

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

**PATENT OWNER MILESTONE ENTERTAINMENT, LLC'S RESPONSE
TO PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO.
11,393,279**

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List of Patent Owner's Exhibits

Ex. No.	Description
2001	U.S. Patent No. 7,798,896
2002	U.S. Patent No. 5,816,918
2003	File History (excerpted), U.S. Patent No. 7,798,896
2004	New Matter form dated Dec. 10, 2002
2005	Invention disclosure
2006	Provisional application No. 60/378,289, filed on May 6, 2002 ("Walker Provisional")
2007	Information Disclosure Statement ("IDS") filed by Microsoft in connection with U.S. Patent App. No. 12/652,289
2008	U.S. Patent Application Publication No. 2006/0287051
2009	Declaration of William P. Nelson in Support of Patent Owner's Motion for <i>Pro Hac Vice</i> Admission
2010	Declaration of Matthew D. Powers in Support of Patent Owner's Motion for <i>Pro Hac Vice</i> Admission
2011	Intentionally Omitted
2012	Declaration of John Szeder in Support of Patent Owner Milestone Entertainment, LLC's Response to Petition for <i>Inter Partes</i> Review of U.S. Patent No. 11,393,279, with Attachment 1 (Szeder Curriculum Vitae)
2013	Declaration of David Murphy in Support of Patent Owner Milestone Entertainment, LLC's Response to Petition for <i>Inter Partes</i> Review of U.S. Patent No. 11,393,279
2014	U.S. Patent Application No. 10/123,861
2015	U.S. Patent No. 8,393,946
2016	December 4, 2002 Meeting Notes
2017	Declaration of Randall Katz in Support of Patent Owner Milestone Entertainment, LLC's Response to Petition for <i>Inter Partes</i> Review of U.S. Patent No. 11,393,279
2018	<i>Activision Blizzard, Inc. v. Milestone Entertainment, LLC</i> , IPR2025-00713, Paper 15, Decision Denying Institution (P.T.A.B. Oct. 16, 2025)
2019	<i>Activision Blizzard, Inc. v. Milestone Entertainment, LLC</i> , IPR2025-00713, Paper 1, Petition (P.T.A.B. Mar. 26, 2025)
2020	Deposition Transcript of Dwight Crevelt, dated December 19, 2025
2021	Screen image of O'Melveny Document Management System

Ex. No.	Description
2022	Selected billing records, 2002-2003
2023	Selected billing records, March-April 2003
2024	Selected billing records, May 2003
2025	Selected billing records, June 30 – July 31, 2003
2026	Selected billing records, August – September 2003

I. INTRODUCTION

Milestone Entertainment, LLC (“PO” or “Patent Owner”) respectfully submits this Response responding to the Petition for *inter partes* review (the “Petition”) filed by Activision Blizzard, Inc. (“Petitioner”) against Claims 1, 3-9, 13, 17-18, 23, 25-26, 28 and 29 (“the challenged claims”) of U.S. Patent No. 11,393,279 (“the 279 Patent”). As discussed in detail below, Petitioner presents three grounds (one based on Kelly as the primary reference and two based on Walker as the primary reference) and each ground suffers from deficiencies that are fatal to its attempt to show unpatentability. For Ground 1, Petitioner has failed to demonstrate that Kelly, alone or in combination with the knowledge of a POSITA, meets each and every limitation of the challenged claims. For Grounds 2 and 3, Walker is not prior art to the challenged claims, because the evidence shows that the inventors of the 279 Patent conceived the claimed inventions prior to the effective filing date of the Walker application, and worked diligently to reduce them to practice. The Petition thus fails to demonstrate the unpatentability of any claim.

II. BACKGROUND

A. THE 279 PATENT

The 279 Patent claims recite inventive new components, such as a “play engine,” which can dynamically modify game play parameters (recited as “variable parameters”). Those variable parameters include both the structure of the game (*e.g.*, the difficulty of the game, the number of game levels, or the game pieces provided),

the odds, and its prizing (e.g., the amount, or frequency, of awards, bonuses, and prizing). The system modifies these parameters programmatically, based on analysis of game play events, in order to achieve a set of objectives which the system must achieve as a whole (recited as “mandated parameters”).

For example, the specification explains that the play engine can modify “game play parameters” including “*awarding extended game play, providing free play awards, advancing a player one or more levels based upon game play*” or even adjusting win/loss probabilities to make the game more difficult or less difficult. 279 Patent (Ex1001) at 16:20-42.

As an example of this dynamic in action, the 279 Patent contrasts its invention with traditional games with fixed rules, like traditional blackjack games. As the specification explains, in a “predetermined mode” – *i.e.*, blackjack as it has always been played – the “system may be arranged for a particular payout, e.g., 2.5% goes to the house, where the outcomes of the game play and the prize amounts are set for that result.” *Id.* at 42:56-59. In accordance with the invention, however, the specification explains that the game may be played with a set of variable parameters that alter the odds of the game, which permits “the results of game play to correspond to the desired prizing parameters.” *Id.* at 42:62-63. In fact, the specification explains that in blackjack according to the claimed inventions, it will force certain outcomes to obtain the mandated parameters. As the specification explains, while the

mandated parameters are being met, “the system may play blackjack in the normal manner.” *Id.* at 43:42-43. However, “if [] there are less than all possible outcomes remaining, e.g., all monetary prizes have been won, and so the play must lose, then ***the system will force that outcome.*** If the player has 17, the system will select and display a card totaling at least 18, and not more than 21, such that the system wins and the player loses.” *Id.* at 43:43-49.

As another example of how the play engine can dynamically alter games, the system may monitor “usage of games and to correlate the game's popularity with the prizing structure” – by increasing the value of prizes, or by offering more frequent, but lower value, prizes to keep players engaged:

The system may monitor both usage of the game in terms of numbers of players, ***but may also track user specific play***, such as the number of times a game is played during one contact or session. . . . ***This data on game play may be utilized by the system as inputs for a decision engine to optimize the prizing structure for a desired end goal, e.g., maximizing game play and therefore sales of game plays.*** The system may ***store data on prior game play activities relative to given games, and then utilize that information, either specifically or on a statistical basis, to optimize the selection of a prizing structure.***

Id. at 44:55-45:2.

