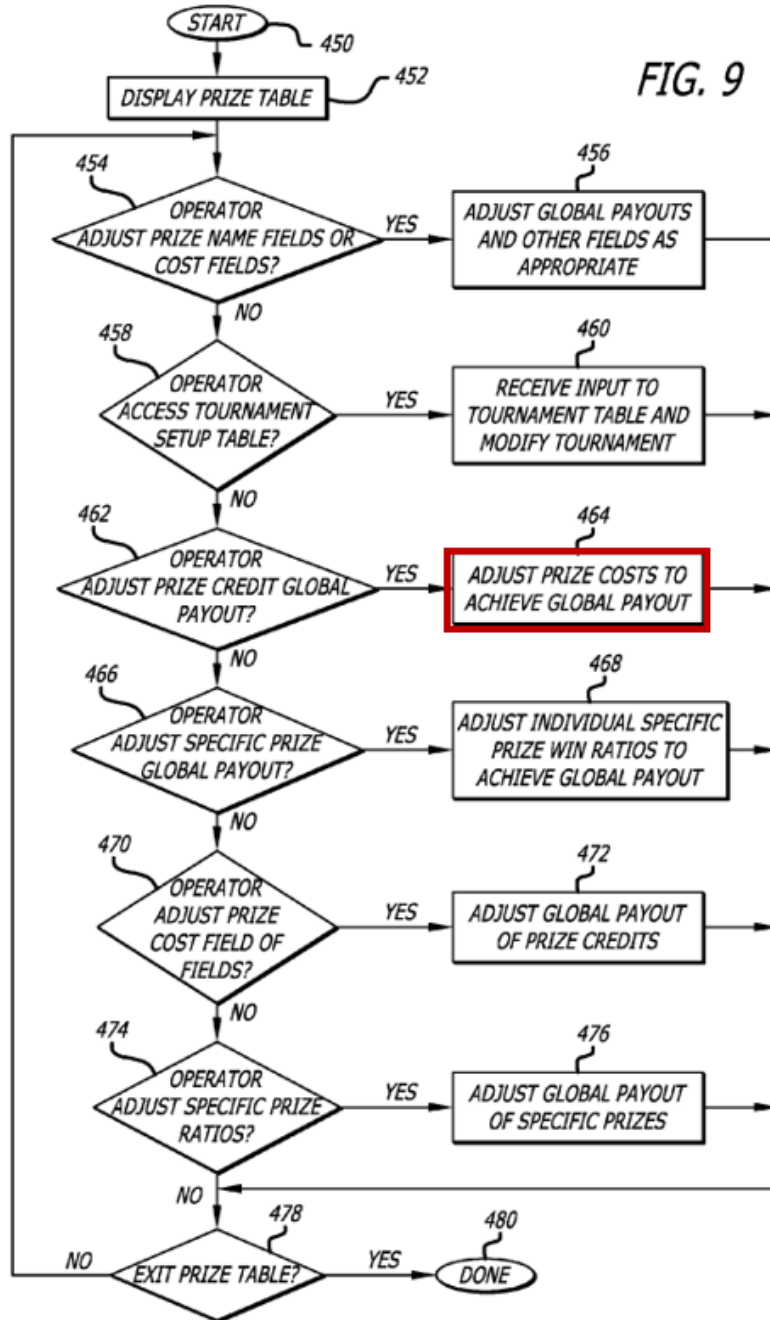
4. [1.b.i]

Kelly683 discloses this limitation. Crevelt¶¶122-128.

As discussed in [1.b.i.A], Kelly683 discloses a global payout percentage and win ratios (*mandated...parameters*) that must be satisfied during game play (*for use in the course of game play*), as well as game and prize parameters that may be set (*programmable variable parameters*) during game play (*for use in the course of game play*). Crevelt¶¶123-124; EX1001, 5:30-34, 6:6-9, 6:35-39; *see also* Section VIII.C.5.

Kelly683 achieves the *mandated...parameters* through adjustment of game structure or prizes. Crevelt¶125; EX1005, 38:62-65, 38:40-42. For example, Kelly683 teaches that the speed of controlled object in an action game, the frequencies of winning combinations in a card game, duration of games can be adjusted to force certain outcomes and achieve certain win ratios. EX1005, 38:58-39:7. Similarly, Figure 9 shows adjustments to the prize structure to achieve global

payout in red below. A POSITA would have understood that the game and prizing structure *programmable* because they are adjustable by the operator. Crevelt¶126.



Kelly683 teaches that the game processor 12 processes and stores (*store*) the global payout percentage and win ratios (*mandated and programmable variable parameters*). Crevelt¶127. Kelly683 teaches the global payout percentage and win ratios *are stored* in the prize table. EX1005, 44:29-35, Fig. 9a. “Information in the prize table 480 can be stored locally, or by the central location and can be downloaded when needed.” EX1005, 43:21-23.

A POSITA would have understood that the gaming system of Kelly683 uses the global payout percentage and win ratios, as well as the gaming structure and prizing structure *for use in the course of game play*, particularly since the gaming structure and prizing structure are adjusted throughout game play to achieve the global payout percentage and win ratios. Crevelt¶128; *see also* Section VIII.C.1.

5. [1.b.i.A]

Kelly683 discloses this limitation. Crevelt¶¶129-140; EX1001, 5:11-15.

Like the '279 Patent, the gaming system of Kelly683 includes a “global payout percentage” (EX1005, 5:20-29, 37:27-38:15, 38:58-39:7, Fig. 9a) and “win ratios” (EX1005, 5:3-5, 5:30-43, 5:55-6:3). Crevelt¶131. The payout and win ratios may include such facts as a defined percentage payout, the number of prizes and form of prizes. EX1005, 37:23-27.

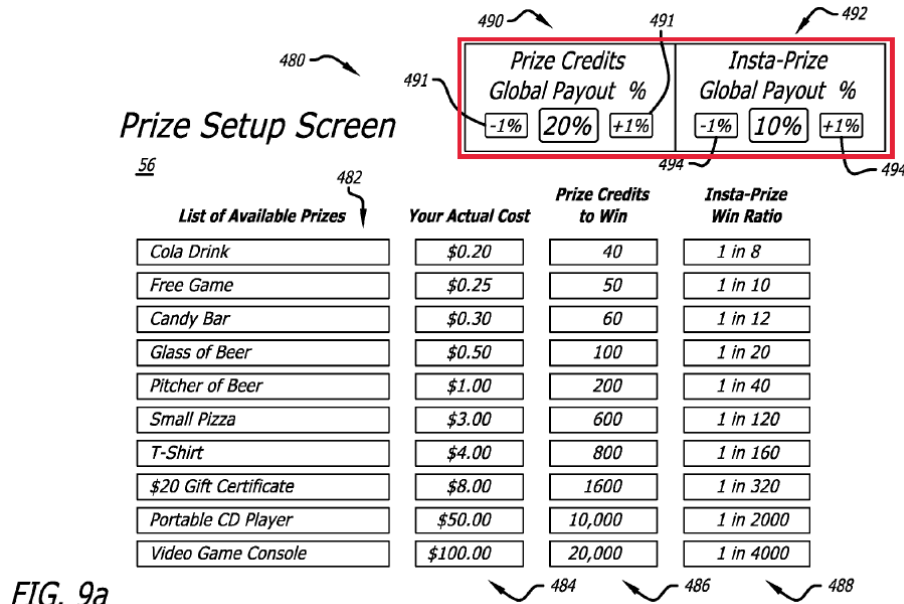


FIG. 9a

EX1005, Fig. 9a

Kelly683 discloses that the global payout percentage and win ratios *represent parameters that must be achieved by the system as a whole*. Crevelt¶132. “The prize payout percentage 490 indicates the payout of the game unit 10 as a percentage of an operator’s revenue from the game that the operator will pay back, on average, to players in the form of prize credits or prizes purchased using prize credits.” EX1005, 37:35-39. Similarly, Kelly683 explains that “the specific prize ratios 488 are automatically determined by the redemption system based on other operator input such as actual cost 484 and the specific prize global win ratio 492.” EX1005, 37:11-14.

Kelly683 discloses *variable parameters that represent parameters characterizing at least one of: a game structure and a prizing structure*.

Crevelt¶133; EX1001, 5:54-57, 6:17-21. Like the '279 Patent, the gaming system of Kelly683 uses both a *game structure* and *prizing structure*. Crevelt¶134. For *game structure*, Kelly683 explains that the global payout percentage and win ratio can be achieved by adjusting the game structure, such as speed of controlled objects in an action game, winning combinations in a card game, difficulty of questions in a quiz game, and duration of game. EX1005, 38:65-39:7. For *prizing structure*, Kelly683 discloses that the gaming system will automatically adjust the prizing structure to meet the desired goals, specifically, automatically adjusting prize costs. EX1005, 5:55-6:3.

As discussed in [1.b.i], the variable parameters are *programmable*. See Section VIII.C.4.

6. [1.b.ii]

Kelly683 discloses this limitation. Crevelt¶¶141-143. Kelly683 discloses storing (*record*) game play information provided by the game processor including information on game play events based on the user input (*game play information regarding particular game play events*). EX1005, 10:12-15 (“Each type of user input can provide a particular game command to the game processor 12, and the game processor interprets the commands and influences game states and game events in the game process accordingly.”); *see also id.*, 1:44-46, 9:62-66, 46:32-37, 46:49-52.

Kelly683 also discloses recording which games the user previously played. Ex1005 6:24-28 (“receiving an identifier from the game apparatus of a particular user selected from a group of identifiers including: (1) a user identifier relating to the user (i.e., player) of the network gaming and prize redemption system; (2) a game identifier relating to a particular game played by the user of the network gaming system;”); *see also* 39:8-15.

7. [1.b.iii]-[1.b.iii.B]

Kelly683 in view of the knowledge of a POSITA renders obvious these limitations. Crevelt¶¶144-153. Kelly683 discloses player’s account information that includes a user identification code (*player identification information*) and tracks a player’s credits and prizes. EX1005, 59:66-60:1 (“a current amount of available credits of a particular user based on the user identification code”); *see also id.*, 30:34-40, 50:20-22. 50:35-37. Although Kelly683 does not expressly disclose *player’s club information* or *amount of player points*, a POSITA would have been motivated and obvious to implement these features. Crevelt¶145.