Specifically, the claimed play engine interacts with a “decision engine,” which decides whether game parameters should be modified by analyzing users’

game play, which is recorded by the system. The claim explains that the decision engine analyzes recorded game play to compare with a set of predefined criteria. Such criteria can include “the number of times a game is played during one contact or session, whether the player continuously plays the game without interruption, e.g., diverting to other forms of entertainment or information, and the frequency between player visits”. *Id.* at 44:57-61. As another example, the threshold criteria can include a win/loss rate for the game. *Id.* at 42:37-40. Once those predefined criteria are met, the decision engine determines a “second set of programmable variable parameters providing a second game play experience”, which are implemented to dynamically alter the game.

The interaction of the claimed play engine and decision engine enables game play to achieve a set of “mandated parameters,” which are objectives that “must be achieved by the system as a whole.” *Id.* at 5:6-7. These mandated parameters “may consist of prize pay 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.* at 5:12-15.

As the specification explains, this capability to analyze game play and programmatically alter the structure of the game inventively solves a known problem in the field of computerized gaming – how to programmatically achieve a set of game objectives, such as an overall win probability, the desired amount of time

played, or the overall prizing payout while obtaining a “higher level of audience interest and potential participation.” *Id.* at 14:17-18; *see also id.* at 5:34-37 (“The systems and methods of these inventions permit greatly enhanced flexibility in game play and the prizing experience for a player, while globally achieving the mandated parameters.”); *id.* at 7:42-43 (“Player interest may be maintained, while also maintaining the prizing structure and parameters”).

B. OVERVIEW OF THE REFERENCES

1. Kelly (Ex1005)

As Petitioners note, Kelly discloses a networked gaming system that provides “an ***operator***” of that gaming system – not the computer system itself - “the ability to adjust prizes and determine the desired prize costs and win ratios.” Ex1005 at 5:4-5. As Petitioners further note, Kelly 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.” *Id.* at 38:62-65. Kelly confirms that its game adjustments, such as the “speed” and “difficulty” game aspects relied on by Petitioners, are ***operator-determined***. *Id.* at 16:13-21 (emphasis added)(“the control system can include ***operator-configurable controls*** to provide ***selectable*** game functions such as . . .the speed and/or difficulty of game play, the conditions required to add to the game score and/or receive universal or specific prize tickets, the conditions required for a player to win a progressive bonus award or enter a

tournament, and the like.”); *id.* at 34:51-54 (“FIG. 9 is a flow diagram illustrating a process 440 of the present invention for *allowing the operator of the game redemption system to adjust prize characteristics* of the system.”); *id.* at 38:58-59 (“It is possible for the game's *manufacturer* to adjust game difficulty”).

Kelly also teaches “global payout percentage[s]” and “win ratios,” which Petitioner contends discloses the 279 Patent’s claimed, “mandated parameters.” *Id.* at 5:30-43. As discussed below, that has particular relevance to Patent Owner’s demonstration of invention of the challenged claims prior to any priority date to which Schneier143 entitled.

2. Walker (Ex1006)

Walker concerns a system that monitors electronic game play and adjusts game parameters to attempt to “ensure that a set of results obtained during a plurality of game plays of a game satisfy one or more predetermined criteria.” Ex1006 at [0022]. As explained below, Walker is not prior art to the 279 Patent.

3. Schneier143 (Ex1008)

Schneier143 describes, *inter alia*, a system for purchasing and utilizing game credits in an electronic gaming system. Ex1008 at 63:13-19.

III. PERSON HAVING ORDINARY SKILL IN THE ART (“POSITA”)

Petitioner contends that a person of ordinary skill in the art (“POSITA”) in 2004 “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.” Pet. at

11. For the purposes of this response, Patent Owner does not dispute Petitioners' proposed level of skill, and under any level of skill a POSITA would not understand the asserted Grounds to raise any unpatentability issue. Accordingly, this POR and supporting declarations apply Petitioner's proposed level of skill.

IV. CLAIM CONSTRUCTION

The Board need not construe any terms at this stage, because under any reasonable construction of the claim terms, the prior art fails to disclose or suggest the claimed features, and Walker is not prior art. Thus, no claims should be construed because the Board only construes the claims when necessary to resolve the underlying controversy. *Toyota Motor Corp. v. Cellport Systems, Inc.*, IPR2015-00633, Paper 11 at 16 (P.T.A.B. Aug. 14, 2015) (citing *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

V. PETITIONERS HAVE FAILED TO SHOW THAT ANY INSTITUTED GROUNDS RENDER THE CHALLENGED CLAIMS OF THE 279 PATENT UNPATENTABLE

A. Ground 1: Kelly, Alone Or In Combination With The Knowledge Of A POSITA

1. Independent Claim 1

a. Limitation 1[b.ii]: “memory to... record game play information regarding particular game play events”

Petitioner has failed to identify any disclosure in Kelly of the 279 Patent's “memory to... record game play information regarding particular game play events” as recited in limitation 1[b.ii] of independent Claim 1, from which all challenged

claims depend. Ex2012, ¶68. Accordingly, it has failed to establish that any asserted claim is unpatentable under these grounds.