Player tracking programs (*player’s club*) including player tracking points (*player points*) were a well-known way of maintaining a game player’s interest which “provide rewards, or comps, to players in proportion to the player’s level of patronage (e.g., to the player’s playing frequency and/or total amount of game plays

at a given casino).” Crevelt¶146; EX1007, ¶¶[0008]-[0009]; *see also* Crevelt ¶¶29-39; EX1020, 186-188; EX1021, 120-121.

A POSITA would have been motivated to modify Kelly683’s gaming system to store as part of the player’s account the player tracking program information (*store player’s club information*) including at least Kelly683’s user identification code (*player identification information*) and the amount of player tracking points (*the amount of player points*) as was well-known at the relevant time. Crevelt¶147. A POSITA would have understood that this would have enhanced the goal of Kelly683 to increase player engagement and revenue by maintaining player interest by providing more prizes. Crevelt¶148; EX1005, 25:10-12, 54:23-27.

A POSITA would have had a reasonable expectation of success in modifying Kelly683’s gaming system because Kelly683 already stores and tracks similar information with respect to credits. Crevelt¶149. Notably, Kelly683 already uses a *player identification information* (user identification code), and storing the additional player tracking program information would merely require adding a few additional rows or tables in a database of Kelly683. Crevelt¶¶150-153.

8. [1.c]

Kelly683 discloses this limitation. Crevelt¶¶154-156. The ’279 Patent does not use the term *play engine*. PO takes the position that *a play engine* includes the components that implement the functions recited in [1.c.i]-[1.c.iii]. EX1010, 27.

As discussed for limitations [1.a]-[1.b], the game units have game processor 12 and memory. Sections VIII.C.2-3. As discussed in limitations [1.c.i]-[1.c.iii] below, a POSITA would have understood that the game processor 12 functions to implement, modify, and utilize the game and prizing variable parameters (as described in limitations [1.c.i-iii] in Sections VIII.C.9-11), and would have been performed by a software module (*play engine*). Crevelt¶155. A POSITA would have also understood that the *play engine* would be *operating with the processor* since game processor 12 would be executing the software module using its microprocessor, and would be *coupled to the memory* since it would control functions that involving game data stored in memory. *Id.* ¶156.

9. [1.c.i]

Kelly683 discloses this limitation. Crevelt¶¶157-161. Kelly683 discloses multiple ways of *implement[ing] a first set of programmable variable parameters to provide a first game play experience*. Crevelt¶158. One way uses the *game structure* (see Section VIII.C.5) where *a first game play experience* is less difficult. *Id.* Kelly683 discloses that “[i]t is possible for the game’s manufacturer to adjust game difficulty so that, on average, a predetermined number of prize credits will be awarded for each game played.” EX1005, 38:58-60.

Another way uses the *prizing structure* (see Section VIII.C.5) where *a first game play experience* results in “a ‘best fit’ of prizes awarded according to the

operator's odds." EX1005, 36:63-66. "For example, every 8,000 games, two video consoles are to be awarded." EX1005, 37:1-3; *see also* Crevelt¶159; *see also* EX1001, 16:54-17:3 ("The game play experience may be varied by changing the play probabilities. In one implementation, game play experience may utilize real world probabilities for the game play portion of the experience, but utilize other probabilities for the prizing portion of the overall game.").

A POSITA would understand that the game processor implements the first set of variable parameters. Crevelt¶160; EX1005, 9:15-18 ("Game processor 12 implements (e.g., controls, influences, coordinates, monitors, calculates, and the like) the functions of the game unit 10 during a game process and includes several input and output functions.").

As discussed in [1.b.i] the game and prizing structure parameters (*variable parameters*) are *programmable* because the operator can adjust them. Section VIII.C.4.

10. [1.c.ii]

Kelly683 discloses this limitation. Crevelt¶162-166. Kelly683 discloses *modify[ing] one or more programmable variable parameters* (discussed in Sections VIII.C.4-5. VIII.C.9) *to provide a second set of programmable variable parameters providing a second game play experience*. Crevelt¶163. First, Kelly683 discloses adjusting the parameters (*programmable variable parameters*) characterizing the

game structure (see Section VIII.C.5) to provide a more difficult game play (a second set of programmable variable parameters providing a second game play experience). EX1005, 38:63-39:7. Kelly683 discloses that *the first game play experience differs from the second game play experience* because the second game play experience is more difficult than the first game play experience (e.g., more difficult to achieve a score higher than a particular value, frequencies of winning combinations is lower, difficulty of questions is higher). *Id.*; Crevelt¶164.

Second, Kelly683 discloses adjusting the parameters (*programmable variable parameters*) characterizing the *prizing structure* (see Section VIII.C.5) to provide prizes at different odds. EX1005, 36:63-37:9; Crevelt¶165. “For example, every 8,000 games, two video consoles are to be awarded. If it is randomly determined that a third video console is to be awarded within, e.g., the 3,000th game, then a different prize can be awarded so that the desired odds are better met.” EX1005, 37:1-6. Kelly683 discloses that *the first game play experience differs from the second game play experience* because the play probabilities have changed. *Id.*; Crevelt¶165; *see also* EX1001, 16:66-17:1 (“The game play experience may be varied by changing the play probabilities.”).

A POSITA would understand that a software module executed by game processor (play engine) modifies the variable parameters to provide a second set of variable parameters. Crevelt¶166; EX1005, 9:15-18.

11. [1.c.iii]

Kelly683 discloses this limitation. Crevelt¶¶167-172. Kelly683 discloses *utiliz[ing] the first and second programmable variable parameter sets to achieve the mandated parameters through at least the first and second game play experiences* because a POSITA would have understood that the adjustment from the first to second parameters achieves the global payout or win ratios by making the game more difficult to adjusting the prizes. Crevelt¶168. Kelly683 discloses “[i]t is possible for the game’s manufacturer to adjust game difficulty so that, on average, a predetermined number of prize credits will be awarded for each game played.” EX1005, 38:57-58.

Kelly683 discloses that “[t]he difficulty and thus the average prize credits awarded per game can be adjusted using a variety of techniques that depend on the type of game being played. For example, in an action game the speed of controlled objects, response of input devices, and the like, can be adjusted so that most players don't receive a score higher than a particular value. In card games, the frequencies of winning combinations of cards can be adjusted. In quiz games, the difficulty of the questions at various times during the game can be adjusted so that average players will typically win a certain number of prize credits per game. Durations of games, which have a fixed duration, can also be adjusted to achieve an average payout level of prize credits.” *Id.*, 38:60-39:7.

Kelly683 discloses that “[i]n one embodiment, the random determination of whether a particular prize is to be awarded is also, modified by statistical information to create a ‘best fit’ of prizes awarded according to the operator’s desired odds; ... If it is randomly determined that a third video console is to be awarded within, e.g., the 3,000th game, then a different prize can be awarded so that the desired odds are better met.” *Id.*, 36:63-37:6.

Kelly683 discloses that “[i]n networked embodiments ... the server 108 can store the prize credits won by a player over previous game sessions and can send this information to an individual game unit when requested by the game unit, e.g., when the player associated with a credit account plays a game on the game unit. Thus, a player can access his or her credit account by playing any individual game unit connected to the server that stores that player’s credit account information.” *Id.*, 24:4-15.

12. [1.d]

Kelly683 discloses this limitation. Crevelt¶¶173-178; EX1001, 44:57-65.

Kelly683 discloses a process for “providing statistical information” (*a decision engine for performing game analytics on the game play*). EX1005, 32:27-33. This statistical information includes the “number of times the player has played” (EX1005, 25:23-24), “the time the player took to play a game, the number of times a player has participated in similar previous tournaments, and the like” (EX1005,

32:27-33), “the number of games played and the number of times the specific prize goal was hit” (EX1005, 40:33-45), and “the amount of times a particular game is played, the number of times that difference games are played, or by achieving a game-related goal” (EX1005, 56:49-51). Kelly683 discloses that “[t]he ‘hit ratio’ is the fraction of games played, on average, in which a specific prize goal is met and thus a specific prize is won.” EX1005, 40:19-21. Kelly683 explains that “some games may have much different hit ratios than other games depending on the nature of the game action, randomness, and the like, and the difficulty of the specific prize goal” that “normalization factor” can be used, which “indicates how much an individual ratio 488 should be adjusted based on the particular game played.” EX1005, 40:59-41:9. Kelly683 explains that while the normalization factor “can be estimated initially,” “[a]fter a number of games have been played on a game unit 10, the normalization factor for each game can be based on the actual hit ratio determined for each game.” EX1005, 41:30-33.

The gaming system of Kelly683 uses this statistical information to optimize the prizing structure for a desired goal. *See, e.g.*, EX1005, 36:63-66 (“In one embodiment, the random determination of whether a particular prize is to be awarded is also modified by statistical information to create a ‘best fit’ of prizes awarded according to the operator's desired odds.”).

Kelly683 discloses *a decision engine coupled to the memory and operating with the processor because POSITA would have also understood that the decision engine would be operating with the processor since game processor 12 would be executing the process using its microprocessor, and would be coupled to the memory since it would control functions that involving game data stored in memory. Id.* EX1005, 9:15-19.

13. [1.d.i]

Kelly683 discloses this limitation. Crevelt¶¶179-183. Kelly683 discloses *analyz[ing] game play as a function of the recorded information regarding particular game play events because the game system analyzes game play as a function of difficulty or past wins.*

With respect to *recorded information regarding particular game play events* as difficulty, Kelly683 discloses the adjustment of game difficulty to achieve an average payout level of prize credits, which in turn will achieve the global payout percentage inputted by an operator. Crevelt¶180; EX1005, 38:65-39:7 (examples of adjusting difficulty).