Petitioner points to disclosures that Kelly’s system receives “user inputs” - *e.g.*, button presses – that are interpreted by the game processor and “influences game states and game events in the game process accordingly.” Pet. at 22-23 (citing Kelly at 10:12-15, 1:44-46, 9:62-66, 46:32-37, 46:49-52). There are multiple problems with Petitioner’s contention. First, there is no disclosure that Kelly’s button presses are recorded in memory, as the claim requires, rather than being interpreted and simply not saved. Nor do Petitioners identify any disclosure that Kelly’s system analyzes these ephemeral “user inputs” to determine the selection of appropriate game parameters, as required by limitation 1[f] (there is none). Ex2012, ¶69. Second, a POSITA would not regard Kelly’s “user inputs” such as button presses to be “game play events” recorded by the 279 Patent system. The 279 Patent consistently describes the “game play events” which are recorded and analyzed as providing information about game outcomes, programs or progress – not that, for example, the user pressed a button. *See, e.g.*, Ex1001 at 17:36-38 (“The strike display 220 shows a depiction of the number of negative events, here strikes, which have occurred.”); *id.* at 18:21-24 (“In such a system, the system could update the negative result tally at box 52, and perform a comparison 54 of the totaled number of negative events to the maximum number of negative events allowed.”); *id.* at 40:6-9 (“It may

be desirable to have the outcome of the play event appear to be as consistent with the perceived odds, or the actual odds, and thus as normal as possible,”); *id.* at 42:37-40 (“A certain number, or a certain number of type of wins, may be required for very set number of events, e.g., 5 wins of \$2 for every 20 plays.”); *id.* at 43:63-64 (“A set of outcomes for those games is stored.”). Ex2012, ¶69.

In IPR2025-00713, the Board has already found that Petitioner’s arguments fail to establish unpatentability in connection with an essentially identical claim limitation in U.S. Patent No. 11,501,607. *See* Ex2018 (Decision Denying Institution in IPR2025-00713). There, for the limitation [1.a.ii], reciting a “server including memory to process and *store* . . . game play information regarding particular game play events,” Petitioner relied on exactly the same disclosures in Kelly relied upon here. Ex2019 (Petition, IPR2025-00713) at 22. On this evidence, the Board “agree[d] with Patent Owner that Petitioner has failed to provide adequate evidence and analysis to show that Kelly discloses storing the identified user input in Kelly’s system,” and found that the relied-on portions of Kelly “makes no mention of storing the user input.” Ex2018 at 19. The Board further noted that “Petitioner also cites generally to other portions of Kelly with insufficient explanation of their relevance,” and “fails to sufficiently show how any of these passages describes storing user input, such as button presses, in Kelly’s system.” *Id.* The same result is mandated here. Ex2012, ¶70.

Petitioner also contends that Kelly “also discloses recording which games the user previously played.” Pet. at 23. Here, Petitioner relies on a disclosure in Kelly describing “receiving an identifier from the game apparatus” including receiving “a game identifier relating to a particular game played by the user.” *Id.* This contention also does not demonstrate that Kelly discloses or renders obvious this limitation. First, receiving a “game identifier” – the identity of a game that has been played – is not a “game play event. Nor is the identity of a game a “particular game play *event*”. Ex2012, ¶71. And neither the Petition nor Petitioner’s expert ever explain how they could be. Second, Petitioner provides no discussion or analysis of how such a “game identifier” is analyzed in limitation 1[d.i], reciting “analyze game play as a *function of the recorded information regarding particular game play events*”, or what role it plays in limitation 1[d.ii]’s “determin[ing] the selection of the first or second programmable variable parameter sets *utilizing the recorded game play information*,” as required by the claim. Ex2012, ¶72.

b. Limitation 1[d.i]

Petitioner has also failed to identify any disclosure in Kelly of the 279 Patent’s step of “analyze game play as a function of the recorded information regarding particular game play events,” as recited in limitation 1[d.i] of independent Claim 1, from which all challenged claims depend for Ground 1. Accordingly, it has failed to establish that any asserted claim is unpatentable under this ground.

Petitioner relies on the purported disclosure in Kelly that the “game system analyzes game play as a function of difficulty or past wins” as disclosing this limitation. Pet. at 31. For example, Petitioner asserts that 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.” *Id.* at 32. Similarly, Petitioner contends that 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.” *Id.*

Once again, there are multiple deficiencies in Petitioners’ showing. First, the plain language of the limitation, including the use of the definite article “the,” makes clear that “***the*** recorded information regarding particular game play events” upon which analytics are performed must be those which were recorded in limitation 1[b.ii], which recites “memory to... record game play information regarding particular game play events.” Ex2012, ¶¶74-75. However, Petitioner did not identify any of the “game play events” it alleges are analyzed in this step – specifically, “difficulty or past wins” – as the data that is ***recorded*** in connection with limitation 1[b.ii]. Pet. at 22-23. Instead, as discussed above, Petitioners identified only “user input[s]” – e.g., button presses – that are interpreted by the game processor, and a

“game identifier” as being the “game play events” stored by the system. Pet. at 22-23 (citing Kelly at 10:12-15, 1:44-46, 9:62-66, 46:32-37, 46:49-52). Petitioner never contends that the supposed “game play events” identified for limitation 1[d.i] are those recorded by the system in connection with limitation 1[b.ii]. Nor does Petitioner ever demonstrate, much less contend, that the “user inputs” or “game identifier” Petitioners alleged to be recorded in limitation 1[b.ii] are ever “analyzed” as this limitation 1[d.i] requires. *See* Pet. at 31-32. Ex2012, ¶75. As such, Petitioner has failed to show that Kelly discloses or renders obvious this limitation.