With respect to *recorded information regarding particular game play events* as past wins, Kelly683 discloses tracking past wins to provide an overall prize or to adjust prizes to achieve global payout or win ratios. Crevelt¶181; *see also* EX1005, 37:1-10. Kelly683 discloses that “FIG. 6 a illustrates an example display of score

and prize credits (shows as “tickets”) won by a player after a game is over... A score of higher value is awarded to reflect this necessary higher skill. In the described embodiment, a multiplier is applied to the score to achieve a total score 366.” EX1005, 26:59-27:1, 57:27-33.

A POSITA would have understood that the current game play information and corresponding past wins or difficulty would need to be recorded to determine whether game or prizing structures would need to be adjusted. Crevelt¶183.

14. [1.d.ii]

Kelly683 discloses this limitation. Crevelt¶¶184-185. As discussed in [1.c.i]-[1.c.ii], Kelly683 discloses *first and second programmable variable parameter sets...including at least one of: a game structure and a prizing structure* in the form of different parameters to make a game more or less difficult or to adjust prizes. As discussed in [1.d.i], Kelly683 discloses past wins and difficulty as *recorded game play information*.

Kelly683 further discloses *determine[ing] the selection of the game or prizing structure parameter sets by utilizing the difficulty or past wins based on a threshold related to the global payout or win ratios (with predefined criteria)*. As to *game structure*, as discussed in [1.d.i], if the game is too easy or difficult, the difficulty can be adjusted during the course of play. EX1005, 38:55-39:7 (discussing ways to adjust difficulty in action games, card games, quiz games, games with a fixed

duration). As to *prizing structure*, as discussed in [1.d.i], if the global payout or win ratio is too high based on past wins, the prizing structure can be adjusted to achieve the global payout or win ratio. EX1005, 37:1-10 (“For example, every 8,000 games, two video consoles are to be awarded. If it is randomly determined that a third video console is to be awarded within, e.g., the 3,000th game, then a different prize can be awarded so that the desired odds are better met.”).

15. [1.e]

Kelly683 in view of the knowledge of a POSITA renders obvious this limitation. Crevelt ¶¶186-189. As discussed for the preamble, Kelly683 discloses output devices 18 including displays (*a display system for displaying*). Section VIII.C.1; *see also* EX1005, 10:49-11:9, 11:10 (“A preferred output device is a display screen”). Although Kelly683 does not expressly disclose that the output devices 18 display *at least the player club points*, a POSITA would have been motivated and found it obvious to implement. Crevelt ¶187. It was well-known that player tracking information would have included the user’s player’s club points (*player club points*). Crevelt ¶¶29-39, 187; EX1007, ¶[0049]; EX1020, 186-188; EX1021, 120-121.

A POSITA would have been motivated with a reasonable expectation of success to display player points on Kelly683’s output devices 18 because it would

have allowed the user to view the points as they were playing and increase the likelihood that the user would remain engaged in the current game. Crevelt¶189.

16. [1.f]

Kelly683 discloses this limitation. Crevelt¶¶190-193. Kelly683 describes a variety of *system input[s]* (e.g., “buttons, a keyboard, dials, joystick controls”) that are used in Kelly683 *for receiving payer input*. EX1005, 9:62-10:7 (“Input devices 16 are used by a player or user to provide input to the game unit 10 to influence game events during a game process and to achieve one or more predetermined goals or tasks for scoring points and winning prizes or other types of awards”).

D. Dependent Claims

1. Claim 3

Kelly683 in view of the knowledge of a POSITA renders obvious this limitation. Crevelt¶¶194-197. Player tracking programs (*player’s club*) which “provide rewards, or comps, to players in proportion to the player’s level of player’s level of patronage (e.g., to the player’s playing frequency and/or total amount of game plays at a given casino)” were well-known in the art. EX1007, ¶¶[0008]-[0009]; Crevelt ¶¶29-39; EX1020, 186-188; EX1021, 120-121. Player tracking information would have included information on *non-cash items* such level of patronage, number of player tracking points previously accumulated, and player

preferences. EX1007, ¶¶[0052]; Crevelt ¶¶29-39, 195; EX1020, 186-188; EX1021, 120-121.

A POSITA would have been motivated to implement this feature because it would have provided more information to both the operator and the user that would have enhanced the user experience with a reasonable expectation of success. Crevelt¶197.

2. Claim 4

Kelly683 in view of the knowledge of a POSITA renders obvious this limitation. Crevelt¶¶198-201. It would have been obvious to a person of skill in the art to implement a system where the player's club information includes an image as part of the non-cash information. Crevelt¶200. It was well known to a POSITA that players' club points or other club information could be used to categorize players into different levels based on their patronage, e.g., "gold level," "diamond level," etc. It would have been obvious to include this information in the form of an image (e.g., gold bar or diamond) as part of the players non-cash information stored with their account. Crevelt¶200. Alternatively, it would have been obvious to a POSITA to include a picture of the player themselves as part of their player's club information to assist with authentication of the user and other security related issues.

A POSITA would have been motivated to implement this feature because it would have provide better communication to the user with a reasonable expectation of success. Crevelt¶203.

3. Claim 5

Kelly683 discloses this limitation. Crevelt¶¶202-204; EX1005, 9:40-55, 23:42-58, 24:4-18, 30:1-16, 20:48-21:3.

For game structure, Kelly683 discloses modifying the parameters characterizing the game structure to increase difficulty (*the first set and second set of variable parameters are set*) based on the average prize credits awarded across game units (*based on game play information across multiple user devices*). EX1005, 38:58-60.

For *prizing structure*, Kelly683 discloses modifying the parameters characterizing the prizing structure to change the play probabilities (*the first set and second set of variable parameters are set*) based on the frequency of players utilizing game units achieving a specific prize goal (*based on game play information across multiple user devices*). EX1005, 40:55-57.

4. Claim 6

Kelly683 discloses this limitation. Crevelt¶¶205-206. Kelly683 discloses that the game play information provided by the game processor includes information on whether a player has been “eliminated from the tournament after losing a

predetermined number of games” (*information on a loss*). EX1005, 34:19-24, 15:10-23, 32:20-33.

5. Claim 7

Kelly683 discloses this limitation. Crevelt¶¶207-208. Kelly683 discloses that the game play information provided by the game processor includes information on game credits and prize credits accrued from previous outcomes of the game play. EX1005, 9:40-55, 23:42-58, 24:4-18, 30:1-16. To the extent series of outcomes excludes game credits, Kelly683 also discloses that the game play information provided by the game processor includes information on each player’s score or performance after successive game play as well as the outcomes from a series of games in a tournament. EX1005, 20:48-21:3, 58:29-56, Fig. 22.

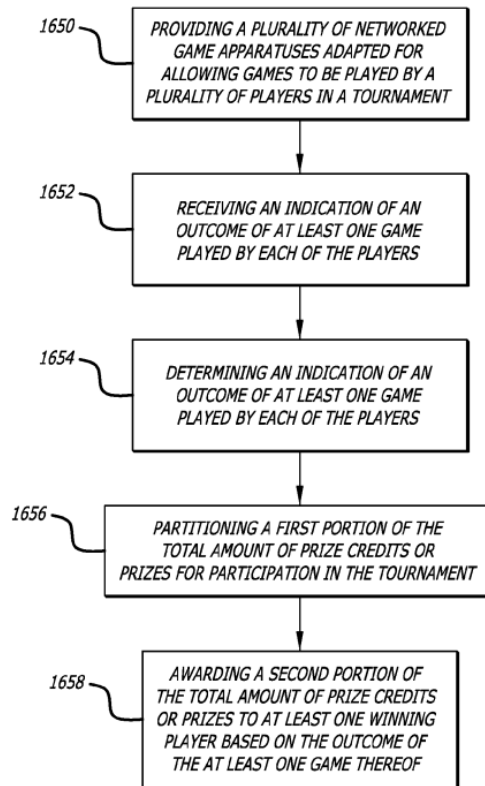


FIG. 22

6. Claim 8

Kelly683 discloses this limitation. Crevelt¶¶209-210. Kelly683 tracks “win rates” which is a rate that looks at the number of wins divided by the number of plays. EX1001, 5:11-15. A POSITA would have understood that win rates are game play information on the number of wins. Crevelt¶210.

7. Claim 9

Kelly683 discloses this limitation. Crevelt¶¶211-212. Kelly683 discloses that the game play information provided by the game processor includes information on

an initial game play event based on the user input (*information on a first game play event*). EX1005, 10:12-15, 1:44-46, 9:62-66, 46:32-37, 46:49-52.

8. Claim 13

Kelly683 discloses this limitation. Crevelt¶¶213-214. Kelly683 discloses that the game play information provided by the game processor includes statistical information on the user's play including the player's "score 362 of the game" as well as "the time the player took to play a game, the number of times a player has participated in similar previous tournaments, and the like." EX1005, 26:59-27:1, 32:20-33.

9. Claim 17

Kelly683 discloses this limitation. Crevelt¶¶215-216. Kelly683 discloses modifying *the prizing structure by modifying the awarding of* a progressive bonus award (*bonus prizing*). EX1005, 16:13-25. To the extent that bonus prizing refers to a prize awarded during a bonus round, Kelly683 discloses prizes awarded during an optional speed bonus. EX1005, 26:59-27:18.

10. Claim 18

Kelly683 discloses this limitation. Crevelt¶¶217-218. Kelly683 discloses modifying *the prizing structure by modifying the awarding of* tickets, prize credits, or game credits (*non-cash prizes*). EX1005, 12:22-23 ("tickets' or 'prize credits' are used as a medium of conversion from game score to prize value"), 50:52-53 ("If

game credits were won, such game credits are added to the account of the player.”); *see also id.*, 16:13-25, 26:59-27:18, 27:55-28:2, 38:55-39:7.

11. Claim 23

Kelly683 discloses this limitation. Crevelt¶¶219-220. As discussed in [1.d] (*see* Section VIII.C.12), Kelly683 discloses a process for providing statistical information (*decision engine for game analytics*), including “[t]he number of times the player has played.” EX1005, 25:23-24; *see also id.*, 32:27-33. The number of times a player has played is *user specific play*. Crevelt¶220.

12. Claim 25

Kelly683 discloses this limitation. Crevelt¶¶221-222. Kelly683 discloses predefined criteria that include prizing criteria: “An operator need only input desired prizes and a desired percentage of income that is to be paid back to players, and the system can automatically determine prize credit costs and win ratios for the entered prizes, which achieve the desired profitability of the game apparatus. These entered prizes and prize costs are then automatically provided to players on the game apparatus.” EX1005, 5:58-64.

13. Claim 26

Kelly683 discloses this limitation. Crevelt¶¶223-224. As discussed in [1.d.ii], Kelly683 discloses predefined criteria that is past wins, or the number of wins, as

win rates are one of the examples or predefined criteria that it describes can be set by the operator. EX1005, 5:11-15.

14. Claim 28

Kelly683 discloses this limitation. Crevelt ¶¶225-226. As discussed in [1.d.ii], Kelly683 discloses that the *predefined criteria* can be difficulty which can be adjusted based on the duration of the game. EX1005, 39:5-7.

15. Claim 29

Kelly683 in view of the knowledge of a POSITA discloses this limitation. Crevelt ¶¶227-231. As discussed in [1.d.ii], Kelly683 discloses that the *predefined criteria* can be past wins. Section VIII.C.14. Although Kelly683 does not expressly disclose that the predefined criteria *is the number of plays for a player*, a POSITA would have been motivated and it would have been obvious to implement this feature. Crevelt ¶229. Player tracking programs were known to have included tracking the number of plays for a player to provide rewards or other prizes. EX1007, ¶[0008] (describing “rewards, or ‘comps,’ to players in proportion to the player’s level of patronage (e.g., to the player’s playing frequency and/or total amount of game plays at a given casino).”); *see also* Crevelt ¶¶29-39; EX1020, 186-188; EX1021, 120-121.

A POSITA would have been motivated to implement this feature because it would have resulted in better user engagement with a reasonable expectation of success. Crevelt ¶231.

IX. GROUND 2: WALKER ALONE OR IN VIEW OF THE KNOWLEDGE OF A POSITA RENDERS OBVIOUS CLAIMS 1, 3, 5-9, 13, 17, 18, 23, 25, 26, 28, 29

The various embodiments of Walker disclose each limitation of the challenged claims of the '279 Patent except for the additional limitation of claim 4. Walker teaches that the features of these embodiments are not alternatives but features that a POSITA could have combined when implementing the Walker system.⁶ Crevelt ¶¶232-233.

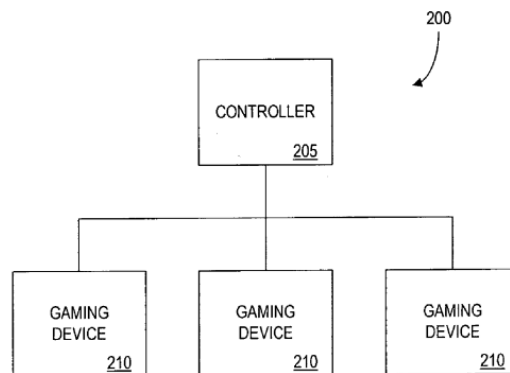
A. Independent Claim 1

1. Preamble

To the extent limiting, Walker discloses the preamble. Crevelt ¶¶234-239. Walker discloses “system 200...may include a controller 205 (an example of which

⁶ No findings regarding motivation to combine or reasonable expectation of success are necessary with a single reference obviousness ground. *See Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1372-73 (Fed. Cir. 2019). Regardless, Walker teaches that the features of the embodiments are options that can be combined, which would have motivated a POSITA to do so. Crevelt ¶233.

is depicted in FIG. 3) in one or two-way communication with a plurality of gaming devices 210 (an example of which is depicted in FIG. 4) via a network such as, for example, the Internet or via another communications link.” EX1006, ¶[0051], Fig. 2; *see also* ¶[0062] (“embodiment 300 of controller 205”). A POSITA would have understood that the controller and gaming devices create a *system for...game play...in an electronic environment* because these components are electronic. Crevelt¶234; *see also* EX1006, ¶[0062] (“The controller 300 may be implemented as a system controller...or any other equivalent electronic”), [0069] (“The gaming device 400 may be implemented as a system controller...or any other equivalent electronic”), (“The gaming device 400 may comprise any or all of the gaming devices 210”).



Walker discloses that the game may be played according to certain *game play parameters* which are “variables that affect the performance, scoring, difficulty, outcome, or other aspects of the game.” EX1006, ¶[0155]; *see also id.*, ¶¶[0156]-

[0166]. Walker explains that the *system* provides for *dynamically varying game play parameters* because the game parameters may be adjusted at various times based on an evaluation of results. Crevelt ¶235. For example, if certain predetermined criteria for the game are not met, game parameters may be adjusted to achieve those criteria. EX1006, ¶[0267]. Adjustments to vary game parameters can be made dynamically during game play, such that an evaluation of results (and subsequent adjustment) may occur, for example, at a predetermined time (*id.*, ¶¶[0274]-[0275]) or after a user's gaming device has reached a "predetermined activity level" (*id.*, ¶[0277]). The game parameters can also be dynamically varied based on an assessment of the skill level of a player. *Id.*, ¶[0105].

Walker discloses that "a player may remotely operate a gaming device" (*the users utilizing electronic communication devices*). EX1006, ¶[0091]. The system of Walker provides for a communications network (*over a communications network*) that allows for communication between multiple players using gaming devices at remote locations (*multiple users of the system at multiple locations*) and a controller on a remote server (*and a remote location*). EX1006, ¶¶[0051] ("The system 200...may include a controller 205...in one or two-way communication with a plurality of gaming devices 210...via a network such as, for example, the Internet or via another communications link."), [0055] ("Communication between the gaming devices 210 and the controller 205, and among the gaming devices 210, may be

direct or indirect, such as over the Internet through a Web site maintained by a controller 205 on a remote server....”).

As further discussed for [1.c] (*see* Section IX.A.10), the controller (*remote location*) includes a play engine software module (*including a play engine*), which performs functions such as implementing, modifying, and utilizing game and prizing parameters, as described above. Indeed, Walker discloses that the controller (*remote location*) is operable to adjust the game parameters to achieve predetermined criteria, thus performing functions of a *play engine*. EX1006, ¶[0168].

The users’ gaming devices (*the communication devices*) also have *input capability and generate an output corresponding to the input*. “The gaming device 400 comprises a processor 405...in communication with an output device 410,” as shown in red below, which “may comprise, for example, a cathode ray tube (CRT) monitor, liquid crystal display (LCD) screen, or light emitting diode (LED) screen.” EX1006, ¶[0070]; Fig. 4. “The gaming device 400 comprises a processor 405...in communication with...an input device 415,” as shown in blue below, which may be “a computer keyboard or keypad, a button, a handle, a keypad, a touch-screen, a microphone” (*the communication devices having input capability*). EX1006, ¶[0070]; Fig. 4.

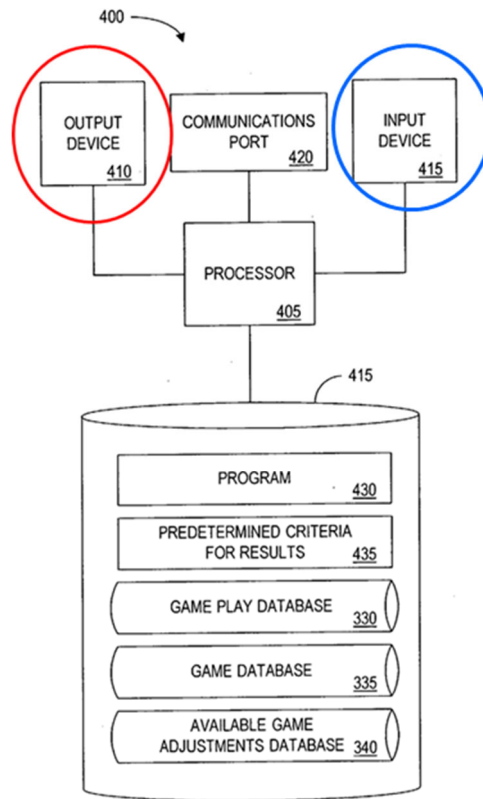


FIG. 4

EX1006, Fig. 4 (annotated)

Walker discloses *the communication devices having input capability and generate an output corresponding to the input* because “the controller...may receive a selection of a game that a player would like to play” and that “a player may use a player device or a gaming device to select a game that he would like to play from a list of available games.” Crevelt ¶239; EX1006, ¶[0219]. Walker explains that “the controller may...direct the gaming device to initiate the requested game.” EX1006, ¶[0220]. A POSITA would have understood that the player inputs a selection of a

game (e.g., through the input device) and the gaming device outputs the corresponding selected game (e.g., through the display capabilities of the output device 410). Crevelt ¶239.

2. [1.a]

Walker discloses this limitation. Crevelt ¶¶240-241. Walker discloses that “controller 300 may comprise, for example, a server computer operable to communicate with one or more client devices such as gaming devices 210.” EX1006, ¶[0062]. “The controller 300 comprises a **processor 305**...in communication with a communications port 310...and a memory 315.” EX1006, ¶[0064].

3. [1.b]

Walker discloses this limitation. Crevelt ¶¶242-243. Walker discloses that “controller 300 may comprise, for example, a server computer operable to communicate with one or more client devices such as gaming devices 210.” EX1006, ¶[0062]. “The controller 300 comprises a processor 305...in communication with a communications port 310...and a **memory 315**.” EX1006, ¶[0064]. A POSITA would have understood that the controller 205/300 is used to process and store information used by the system given Walker’s teaching that the controller processes and stores the program for gaming. Crevelt ¶243; EX1006, ¶ [0065] (“The memory 315 stores a program 320 for controlling the processor 305.”).