In IPR2025-00713, the Board has already found that Petitioner’s arguments fail to establish unpatentability in connection with a substantively identical claim limitation in U.S. Patent No. 11,501,607. *See* Ex2018 (Decision Denying Institution in IPR2025-00713). There, for the limitation [1.e], reciting a “a decision engine *for performing game analytics on the game play* and determine the selection of the first or second programmable variable parameters utilizing the recorded game play information with predetermined criteria,” Petitioner relied on exactly the same disclosures in Kelly relied upon here. Ex2019 (Petition, IPR2025-00713) at 33-34. On this evidence, the Board “agree[d] with Patent Owner that Petitioner fails to show a reasonable likelihood of prevailing on this claim limitation because *the game play events identified by Petitioner to satisfy limitation [1.a.ii] are not the same game play events that Petitioner cites in support of limitation [1.e]*. Claim 1 requires in

limitation [1.e] that the decision engine determines the selection of the first or second programmable variable parameters utilizing ‘*the recorded game play information,*’ referring back to the recorded game play information introduced in limitation [1.a.ii]. Ex. 1001, 47:54–58 (emphasis added). ***Petitioner, however, fails to adequately explain how data, such as the number of times the player has played, is the game play information, i.e., button presses, that was allegedly stored by the server in limitation [1.a.ii].***” Ex2018 (Decision Denying Institution in IPR2025-00713) at 21. The same result is warranted here. Ex2012, ¶76.

c. Limitation 1[d.ii]

Petitioner has also failed to identify any disclosure in Kelly of the 279 Patent’s “determine the selection of the first or second programmable variable parameter sets utilizing the recorded game play information,” as recited in limitation 1[d.ii] of independent Claim 1, from which all challenged claims depend for Ground 1. Accordingly, it has failed to establish that any asserted claim is unpatentable under this ground.

For limitation 1[d.ii], Petitioner contends that Kelly “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).*” Pet. at 32-33. As noted in connection with limitation 1[d.i], however, “difficulty or past wins” is not the “the recorded game play information”

of limitation 1[b.ii], which Petitioner has identified as “user inputs” and a “game identifier.” Pet. at 22-23. Nowhere for this limitation 1[d.ii] does Petitioner demonstrate or explain that the “user inputs” or “game identifier” it has identified as the recorded game play events are “utilized” to “determine the selection of the first or second programmable variable parameter sets” as this limitation requires. Petitioner points to something different: “difficulty or past wins.” Ex2012, ¶78. The Petition therefore fails to demonstrate unpatentability.

Even as to “difficulty or past wins,” Petitioners have failed to demonstrate that Kelly discloses or renders obvious this limitation, which requires “utilizing” the “recorded game play information” to “determine the selection of the first or second programmable variable parameter sets.” For “difficulty,” Petitioner contends that “if the game is too easy or difficult, the difficulty can be adjusted during the course of play.” Pet. at 33. Even if that assertion is true, it does not disclose this limitation. Nowhere do Petitioners demonstrate, or even contend that game “difficulty” is recorded information that is utilized to *determine* the selection of variable parameter sets, which is what the limitation requires. Similarly, for “past wins,” Petitioners contend that “if the global payout or win ratio is too high based on past wins, the prize 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.”). *Id.* at 33. That contention also does not demonstrate that “recorded game play information” (*i.e.*, a “past win”) is “utilized” to “determine the selection of the first or second programmable variable parameter sets.” Petitioner’s cited evidence identifies no disclosure of “past wins”, or how they are utilized to determine whether to select a first or second variable parameter set, or how a POSITA would understand the example from Kelly to do so. Ex2012, ¶79.

In IPR2025-00713, the Board has already found that the same arguments and evidence fail to establish unpatentability in connection with a substantively identical claim limitation in U.S. Patent No. 11,501,607. *See* Ex2018 (Decision Denying Institution in IPR2025-00713). There, for the limitation [1.e], reciting a “a decision engine for performing game analytics on the game play and ***determine the selection of the first or second programmable variable parameters utilizing the recorded game play information with predetermined criteria***,” Petitioner relied on exactly the same disclosures in Kelly relied upon here. Ex2019 (Petition, IPR2025-00713) at 32-33. On this evidence, the Board found that Petitioner had not demonstrated disclosure of the limitation:

Specifically, Kelly uses the operator’s desired odds of winning the available prize, in combination the number of prizes already awarded, as the statistical information to determine which prize to award,

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. For example, the next most valuable prize in the list can be awarded instead of the video console, as long as awarding the next prize would fit the desired odds for that prize.

Id. at 37:1–9; Fig. 9a. ***Petitioner has failed to adequately explain where the “statistical information” discussed above from columns 25, 32, 40, and 56 of Kelly is used in the example described in column 36 to select between variable parameters based on stored game play events.***

Ex2018 (Decision Denying Institution in IPR2025-00713) at 23. The same result is mandated here. Ex2012, ¶80.

d. Limitation 1[c.iii]

Petitioner has failed to identify any disclosure in Kelly of “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” as recited in limitation 1[c.iii] of independent Claim 1, from which all challenged claims depend. Accordingly, it has failed to establish a reasonable likelihood that any asserted claim is unpatentable under these Grounds.

Petitioner points to disclosures that Kelly’s system can change the “speed” or “difficulty” of games as satisfying this limitation. Pet. at 28. But it is not enough to disclose changing game variables. Rather, limitation 1[c.iii] requires a “play engine”

– a piece of software – that can programmatically utilize two sets of variable game play parameters to achieve a set of mandated parameters. Ex2012, ¶81.

Petitioners have failed to show any such disclosure in Kelly. Kelly confirms that its game adjustments, such as the “speed” and “difficulty” game aspects relied on by Petitioners, are *operator-determined*. Ex1005 at 16:13-21 (“the control system can include *operator-configurable controls* to provide *selectable* game functions such as . . . the speed and/or difficulty of game play, the conditions required to add to the game score and/or receive universal or specific prize tickets, the conditions required for a player to win a progressive bonus award or enter a tournament, and the like.”); *id.* at 34:51-54 (“FIG. 9 is a flow diagram illustrating a process 440 of the present invention for *allowing the operator of the game redemption system to adjust prize characteristics* of the system.”); *id.* at 34:66-35:8 (“The prize table 480 is preferably displayed by a display screen, such as screen 56 of game unit 10 or 50, so that *the operator can adjust prize characteristics for that game unit* and any linked game units, if desired.”); *See also id.* at 38:58-59. Such operator-determined adjustments cannot disclose this limitation. Ex2012, ¶81.

2. Dependent Claims 3-9, 13, 17-18, 23, 25-26, 28 and 29

At least because Petitioners have not shown that Ground 1 establishes the unpatentability of Claim 1, for the reasons discussed above in connection with

limitations 1[b.ii], 1[d.i], 1[d.ii] and 1[c.iii], this Ground also fails for Claims 3-9, 13, 17-18, 23, 25-26, 28 and 29, each of which depends from Claim 1.