4. [1.b.i]

Walker discloses this limitation. Crevelt ¶¶244-248. As discussed further for [1.b.i.A], Walker discloses one or more predetermined criteria (*mandated parameters*) that must be satisfied during game play (*for use in the course of game play*), as well as game and prize parameters (*programmable variable parameters*) that may be set during game play (*for use in the course of game play*). Crevelt ¶244; EX1001, 5:30-34, 6:6-9, 6:35-39; *see also* Section IX.A.5.

The Walker system achieves the *mandated...parameters* by “adjustment of a game in order to help ensure that a set of results obtained during a plurality of game plays of a game satisfy one or more predetermined criteria (e.g., that a standard deviation of the results is not greater than a maximum predetermined standard deviation and not lower than a minimum predetermined standard deviation).” EX1006, ¶[0022]; *see also* ¶[0023] (“The present invention, in accordance with one or more embodiments, allows a gaming establishment to adjust a game such that results of a game are maintained within a range determined to be desirable by the gaming establishment.”), ¶[0024]. Walker explains that the predetermined criteria (*mandated...parameters*) may include, for example, whether a predetermined standard deviation or variance is within a predetermined range, above or below a predetermined minimum threshold, or above or below a predetermined maximum threshold. *Id.*, ¶¶[0248]-[0250].

As further discussed for [1.b.i.A], the Walker system uses both a game structure and prizing structure. Crevelt¶246; Section IX.A.5. For game structure, Walker discloses adjusting game parameters (*programmable variable parameters*) such as “variables that affect the performance, scoring, difficult, outcome, or other aspects of the game.” EX1006, ¶[0155]; *see also id.*, ¶¶[0155]-[0166]. For prizing structure, Walker discloses adjusting prize parameters such as the prize that is awarded, or the median or mean score of a game to enable more players to achieve a score that corresponds to a prize. *Id.*, ¶[0028].

A POSITA would have understood that the controller stores (*store*) the predetermined criteria (*mandated parameters*) and game and prize parameters (*programmable variable parameters*) in memory. Crevelt¶247; EX1006, ¶[0077] (“The memory 425 [of the controller] also stores a predetermined criteria for results 435.”), ¶[0082] (“In one or more embodiments, gaming device 400 may access the predetermined criteria for results 435 from another device rather than storing it locally. For example, gaming device 400 may obtain such information from controller 300.”), ¶[0106] (“Note that game parameter values may be stored in a database and retrieved as needed by the gaming device. Alternatively, the gaming device 210 or controller 205 may calculate an appropriate value for a game parameter as necessary.”); ¶[0106] (“In another example, a binary indication (e.g.,

‘yes’ or ‘no’) of whether a prize was won as a result of a game play may be stored in the game play database.”) *see also* ¶¶[0067], [0246], Figure 8.

A POSITA would have also understood that the Walker system uses the predetermined criteria, as well as the game parameters and prizing, *for use in the course of game play* by determining whether a set of results meets the predetermined criteria (EX1006, ¶¶[0261]-[0264]), and if necessary, adjusting the game by “(i) determining the at least one goal of the adjustment; (ii) determining the one or more game parameters to be adjusted; (iii) determining a respective new value for each of the one or more game parameters to be adjusted; and (iv) executing the adjustment” (EX1006, ¶[0267]). Crevelt¶248.

5. [1.b.i.A]

Walker discloses this limitation. Crevelt¶¶249-252.

As discussed for I[1.b.i] (*see* Section IX.A.4), Walker discloses that one or more predetermined criteria (*mandated parameters*) of a system must be satisfied during game play (*must be achieved by the system as a whole*). Crevelt¶250. For example, a game may need to be adjusted to ensure that a predetermined standard deviation (*mandated parameter*[*J*]) is met by the system results (*must be achieved by the system as a whole*). Section IX.A.4.

Walker discloses *variable parameters that represent parameters characterizing at least one of: a game structure and a prizing structure.*

Crevelt¶251; *see also* EX1001, 6:6-9, 6:35-39. Like the '279 Patent, the Walker system uses both a *game structure* and *prizing structure*. Crevelt¶251. For *game structure*, Walker explains that the predetermined criteria can be achieved by adjusting “one or more game parameters” that “may be variables that affect the performance, scoring, difficulty, outcome, or other aspects of the game.” EX1006, ¶[0155]. These game parameters include “factors that affect the difficulty of a game (e.g., complexity of a game, hints provided, the sensitivity of controls, difficulty of trivia questions, number of opponents)” (EX1006, ¶[0156]), “rules of a game (e.g., number of strikes allowed in a baseball game, cost of vowels in a word guessing game)” (*id.*, ¶[0159]), “factors that affect the duration of a game (e.g., a number of rounds, a number of lives)” (*id.*, ¶[0160]) and “an amount of time that a player is allowed to achieve an event in a game or complete a game play of the game” (*id.*, ¶[0166]). *See generally* EX1006, ¶¶[0155]-[0166].

For *prizing structure*, Walker explains that the predetermined criteria can be achieved by adjusting “what prize is awarded.” EX1006, ¶[0028]. Walker further discloses “[a]n operator of a gaming establishment may desire to, for example, raise a median or mean score of a game in order to further motivate players by enabling more players to achieve a score that corresponds to a prize (e.g., a more valuable prize) or that is closer to a score that corresponds to a prize.” EX1006, ¶[0028].

6. [1.b.ii]

Walker discloses this limitation. Crevelt¶253-254. Walker explains that the game play database may store information pertaining to certain game play events such as “lives,” “rounds,” or “levels” (*record game play information regarding particular game play events*). EX1006, ¶¶[0027] (“A game play comprises an attempt to obtain a score or win a prize in accordance with the rules of the game and ends at a designated time (e.g., once the prize is won or **a number of ‘lives’ or ‘rounds’ is played** without having won the prize).”), [0160] (discussing game parameters such as “factors that affect the duration of a game (e.g., **a number of rounds, a number of lives**)”), [0163] (discussing game parameters such as “algorithms that control how points are awarded (e.g., a formula for the number of bonus points that a player receives at the[] end of **a round of a game play** or at the end of a game play”), [0245] (discussing “**number of levels** completed”), [0265] (discussing awarding of a prize “if a player achieves a particular...**level of achievement** in one or more game plays of a game (e.g., the player gets to **level 3 of the game** within two consecutive game plays)”), *see also id.*, ¶[0109] (“A game play database 330 stores information about individual game plays conducted on gaming devices of system 200.”). A POSITA would have understood that each of several lives/rounds is a game play event (*particular game play events*). Crevelt¶254.

7. [1.b.iii]

Walker discloses this limitation. Crevelt ¶¶255-256. As discussed for [1.a], the controller comprises a server with memory (EX1006, ¶[0064], and as discussed for [1.a.i], the controller's memory may store a plurality of databases, including a player database (*id.*, ¶[0067]). Walker further discloses that the player database stored on the server may include a player identifier such as a frequent gamer account (*store player's club information*). (*Id.*, ¶¶[0098] (“The tabular representation 500 of the player database 325 includes...fields for each of the entries or records. The fields specify: (i) a player identifier 505....”), [0100] (“[A] player identifier may be any information sufficient to identify a player. For example, a player identifier may include an indication of one or more of the following:...(viii) an identifier that identifies another type of account associated with a player (e.g., a frequent shopper or frequent gamer account).”).

8. [1.b.iii.A]

Walker discloses this limitation. Crevelt ¶¶257-258. As described above for Section IX.A.7, Walker discloses a player database that includes a player identifier 505 and other player identification information. EX1006, ¶[0098].

9. [1.b.iii.B]

Walker discloses this limitation. Crevelt ¶¶258-260. Walker discloses that the player's account in the player database may include the number of points a player

has won through game play (*the amount of player points*). EX1006, ¶[0231] (“[A] player may win 3400 points in a game play of a game and these points may be credited to his account in a player database stored by the controller 205 (e.g., the player database 325).”).

10. [1.c]

Walker discloses this limitation. Crevelt¶¶261-262. As discussed for limitations [1.a] and [1.b], Walker’s controller 205 has a *processor* and a *memory*. Sections IX.A.2-3. Walker discloses that the memory stores a plurality of databases including an “available game adjustments database” (EX1006, ¶[0067]), which “stores a variety of possible adjustments that may be made by the controller 205 to a particular game, along with the anticipated consequences of these modifications” (*id.*, ¶[0178]). Walker explains that “[t]he controller 205 may utilize the available game adjustments database 340 to select one or more game parameters to be adjusted for a game as well as to determine a new value for the game parameters selected to be adjusted.” *Id.*, ¶[0178]. A POSITA would have understood that these controller functions to implement, modify, and utilize the game and prizing variable parameters (as described in limitations [1.c.i-iii] in Sections IX.A.11-13) would have been performed by a software module (*play engine*) of the controller. Crevelt¶262. A POSITA would have also understood that the *play engine* would be *operating with the processor* since both are components of the controller, and would be *coupled to*

the memory since it would control functions that involve using the memory's game adjustment database. *Id.*

11. [1.c.i]

Walker discloses this limitation. Crevelt¶¶263-265. Walker discloses multiple ways of *implement[ing] a first set of programmable variable parameters to provide a first game play experience*. Crevelt¶264. Using the game structure, the system implements game parameters providing *a first game play experience* that is less difficult. *Id.* For example, the number of lives may first be set to 5, the speed of the spaceship may be set at a certain variable, or the precision of the spaceship may be set at a certain level. EX1006, ¶¶[0155]-[0166], Figure 8.

Using the prizing structure, the system implements prize parameters providing *a first game play experience* where the user obtains fewer prizes or less valuable prizes. Crevelt¶265. For example, the system may set the score to obtain a prize at a high score, or provide a lower monetary value prize. EX1006, ¶[0028].

12. [1.c.ii]

Walker discloses this limitation. Crevelt¶¶266-269. Walker discloses *modify[ing] one or more programmable variable parameters* (discussed in Sections IX.A.4-5) *to provide a second set of programmable variable parameters providing a second game play experience*. Crevelt¶267. Walker explains that the available

game adjustments are stored in the game adjustments database shown in Figure 8 below. EX1006, ¶[0177].