B. Grounds 2 and 3

For Ground 2, Petitioner contends that Walker, either alone or in view of the knowledge of a POSITA, renders the challenged claims obvious. For Ground 3, Petitioner contends that Walker in view of Schneier¹⁴³ renders claim 4 obvious. Petitioner has failed to demonstrate that either Ground renders any claim unpatentable.

1. Walker Is Not Prior Art

Petitioner asserts that Walker is prior art under 35 U.S.C. §102(a) and (e). Pet. at 5, n. 3. As an initial matter, since Walker, a patent application, was not published until January 1, 2004 (Ex1006 at 1), it cannot be prior art under 35 U.S.C. §102(a), since the 279 Patent's effective filing date was September 2, 2003 (Ex1001 at 2) and pre-AIA §102(a) bars patentability only where “the invention was ***known or used*** by others in this country” – *i.e.*, publicly known or used – “or patented or ***described in a printed publication*** in this or a foreign country, before the invention thereof by the applicant for patent.” 35 U.S.C. §102(a) (Pre-AIA). *See Lynk Labs, Inc. v. Samsung Elecs. Co.*, 125 F.4th 1120, 1126 (Fed. Cir. 2025) (finding that “***unlike § 102(a)*** or (b), and unlike books, articles, or other types of printed

publications, Congress created—in § 102(e)(1)—a special rule for *published patent applications*.”).

Moreover, although Walker claims priority to Provisional application No. 60/378,289, filed on May 6, 2002 (“Walker Provisional”) (Ex1006 at 1), Petitioner has failed to analyze or even submit the Walker Provisional and accordingly has waived any ability to establish the provisional date as the §102 date. *See Globus Med., Inc. v. Depuy Synthes Prods., LLC*, No. IPR2015-00107, Paper 11 at *3 (P.T.A.B. May 1, 2015).¹ Accordingly, Petitioner’s contention is necessarily that Walker is prior art based on its May 1, 2003 filing date.

To qualify as prior art under pre-AIA §102(e), a reference must have been filed in the United States before the applicant’s invention. *Arctic Cat Inc. v. GEP Power Prods.*, 919 F.3d 1320, 1330 (Fed. Cir. 2019). As such, Walker is **not** prior art under either pre-AIA §102(a) or (e) if the Milestone inventors either (a) reduced the claimed invention to practice prior to May 1 2003, **or** (b) conceived of the claimed invention prior to May 1, 2003, and exercised reasonable diligence between

¹ In any event, the Walker Provisional cannot support an earlier date for Walker, because it lacks the disclosures Petitioner relies on. For example, Petitioner relies on Walker’s disclosure of “predetermined criteria” as disclosing the claimed “mandated parameters.” Pet. at 10-11, 49. But the Walker Provisional makes no mention of predetermined criteria (Ex2006), and “predetermined criteria” is new matter in the Walker non-provisional application.

that conception and a later actual or constructive reduction to practice. *See, e.g., Arctic Cat*, 919 F.3d at 1331; *Purdue Pharma L.P. v. Boehringer Ingelheim GmbH*, 237 F.3d 1359, 1365 (Fed. Cir. 2001); *Mahurkar v. C.R. Bard, Inc.*, 79 F.3d 1572, 1579 (Fed. Cir. 1996).

The Petitioner bears the burden of proving that the references upon which it relies constitute prior art. *Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1380 (Fed. Cir. 2015). That burden is initially met by showing that the effective filing date of the reference is prior to that of the challenged patent(s). Once the Patent Owner comes forward with evidence of an earlier invention date, however, the burden then falls to Petitioner to prove that invention did not occur prior to the filing date of the alleged prior art reference. *Id.* The ultimate burden of proof remains on the Petitioner and never shifts to the Patent Owner. *Id.* at 1378.

a. The Milestone Inventors Conceived Of The Claimed Inventions Prior to May 1, 2003

Each of the challenged claims of the 279 Patent should be afforded a conception and priority date of at least December 4, 2002. An inventor must form a definite and permanent idea of the complete and operable invention to establish conception. *Bosies v. Benedict*, 27 F.3d 539, 543, 30 U.S.P.Q.2d 1862, 1865 (Fed. Cir. 1994). “[C]onception is established when the invention is made sufficiently clear to enable one skilled in the art to reduce it to practice without the exercise of extensive experimentation or the exercise of inventive skill.” *Hiatt v. Ziegler*, 179

U.S.P.Q. 757, 763 (Bd. Pat. Inter. 1973). “Conception must be proved by corroborating evidence which shows that the inventor disclosed to others his ‘completed thought expressed in such clear terms as to enable those skilled in the art’ to make the invention.” *Coleman v. Dines*, 754 F.2d 353, 359 (Fed. Cir. 1985) (quoting *Field v. Knowles*, 183 F.2d 593, 601 (CCPA 1950)); see *Burroughs Wellcome Co. v. Barr Labs., Inc.*, 40 F.3d 1223, 1228 (Fed. Cir. 1994). “The sufficiency of the proffered corroboration is determined by a ‘rule of reason’ analysis in which all pertinent evidence is examined.” *Id. Apator Miitors ApS v. Kamstrup A/S*, 887 F.3d 1293, 1295 (Fed. Cir. 2018).

The principal inventor of the 279 Patent, Mr. Randy Katz, shows in his Declaration (Ex2017) that he and his co-inventor formed a definite and permanent idea of the complete and operable invention as recited in the challenged claims prior to May 1, 2003, by demonstrating that each element from these claims is described: 1) in the notes kept by Mr. David Murphy, Milestone’s patent attorney, from a patent disclosure discussion held with Mr. Katz and his coinventor on December 4, 2002 (Ex2016); 2) U.S. Patent Application No. 10/123,861 (the “861 Application”) (Ex2014), an earlier application filed by the same inventors on April 15, 2002, to which the 279 Patent relates. See Ex1001 at 1:6-16 (identifying 279 Patent as a divisional of U.S. Patent No. 7,798,896, which claims priority to the 861 Application). See Ex2017, ¶¶7-24, 41, pp. 19-62. These documents provide external

corroboration of Mr. Katz’s account of the conception and reduction to practice of the claimed inventions. The Declaration of David Murphy, Milestone’s patent attorney, further corroborates prior conception and then reduction to practice. *See* Decl. of David Murphy (Ex2013, ¶¶7-25. The Declaration of expert witness John Szeder on behalf of Milestone additionally confirms that a POSITA would have understood that the inventors conceived of each element of the challenged claims by December 4, 2002, which were subsequently constructively reduced to practice by September 2, 2003. Ex2012 ¶¶86-90, pp. 41-84. The declaration and deposition testimony of Petitioners’ expert Mr. Crevelt further confirms the inventors’ prior conception of the claimed inventions. For example, as described in the Katz and Murphy declarations, the notes from a December 4, 2002 meeting between the inventors and their patent attorney show discussion of ensuring “a certain amount of low tier wins” within “every X plays.” – a win rate – and raising “50% payout to 75%.” – a global payout percentage. Ex2013 at ¶¶16-19; Ex2017 at ¶¶22-24; Ex2016 at 1-2. As Mr. Crevelt confirmed, a POSITA would unequivocally regard disclosure of “win rate[s]” and “global payout percentage[s]” as disclosing the claimed “mandated parameters” that are achieved by utilizing variable parameters – a key limitation of the challenged claims. *See* Ex2020 at 15:7-18:4, 19:14-21:16, 24:25-25:15 (global payout percentages); *id.* at 21:18-24:24 (win rates). *See also* Ex1003 at ¶131 (“the gaming system of Kelly683 includes a ‘global payout percentage’

(Ex1005 at 5:20-29, 37:27-38:15, 38:58-39:7, Fig. 9a) and ‘win ratios’ (Ex1005 at 5:3-5, 5:30-43, 5:55-6:3).”).

The table below shows that the inventors of the 279 Patent conceived of every limitation of the challenged claims by at least December 4, 2002.

279 Patent Challenged Claims	Evidence Demonstrating Conception By December 4, 2002
l[pre]. 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:	To the extent the preamble is a limitation, the inventors conceived of this limitation no later than April 15, 2002. For example, the 861 Application discloses a system for game play in an electronic environment between multiple users utilizing communication devices with input and output capability utilizing a remote play engine (a “play server”). Figure 16 and its accompanying description disclose such a system: The diagram illustrates a lottery system architecture. At the top left, a computer icon labeled 254 is connected via a cloud labeled 'Telephone Network' (252) to a central 'COMMUNICATION NETWORK' (250). Below this, another computer icon labeled 246 is connected via a cloud labeled 'CABLE NETWORK' (248) to the same 'COMMUNICATION NETWORK'. To the right of the 'COMMUNICATION NETWORK' is a box labeled 'RANDOM EVENT GENERATOR' (222), which outputs 'LIVE DRAW DATA ENTRY' (224) through a circular arrow icon. Below the 'RANDOM EVENT GENERATOR' is a box labeled 'LOTTERY REAL TIME INFORMATION' (220), which outputs 'FINANCIAL DATA' (226) and 'TICKET DATABASE' (228). In the center, there is a box labeled 'PLAY Server' (210) connected to the 'COMMUNICATION NETWORK' (250) and the 'RANDOM EVENT GENERATOR' (222). Below the 'PLAY Server' is a box labeled 'Lottery Server/Data Base' (214). To the left of the 'PLAY Server' is a cloud labeled 'INTERNET' (242), which is connected to several computer icons representing users. Below the 'INTERNET' cloud are two boxes labeled 'ON-LINE RETAIL VENDOR' (202 and 204), each connected to the 'INTERNET' cloud. The entire diagram is captioned 'Fig. 16'. Ex2014. “[00115] Fig. 16 is a schematic and block diagram of one version of the system for

implementing game play of the form described herein. . . *As yet another alternative, the purchase of the ticket may be made through the internet or other electronic communication modality. As shown, the online retail vendor location system may further include printers 204 and scanning systems 206, such as a bar code scanning system. A communication network 208 interfaces the various vendor locations with the processing system 210.* The processing system 210 may include various functionalities, such as the play server 212 and the lottery server 214. *The play server 212 may be, for example, a web server for hosting the website accessed by the player. . . .* As shown, the play server 212 interfaces with the lottery server 214 over a communication path 216. The communication path 216 permits bi-directional data flow, control flow and other signal flow between the various functional parts of the computer system 210. . . . The contents of the various memory systems 226 and 228 are described in greater detail in connection with Figs. 18A through E, 19 and 20.”

The 861 Application discloses game play with communication devices having an input and an output responsive to that input:

“[00116] *The player may engage in the electronic game play through any number of modes of entry.* Computers 240 may access the system via the internet 242 or other communications network. *An interactive TV system 246 may interface with the system 210 via a cable network 248. A wireless display enabled device 250 may communication with the system 210 through a communication network 252. Any form of electronic communication enabled device may be utilized, whether wired or wireless, such as a cell phone, personal digital*

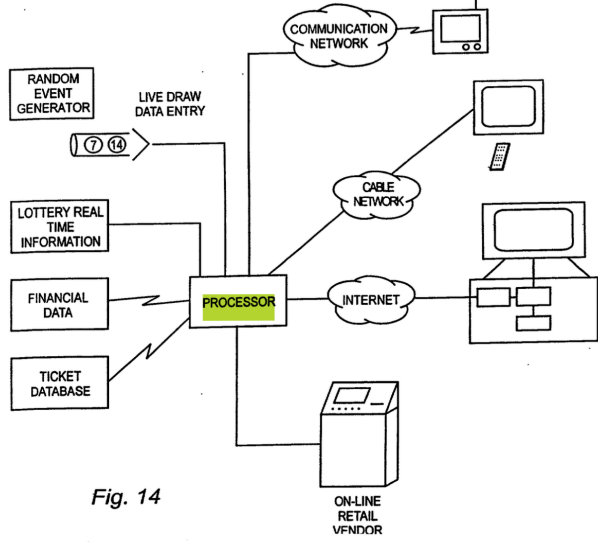
assistant, pager, messaging system, wireless application protocol (WAP) system, or other form of communication tool. Preferably, the system includes *a graphical display capability, most preferably including the ability to display both static and dynamic images, preferably at variable degrees of resolution, ranging from low resolution to normal resolution to high resolution.*”