800

GAME IDENTIFIER: G-5327		802	
AVAILABLE ADJUSTMENT		ANTICIPATED CHANGE IN STANDARD DEVIATION	
	804	806	
R-8-01	INCREASE SPEED OF SPACESHIP BY 10-20%	+ 20 POINTS	R-8-02
R-8-03	DECREASE SPEED OF SPACESHIP BY 10-20 %	- 30 POINTS	
	INCREASE NUMBER OF LIVES FROM 3 TO 5	- 50 POINTS	R-8-04
R-8-05	INCREASE NUMBER OF HITS NEEDED TO DESTROY A SMALL METEORITE BY 30-50% AND INCREASE SPEED OF SMALL METEORITE BY 20-30%	+ 90 POINTS	
	INCREASE POINTS AWARDED FOR DESTROYING LARGE METEORITE BY 20-30%% AND DECREASE POINTS AWARDED FOR DESTROYING SMALL METEORITE BY 20-30%	- 100 POINTS	R-8-06
R-8-07	INCREASE TEMPO OF BACKGROUND MUSIC BY 5%	- 5 POINTS	
	ADD "SLOW DOWN / REVERSE DIRECTION" CAPABILITY TO SPACESHIP	+ 30 POINTS	R-8-08
R-8-09	DECREASE PRECISION OF SPACESHIP HEADING CONTROLS BY 2 DEGREES	- 40 POINTS	
	INCREASE SPEED OF MISSILES BY 10-20%	+ 15 POINTS	

FIG. 8

EX1006, FIG. 8

Using the game structure, Walker discloses modifying the first set of *programmable variable parameters* to provide a more difficult game play (*a second set of programmable variable parameters providing a second game play experience*). For example, the number of lives may be modified from 5 to 3, the speed of the spaceship may be modified to increase by 10-20%, and the precision

required by the spaceship controls may be increased by 2%. EX1006, Figure 8. Walker discloses that *the first game play experience differs from the second game play experience* because the second game play experience is more difficult than the first game play experience (e.g., less lives, speed of spaceship is faster and therefore less time to react, more precision required to control the spaceship). *Id.*; Crevelt¶268.

Using the *prizing structure*, Walker discloses modifying the first set of *programmable variable parameters* to obtain a different set of prizes (*a second set of programmable variable parameters providing a second game play experience*). Crevelt¶269. For example, the system may modify the score to achieve a prize to a lower score or provide a higher monetary value prize. EX1006, ¶[0028]. Walker discloses that *the first game play experience differs from the second game play experience* because in the second game play experience, it is easier to win a prize or easier to win a higher value prize. Crevelt¶269.

13. [1.c.iii]

Walker discloses this limitation. Crevelt¶¶270-271. As discussed for [1.c.ii], Walker discloses modifying game and prizing parameters (*programmable variable parameter sets*) such that the adjustment of the parameters from one set of values (*first...programmable variable parameter sets*) to a second set of values (*second programmable variable parameter sets*) provides two different game play experiences (*first and second game play experiences*). Section IX.A.12. As further

discussed for limitations [1.b.i] and [1.b.i.A], Walker discloses that the predetermined criteria (*mandated parameters*), such as the standard deviation of results, are achieved by modifying the game and prizing parameters. Sections IX.A.4-5. A POSITA would have thus understood that the two sets of variable parameters are used (*utilize the first and second programmable variable parameters sets*) to achieve the predetermined criteria (*to achieve the mandated parameters*) by switching from a first to second game play experience (*through at least the first and second game play experiences*). Crevelt¶271.

14. [1.d]

Walker discloses this limitation. Crevelt¶¶272-274; EX1001, 45:34-39.

Walker discloses a process for deciding whether game play results satisfy the mandated parameters and whether variable parameters need to be adjusted accordingly, as further discussed for limitations [1.d.i-ii] in Sections IX.A.15-16. Crevelt¶273. In particular, Walker explains that the evaluation process to determine whether mandated parameters are met may be triggered by various conditions, including the passage of a predetermined amount of time or the occurrence of a predetermined number of game plays. EX1006, ¶¶[0273]. If evaluation is triggered, the controller “determines a set of results obtained over a plurality of game plays of a game” and “retrieve[s] the set of results from a game play database.” *Id.*, ¶[0233]; *see also id.*, ¶¶[0234]-[0246]. Walker explains that the game play database is part of

the memory (*id.*, ¶[0067]) and “stores information about individual game plays conducted on gaming devices of system 200” (*id.*, ¶[0109]). The controller then “determine[s] whether the set of results selected...satisfies the one or more predetermined criteria associated with the game.” *Id.*, ¶[0248]; *see also id.*, ¶¶[0249]-[0265]. “If it is determined that a set of results for a game does not satisfy one or more predetermined criteria for the game, “the controller 205 adjusts the game” by “(i) determining the at least one goal of the adjustment; (ii) determining the one or more game parameters to be adjusted; (iii) determining a respective new value for each of the one or more game parameters to be adjusted; and (iv) executing the adjustment.” *Id.*, ¶[0267].

As discussed for limitations [1.a] and [1.b], Walker’s controller 205 has a *processor* and a *memory*. Sections IX.A.2-3. A POSITA would have also understood that the *decision engine* would be *operating with the processor* since both are components of the controller, and would be *coupled to the memory* since it would control functions that involve using the memory’s game play database. Crevelt¶274.

15. [1.d.i]

Walker discloses this limitation. Crevelt¶¶275-276. Walker discloses that the game play database discussed for [1.d] (*see* Section IX.A.14) “stores information about individual game plays conducted on gaming devices of system 200” (*recorded information regarding particular game play events*). EX1006, ¶[0109]. The software

module (*decision engine*) of Walker analyzes game play based on (*analyze game play as a function of*) the information in the game play database. Crevelt¶276. Walker discloses that the “game play database may be utilized, for example, to track results of game plays conducts by means of the system 200.” EX1006, ¶[0114]. “The tracked results may, in turn, be evaluated to determine whether a range of results satisfies one or more predetermined criteria.” *Id.*, ¶[0115].

16. [1.d.ii]

Walker discloses this limitation. Crevelt¶¶277-280. As discussed for [1.d], Walker discloses a process by which the *decision engine* evaluates a selected set of results from the game play database (*recorded game play information*) to determine if mandated parameters are achieved, and based on that determination, determines which game parameters to be adjusted (*determines the selection of...variable parameter sets utilizing the recorded game play information*) if the mandated parameters are not met. See Section IX.A.14. As discussed in limitations [1.b.i], [1.b.i.A], and [1.c.i-iii], Walker discloses that the adjustment/modification of gaming parameters involves *first* and *second programmable variable parameter sets*, including parameters characterizing *a game structure* and *prizing structure*. See Section IX.A.4-5, IX.A.11-13. Indeed, as discussed for [1.c.ii], the gaming parameters may be selected (*determine the selection of the first or second*

programmable variable parameter sets) from the game adjustments database in Figure 8. EX1006, ¶[0177], Fig. 8; Section IX.A.12.

Walker further discloses that this determination by the *decision engine* is performed *with predefined criteria*. Crevelt¶279. Walker discloses that the *predefined criteria* used in evaluation may include a predefined condition that triggers evaluation (EX1006, ¶¶[0273]-[0280]), a predefined set of results selected for evaluation (*id.*, ¶¶[0233]-[0244], a predefined statistic/metric (e.g., standard deviation, variance, or other mandated parameter) to evaluate (*id.*, ¶¶[0022]-[0023], [0245], [0248]-[0250]), and predefined game parameters (*variable parameter sets*) to modify if the mandated parameter is not achieved (*id.*, ¶¶[0155]-[0166]).

Walker also discloses the *predefined criteria including at least one of: a game structure and a prizing structure*. Crevelt¶280. As discussed for [1.b.i.A], Walker discloses that the available variable parameters (which as discussed above are one type of *predefined criteria*) may include parameters characterizing *game structure* and *prizing structure*. Section IX.A.5.

17. [1.e]

Walker renders obvious this limitation. Crevelt¶¶281-284. Walker discloses that the gaming device includes output device 410, which “may comprise, for example, a cathode ray tube (CRT) monitor, liquid crystal display (LCD) screen, or

light emitting diode (LED) screen” (*a display system for displaying*). EX1006,

¶[0070]; Fig. 4.

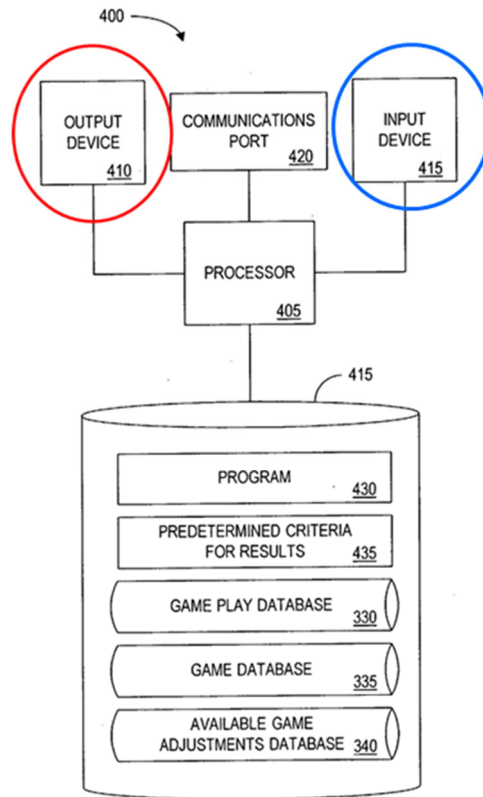


FIG. 4

EX1006, Fig. 4 (annotated)

Walker further discloses that the player database may include a player identifier such as a frequent gamer account (*player club*). (*Id.*, ¶[0098], [0100.

Although Walker does not expressly disclose that the displays of the gaming device display the frequent user points (*a display system for displaying at least the player club points*), a POSITA would have found this feature obvious. Crevelt¶284.