“[0069] . . . *A selection system 90, such as an array of buttons is utilized for player input of the desired selection. However, any mode or manner of input may be utilized.* For example, a computer mouse, voice detection system or other input mechanism permitting the player to interface with the machine may be utilized consistent with the goals and objects of this invention.”

The 861 Application discloses multi-player play. *Id.* at [0090] (“Multiple players may play in parallel against the house, with the display for the other players being included upon all player's screens.”).

The 861 Application discloses techniques by which game play parameters may be dynamically varied:

“The system would then access memory utilizing the identification number to determine the variables associated with that ticket identification number. Such variables may include the prize amount, the game to be played and/or the degree of difficulty as previously explained. The system database may then be updated to indicate that the game had been played. The variable information as to the game play is then utilized to conduct game play in

	<i>accordance with those variables.”</i> Ex2014 at [00125]. See Ex2012, ¶90, pp. 41-46; Ex2017, ¶41, pp.19-23.
[1a] a processor,	The inventors conceived of this limitation no later than April 15, 2002. The 861 Application discloses a system with a processor and memory. “[00111] Fig. 14 shows a schematic diagram of an overall system for use in performance of the games described herein. A processor is coupled to one or more player participating via an electronic communication system.” Ex2014 at [00111].  Fig. 14 <i>Id.</i> at Fig. 14. “A communication network 208 interfaces the various vendor locations with the processing system 210. The <i>processing system</i> 210 may include various functionalities, such as the play server 212 and the lottery server 214.” <i>Id.</i> at [00115]

	<i>See id.</i> at [00111], [00112], Fig. 14, Fig.16. <i>See</i> Ex2012, ¶90, pp. 46-48; Ex2017, ¶41, pp.23-26.
[1b] memory to:	The inventors conceived of this limitation no later than April 15, 2002. The discussion of limitation 1[a] is incorporated by reference. The 861 Application discloses a memory to store information, including information regarding game parameters and game events – which necessarily requires memory. For example, it describes that “[t]he game play server/lottery system would then access the system memory to retrieve the stored information associated with the identification data, such as to determine whether the player wins or loses, and if they win, the amount and form of their win. The system records would be updated to indicate that game play occurred.” Ex2014 at [00124]. As a further example, in connection with Figure 18C, it discloses that the “date of play and time of play,” both game play events are stored in memory. Ex2014 at [00122]. <i>See also id.</i> at [00118] (“Figs. 18A through E depict various types of data fields and particular data which may be <i>stored within the system.</i>”). Similarly, the 861 Application discloses that “[o]ne data field” that may be stored “may indicate simply whether the person is a frequent player, and if so, the number of points they possess.” <i>Id.</i> at [00123]. Such points accumulated through game play are also “game play events.” <i>See</i> Ex2012, ¶90, pp. 48-49; Ex2017, ¶41, pp. 26-27

[1.b.i] store mandated and programmable variable parameters for use in the course of game play,	The inventors conceived of this limitation no later than December 4, 2002. The notes of the 12/4/02 meeting identify several examples of mandated parameters that must be achieved by the system as a whole, including a “fair number of low tier prize winners,” “force an even distribution of prizing,” “within every X plays, certain amount of low tier wins,” “guarantee[] the payout,” or increasing the percentage payout of a lottery game. Ex2016. The example of ensuring a “certain amount of low tier wins” “within every X plays.” is a guaranteed win rate – an example of what the 279 Patent calls a “mandated parameter.” See, e.g., Ex1001 at 5:11-15 (“Exemplary mandated parameters may consist of prize pay out and win rates. . . .”). The notes also describe an example of guaranteeing a payout percentage (“>50% payout to 75%.”)(Ex2016). A POSITA would recognize this example as a global payout percentage, which is another specific example called out in the Variable Parameter Patents. Ex1001 at 5:11-15. Petitioner’s expert Crevelt has agreed that a person of ordinary skill in the art would recognize a reference to win rates and global payout percentages as disclosing mandated parameters. Ex2020 at 15:7-18:4, 19:14-21:16, 24:25-25:15 (global payout percentages); <i>id.</i> at 21:18-24:24 (win rates). <i>See also</i> Ex1003 at ¶131. <i>See</i> Ex2017 at ¶18-24, 41 (pp. 27-32). <i>See</i> Ex2012, ¶90, pp. 49-54. In connection with the 861 Application, by April 15, 2002 the inventors had already conceived and reduced to practice a system that received, stored, and implemented “variable components” in game
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play, including game selection, difficulty, and prizing.

“Such variables may include the prize amount, the game to be played and/or the degree of difficulty as previously explained. The system database may then be updated to indicate that the game had been played. The variable information as to the game play is then utilized to conduct game play in accordance with those variables.” Ex2014 at [00125].

While that example relates to “variable components” of games, it clearly discloses that the inventors understood their system can receive a parameter set and implement it. Moreover, as the patent explains, variable parameters and mandated parameters could be interchangeable depending on context. As the specification of the Variable Parameters Patents explains,

“Parameters may in one context be a ‘mandated’ parameter and yet in another context a ‘variable’ parameter. For example, in one game, the lottery may mandate certain prizing structure, such as the use of a GLEPS structure, wherein other game, the lottery does not provide such a mandate, but rather, the system determines to utilize a GLEPS type structure as a variable parameter. . . . What is a ‘mandated’ parameter in one game may be a ‘variable’ parameter in another, and vice versa.” Ex1001 at 15:57-16:2.