Such points engage players. *Id.* Displaying the points while the player is playing the game or providing ease of access through the gaming device is more likely to capture more player time, than forcing the player to look at the points in the player's account from a separate device. *Id.*

18. [1.f]

Walker discloses this limitation. Crevelt¶¶285-286. “Input device 415 may be a device that is capable of receiving an input (e.g., from a player or another device)” (*a system input for receiving player input*). EX1006, ¶[0087]. For example, Walker teaches that “a player may use a player device or a gaming device to select a game that he would like to play from a list of available games.” Crevelt¶286; EX1006, ¶[0219]. Walker explains that “the controller may...direct the gaming device to initiate the requested game.” EX1006, ¶[0220].

B. Dependent Claims

1. Claim 3

Walker alone or in view of the knowledge of a POSITA renders obvious this limitation. Crevelt¶¶287-288. As discussed for Section IX.A.9, a player's frequent gamer account (*player's club information*) includes the number of points a player has won through game play (*includes information on non-cash items*). EX1006, ¶[0231].

To the extent Walker does not explicitly disclose that a player's point total is connected to the player's frequent gamer account, a POSITA would have found it obvious to implement this feature. A POSITA would have understood that it would have been beneficial to implement a frequent gamer account such that the frequent gamer's identifier is directly associated with all cash balances, point balances (*non-cash items*), or other monetary or non-monetary values that serve as a player's credits for prizes or further game play because it would have improved the gaming experience for frequent gamers by allowing the gamer to easily access monetary and non-monetary account balances using the frequent gamer identifier. Moreover, such an implementation would have provided an easy way to track frequent gamer status by tracking metrics associated with gaming frequency in connection with the frequent gamer identifier. A POSITA would have also had a reasonable expectation of success in implementing this modification because it would have involved modifying Walker in a manner Walker suggests—using disclosed player account types (i.e., frequent gamer account) to track disclosed types of player information (i.e., point balances).

2. Claim 5

Walker discloses this limitation. Crevelt¶¶289-290. As discussed for [1.d] (*see* Section IX.A.14), Walker discloses selecting a set of results from all game plays (i.e., from all users/devices) (*game play information across multiple users devices*)

during a specific period of time (EX1006, ¶[0236]), evaluating whether the variance or standard deviation of those results is within a predetermined range or meets a predetermined threshold (*id.*, ¶[0249]), and adjusting game parameters (*the first set and second set of variable parameters*) based on that evaluation (*id.*, ¶[0267]). Accordingly, the adjusted game parameters (*the first set and second set of variable parameters*) use results from all game plays across multiple user devices (*utilize game play information across multiple users devices*). Crevelt¶289.

A POSITA would have also understood that calculating a variance or standard deviation of the selected set of results, which is performed when evaluating whether a game parameter adjustment must be made (*the first set and second set of variable parameters*), involves a comparison of the selected results (*utilize game play information across multiple users devices*) since variance and standard deviation are both measures of comparison within a data set to determine the amount of variation of values about a mean. *See* EX1006, ¶¶[0251]-[0258] (formulas for calculating variance and standard deviation both require subtracting the mean/average of all elements in the set from each current element).

3. Claim 6

Walker discloses this limitation. Crevelt¶¶291-292. As shown in Figure 6B below, the game play database records game play information such as a status (in red) indicating the current status of the game play. EX1006, ¶¶[0118] (“Referring

now to FIG. 6B, a tabular representation 640 illustrates an example record of another embodiment of a game play database 330.”), [0119] (“The record 640 includes a number of example fields, each field indicating information related to the game play of the record. The fields include...(vi) a status 662 that indicates a current status of the game play (e.g., ‘in progress’ or ‘completed’)....”). As shown, the status field may indicate if a specific game play resulted in no prize, i.e., a loss (*game play information includes information on a loss*).

650
↙

GAME PLAY IDENTIFIER: GP-100-893645 652		GAME IDENTIFIER: G-100 654	
PLAYER IDENTIFIER: P-8031902 656			
START TIME: 03/03/03 12:58 PM 658		END TIME: 03/03/03 1:24 PM 660	
STATUS: GAME FINISHED, NO PRIZE 662			
FINAL SCORE: 1,625 664			
EVENT(S) ACHIEVED 666	NUMBER OF OCCURRENCE(S) OF EVENT 668	POINTS / EVENT OCCURRENCE 670	POINTS FOR EVENT 672
A	22	25	550
B	15	25	375
C	11	50	550
D	3	50	150
E	0	200	0
F	0	500	0

FIG. 6B

EX1006, Fig. 6B (annotated)

4. Claim 7

Walker discloses this limitation. Crevelt ¶¶293-294. As shown in Figure 6A below, the game play database records information on a series of game outcomes for various players, games, etc. (*game play information includes information on a series of outcomes*). EX1006, ¶[0110] (“Referring now to FIG. 6A, an exemplary tabular representation 600 illustrates an embodiment of a game play database 330. The tabular representation 600 of the game play database 330 includes a number of example records or entries, each indicating a game play conducted on a gaming device of system 200.”).

600 ↘

GAME PLAY IDENTIFIER 605	GAME IDENTIFIER 610	PLAYER IDENTIFIER 615	START TIME 620	END TIME 625	RESULT ACHIEVED 630	GAMING DEVICE IDENTIFIER 635
GP-109-3984617	G-109	P-90327942	04/11/03 12:59 PM	04/11/03 1:21 PM	3,721	GD-99-003
GP-271-461703	G-271	P-90327942	04/11/03 1:23 PM	04/11/03 1:27 PM	PRIZE LEVEL 3	GD-11-072
GP-109-398403	G-109	P-01398419	04/11/03 1:23 PM	04/11/03 1:51 PM	4,921	GD-08-321
GP-602-19872311	G-602	P-72103022	04/11/03 1:39 PM	04/11/03 1:58 PM	16 TICKETS	66.6.77.101

FIG. 6A

EX1006, Fig. 6A

5. Claim 8

Walker discloses this limitation. Crevelt ¶¶295-296. As shown in Figure 6A above in Section IX.B.4, the game play database records *information* regarding the

result achieved, and *number of wins*. For example the player of the second game won a “Prize Level 3” and the player of the fourth game won “16 tickets.”

6. Claim 9

Walker discloses this limitation. Crevelt¶¶297-298. As discussed for Section IX.A.6, Walker explains that the game play database may store information pertaining to certain *game play events* such as “lives,” “rounds,” or “levels.” EX1006, ¶¶[0027], [0163], [0245], [0265]; *see also id.*, ¶[0109]. A POSITA would have understood that the information collected on the first life/round of several lives/rounds is a first game play event (*game play information includes information on a first game play event*). Crevelt¶298.

7. Claim 13

Walker discloses this limitation. Crevelt¶¶299-300. Walker discloses that the game play database tracks results of users’ game plays (*game play information includes information tracking the users play*) for further evaluation in determining whether results satisfy predetermined criteria. EX1006, ¶[0109] (“The game play database 330 may be used, for example, to **track results of game plays** for use in determining whether a range of results for a particular game satisfy one or more predetermined criteria.”).

8. Claim 17

Walker discloses this limitation. Crevelt ¶¶301-302. As discussed in [1.b.i], [1.b.i.A], and [1.c.i]-[1.c.iii], Walker discloses that game parameters may be adjusted if predetermined criteria are not met. *See* Sections IX.A.4-5, IX.A.11-13. For example, Walker explains that game parameters associated with bonus prizing can be modified (*the prizing structure is modified by modifying bonus prizing*), such as by changing the number of bonus items available, changing the formula for bonus points awarded at the end of a round, or activating bonus features. EX1006, ¶¶[0158] (discussing modification of game parameters such as “factors that affect a player’s ability to score points in a game (e.g., maximum number of points possible, **number of bonus items available**)”), [0163] (discussing modification of game parameters such as “algorithms that control how points are awarded (e.g., **a formula for the number of bonus points that a player receives at the[] end of a round of a game play or at the end of a game play**)”); *see also id.*, claim 22.

9. Claim 18

Walker discloses this limitation. Crevelt ¶¶303-304. As discussed for [1.b.1.A], Walker discloses that the variable parameters may represent parameters characterizing a *prizing structure*, including the prize that is awarded (*awarding of...prizes*). Section IX.A.5. As discussed for limitations [1.b.1.A] and [1.c.ii], these variable parameters, including those characterizing *prizing structure*, may be

modified in order to achieve the mandated parameters. Sections IX.A.5, IX.A.12. Walker discloses that prizes include not only money, but also any form of consideration such as products or services (*non-cash prizes*). EX1006, ¶[0223] (“In one or more embodiments, the controller 205 may provide one or more prizes to a player as a result of a game play. A prize may be any form of consideration, including currencies (e.g., money), products and services.”). Since Walker discloses that prizes encompass products and services (*non-cash prizes*), and discloses modifying prizing structure parameters such as the prize awarded in order to achieve the mandated parameters, Walker thus discloses *the prizing structure is modified by modifying awarding of non-cash prizes*. Crevelt¶304.

10. Claim 23

Walker discloses this limitation. Crevelt¶¶305-306. As discussed for limitations [1.d] and [1.d.i-ii], the controller has a software module (*decision engine*) that performs actions such as deciding which sets of game play information should be selected for analysis, analyzing the results to calculate variance, standard deviation, or other analytical measures, and comparing these values to predetermined thresholds to decide whether game parameters should be adjusted (*decision engine for game analytics*). Section IX.A.14-16. Walker further discloses the selected set of results may comprise “all game plays played by a particular player” (*tracks user specific play*). EX1006, ¶[0237].

11. Claim 25

Walker discloses this limitation. Crevelt¶¶307-308. As discussed in [1.d.ii], the *predefined criteria* may characterize a prizing structure. Section IX.A.16. A POSITA would have understood that in such a case *the predefined criteria is a predefined prizing criteria*. Crevelt¶308.

12. Claim 26

Walker discloses this limitation. Crevelt¶¶309-311.

First, Walker discloses that the *predefined criteria* that define mandated parameters achieved by the system may be *the number of wins*. EX1006, ¶[0245]. As discussed for [1.d.ii], these values, which reflect gaming achievements such as levels completed or questions correctly answered (*wins*), may then be compared to the predetermined threshold (i.e., the mandated parameters). *See* Section IX.A.16; EX1006, ¶[0249]; Crevelt¶310. Second, Walker discloses that the *predefined criteria* that define the variable parameters that may be selected may be *the number of wins*. EX1006, ¶[0157]; Crevelt¶311.

13. Claim 28

Walker discloses this limitation. Crevelt¶¶312-314.

First, Walker discloses that the *predefined criteria* that define mandated parameters achieved by the system may be *the amount of time played*. EX1006, ¶[0245]. As discussed for [1.d.ii], these values, which reflect gaming achievements

such as total time played, may then be compared to the predetermined threshold (i.e., the mandated parameters). *See* Section IX.A.16; EX1006, ¶[0249]; Crevelt¶313.

Second, Walker discloses that the *predefined criteria* that define the variable parameters that may be selected may be *the amount of time played*. *Id.* Walker describes adjusting game parameters such as “factors that affect the duration of a game” (EX1006, ¶[0160]) and “an amount of time that a player is allowed to achieve an event in a game or complete a game play of the game” (*id.*, ¶[0166]). Crevelt¶314.

14. Claim 29

Walker discloses this limitation. Crevelt¶¶315-319.

First, Walker discloses that the *predefined criteria* for triggering an evaluation of results may be *the number of plays for a player*. EX1006, ¶¶[0276], [0273], [0237]; Crevelt¶316. Second, Walker discloses that the *predefined criteria* for selecting a set of results for evaluation may be *the number of plays for a player*. EX1006, ¶[0237]; Crevelt¶317. Third, Walker discloses that the *predefined criteria* that define mandated parameters achieved by the system may be *the number of plays for a player*. EX1006, ¶[0245]; Crevelt¶318. Fourth, Walker discloses that the *predefined criteria* that define the variable parameters that may be selected may be *the number of plays for a player*. EX1006, ¶[0160]; Crevelt¶319.

**X. GROUND 3: WALKER IN VIEW OF SCHNEIER143 RENDERS
OBVIOUS CLAIM 4**

A. Motivation to Combine

A POSITA would have been motivated to combine the teachings of Walker and Schneier143. Crevelt¶¶320-322. Specifically, a POSITA would have recognized that the use of non-cash items by Schneier143 would have been a natural extension of the points in Walker. Crevelt¶¶320.

First, Walker and Schneier143 share the same inventors—namely Jay Walker and James Jorasch. A POSITA implementing and improving the system of Walker would have naturally looked at other patents and applications of the inventors of Walker to identify any features or details that would have improved the system. Crevelt¶¶321.

Second, the use of credits or points during game play, not just to engage in game play, would have enhanced the user experience. Crevelt¶¶322. For less skilled players, the ability to purchase items that advance the player to the next level would have prevented the player from becoming frustrated. *Id.* For more advanced players, the ability to earn credit during game play would have made the game more interesting. *Id.*

B. Reasonable Expectation of Success

A POSITA would have been able to implement the use of non-cash items taught by Schneier143 into the game system of Walker with a reasonable expectation of success. Crevelt¶¶323-325.

First, the systems of Walker and Schneier143 have substantially similar structures and functions. Crevelt¶¶324. Given that Walker and Schneier143 share the same inventors, these structures and function even share the same names. Crevelt¶324. Importantly, Walker and Schneier143 use credits in the same way. *Id.* Indeed, Schneier143 merely discloses more detailed functionality.

Second, it would have involved a combination of known technologies (processors, memory) according to known methods (programming) to yield the predictable result of adding more functionality to an object in the game—namely, credits. Crevelt¶325.

C. Dependent Claim 4

Walker in view of Schneier143 renders obvious this limitation. Crevelt¶¶326-330. Schneier143 discloses that credits can purchase items that allow the player to advance in the game (*non-cash item is an image*). For example, Schneier143 discloses “[e]xtra credits can be required to complete restricted stages of a game” or “the player could be charged an additional credit for the use of a special weapon, access to a map of the dungeon, or hints on avoiding traps.” EX1008, 63:12-19.

Schneier¹⁴³ also discloses how “[e]ach credit might also buy a certain number of lives.” *Id.*, 63:37-38, 63:8-11.

PO has taken the position that this limitation is met when “store information about registered players, including their identity, the number of player points accrued, including gold bars...” EX1010, 36. PO specifically identifies an image offer a player to purchase five additional moves for 12 gold bars. *Id.*, 5. Notably, the ’279 Patent does not use the term *image* in relation to virtual money, non-cash purchase, or advancement to another level.

Based on PO’s position, a POSITA would have understood that the purchase of a non-cash good such as access to restricted portions of the game, game items, or lives, would include an image. Crevelt ¶329. Each purchase would need to be reflected in the display of the game through an image, so that the user could use that purchase to advance to another level. *Id.*

A POSITA would have been motivated to modify the *player’s club information* of the Walker system to include non-cash item images as taught by Schneier¹⁴³ because it would have tailored the experience to the user. Crevelt ¶330. A POSITA would have had a reasonable expectation of success because it would have required a mere change of programming. *Id.*

XI. SECONDARY CONSIDERATIONS

There are no secondary considerations known to Petitioner that affect this strong case of obviousness.

XII. THE BOARD SHOULD REACH THE MERITS

A. Institution is appropriate under § 325(d)

Institution is appropriate under § 325(d) because substantially the same art and arguments have never been presented to or considered by the Office. *Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH*, IPR2019-01469, Paper 6 at 6-11 (Feb. 13, 2020) (precedential). Specifically, Kelly683, Walker, and Schneier143 were not considered during prosecution, and therefore, these combinations were never before the Office.

B. Institution is appropriate under § 314(a)

In the parallel litigation, there is no trial scheduled and the case is currently stayed. Thus, *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (Mar. 11, 2020) (precedential) is inapplicable. Should PO seek denial under *Fintiv*, Petitioner will seek permission to reply to address the facts and law as they stand at the time.

XIII. CONCLUSION

For these reasons, Petitioner respectfully requests institution.

Dated: March 27, 2025

Respectfully submitted,

By: / Lisa K. Nguyen /
Lisa K. Nguyen (Reg. No. 58,018)

U.S. Patent No. 11,393,279
Petition for *Inter Partes* Review

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CLAIM LISTING APPENDIX

Claims 1, 3-9, 13, 17, 18, 23, 25, 26, 28, and 29

1. A system for dynamically varying game play parameters in an electronic environment, over a communications network between multiple users of the system at multiple locations and a remote location including a play engine, the users utilizing communication devices, the communication devices having input capability and generate an output corresponding to the input, comprising:
 - [a] a processor,
 - [b] memory to:
 - [b.i] store mandated and programmable variable parameters for use in the course of game play,
 - [b.i.A] wherein, the mandated parameters represent parameters which must be achieved by the system as a whole, and the programmable variable parameters represent parameters characterizing at least one of: a game structure and a prizing structure,
 - [b.ii] record game play information regarding particular game play events, and
 - [b.iii] store player's club information, including at least
 - [b.iii.A] (i) player identification information, and
 - [b.iii.B] (ii) the amount of player points,
 - [c] a play engine coupled to the memory and operating with the processor to:
 - [c.i] implement a first set of programmable variable parameters to provide a first game play experience,
 - [c.ii] modify one or more programmable variable parameters to provide a second set of programmable variable parameters providing a second game play experience, wherein the first game play experience differs

from the second game play experience, and

[c.iii] utilize the first and second programmable variable parameter sets to achieve the mandated parameters through at least the first and second game play experiences,

[d] a decision engine coupled to the memory and operating with the processor to:

[d.i] (i) analyze game play as a function of the recorded information regarding particular game play events, and

[d.ii] (ii) determine the selection of the first or second programmable variable parameter sets utilizing the recorded game play information with predefined criteria including at least one of: a game structure and a prizing structure,

[e] a display system for displaying at least the player club points, and

[f] a system input for receiving player input.

3. The system for electronic game play of claim 1 wherein the player's club information includes information on non-cash items.
4. The system for electronic game play of claim 3 wherein the player's club information includes information on non-cash item is an image.
5. The system for electronic game play of claim 1 wherein the first set and second set of variable parameters utilize game play information across multiple users devices.
6. The system for electronic game play of claim 1 wherein the game play information includes information on a loss.
7. The system for electronic game play of claim 1 wherein the game play information includes information on a series of outcomes.
8. The system for electronic game play of claim 1 wherein the game play information includes information on the number of wins.
9. The system for electronic game play of claim 1 wherein the game play information includes information on a first game play event.

13. The system for electronic game play of claim 1 wherein the game play information includes information tracking the users play.
17. The system for electronic game play of claim 1 wherein the prizing structure is modified by modifying bonus prizing.
18. The system for electronic game play of claim 1 wherein the prizing structure is modified by modifying awarding of non-cash prizes.
23. The system for electronic game play of claim 1 wherein the decision engine for game analytics tracks user specific play.
25. The system for electronic game play of claim 1 wherein the predefined criteria is a predefined prizing criteria.
26. The system for electronic game play of claim 1 wherein the predefined criteria is the number of wins.
28. The system for electronic game play of claim 1 wherein the predefined criteria is the amount of time played.
29. The system for electronic game play of claim 1 wherein the predefined criteria is the number of plays for a player.

•

CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.24(d), the undersigned certifies that foregoing
**PETITION FOR INTER PARTES REVIEW OF U.S. PATENT NO.
11,393,279** exclusive of the parts exempted as provided in 37 C.F.R. § 42.24(a),
contains 13,842 words and therefore complies with the type-volume limitations of
37 C.F.R. § 42.24(a).

Dated: March 27, 2025

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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing (**CORRECTED**)
PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 11,393,279
AND EXHIBIT EX1003 are being served on March 28, 2025, via Federal Express
overnight mail on counsel of record for U.S. Patent No. 11,393,279 as addressed
below:

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A courtesy copy is also being served on counsel for the patent holder in the
pending litigation on March 27, 2025, via Federal Express:

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