The 861 Application discloses techniques by which a set of parameters are stored by the gaming system. For example, it teaches that a “TIN number is utilized by the system to look up in memory various aspects about the game play, e.g., what game is to be played, whether the

player will win or lose, and the type of prize to be awarded to winners.” Ex2014 at [0020]. *See also id.* at [00118] (“Figs. 18A through E depict various types of data fields and particular data which may be stored within the system. . . .”). The 861 Application further explicitly discloses storage of game parameters in memory. For example, in connection with Figure 18a, it discloses: “For example, *in the event that variable game play as to the particular game to be played forms a part of the system*, the memory would include an identification as to that game. As shown, the *TIN 65432981 indicates that the HOT SEAT game will be played, whereas the game JACKO will be played for someone entering the TIN 65432982.*” *Id.* at [00120].

TIN Number	Game	Prize Amount	Non-Montetary Prize	Last Date to Play	Game Play Required to Reveal Prize?
65432981	Hot Seat	\$1,000.00		05/03/02	Yes
65432982	JACKO	\$50.00		04/23/02	No
65432983	LOTO	\$500.00		Open	Yes
65432984	LOTO	0	Free Play	Open	Yes

Fig. 18a

In addition, the 861 Application further discloses storing game parameters in memory, including information on outcomes, and prizing:

“The game play server/lottery system would then access the system memory to retrieve the stored information associated with the identification data, such as to determine whether the player wins or loses, and if they win, the amount and form of their win.” Id. at [00124].

This example, relating to “variable components” of games, clearly discloses that the inventors understood their system can receive a parameter set and store it in memory.

	Petitioner’s expert Mr. Crevelt has stated that a POSITA would have understood, in light of a disclosure of a server with memory, that such a server “is used to process and store information in its memory, including the mandated parameters.” Ex1003 at ¶94. The discussion of 1[pre] and 1[b] are incorporated by reference. <i>See</i> Ex2012, ¶90, pp. 49-54; Ex2017, ¶41, pp. 27-32.
[1.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,	The inventors conceived of this limitation no later than December 4, 2002. The discussion of limitation 1[b.i] is incorporated by reference. The notes of the 12/4/02 meeting identify several examples of mandated parameters that must be achieved by the system as a whole, including a “fair number of low tier prize winners,” “force an even distribution of prizing,” “within every X plays, certain amount of low tier wins,” “guarantee[] the payout,” or increasing the percentage payout of a lottery game. Ex2016. The example of ensuring a “certain amount of low tier wins” “within every X plays.” is a guaranteed win rate – an example of what the 279 Patent calls a “mandated parameter.” <i>See, e.g.</i>, Ex1001 at 5:7-11 (“Exemplary mandated parameters may consist of prize pay 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.”). The notes also describe an example of guaranteeing a payout percentage (“>50% payout to 75%.”)(Ex2016). A POSITA would recognize this example as a global payout percentage, which is another specific example called out in the Variable Parameter Patents. Ex1001 at 5:7-11.

	Petitioner’s expert Crevelt has agreed that a person of ordinary skill in the art would recognize a reference to win rates and global payout percentages as disclosing mandated parameters. Ex2020 at 15:7-18:4, 19:14-21:16, 24:25-25:15 (global payout percentages); <i>id.</i> at 21:18-24:24 (win rates). <i>See also</i> Ex1003 at ¶130-131. In connection with the 861 Application, by April 15, 2002 the inventors had already conceived and reduced to practice a system that received, stored, and implemented “variable components” in game play, including game selection and difficulty (“game structure”), and prizing (“prizing structure”). “The system would then access memory utilizing the identification number to determine the variables associated with that ticket identification number. Such <i>variables may include the prize amount, the game to be played and/or the degree of difficulty</i> as previously explained. The system database may then be updated to indicate that the game had been played. <i>The variable information as to the game play is then utilized to conduct game play in accordance with those variables.</i>” Ex2014 at [00125]. The 861 Application called these parameters “variable game play parameters” in the original April 15, 2002 claims. <i>See</i> Ex2014 at Claims 23-29. <i>See</i> Ex2012, ¶90, pp. 54-56; Ex2017, ¶41, pp. 32-33.
[1.b.ii] record game play information regarding particular game play events, and	The inventors conceived of this limitation no later than April 15, 2002.

	The 861 Application discloses recording information regarding game play events. For example, it describes that “[t]he game play server/lottery system would then access the system memory to retrieve the stored information associated with the identification data, such as to determine whether the player wins or loses, and if they win, <i>the amount and form of their win</i>. The system records would be updated to indicate that game play occurred.” Ex2014 at [00124]. As a further example, in connection with Figure 18C, it discloses that the “date of play and time of play,” both game play events are stored in memory. Ex2014 at [00122]. <i>See also id.</i> at [00118]. Similarly, the 861 Application discloses that “[o]ne data field” that may be stored “may indicate simply whether the person is a frequent player, and if so, the number of points they possess.” <i>Id.</i> at [00123]. Such points accumulated through game play are also “game play events.” The 861 Application discloses that “[s]tatistical processing of survey data or other game play data may be compiled by the system.” <i>Id.</i> at [00126]. This discloses both recording game play events, and analyzing them. <i>See</i> Ex2012, ¶90, p. 56; Ex2017, ¶41, pp. 33-34.
[1.b.iii] store player's club information, including at least (i) player identification information, and (ii) the amount of player points,	The inventors conceived of this limitation no later than April 15, 2002. For example, the 861 Application discloses online registration to join a frequent players' club: “However, a player may desire to be a registered user so as to participate in additional features or functionalities, such as to participate in a <i>frequent player's club</i>. <i>Provision may be made in the interface to permit registration</i>

online.” Ex2014 at [00117]. *See also id.* at [00123]; Fig. 17; Fig. 18d.

The 861 Application further discloses storing in memory player identification information and the amount of player points.

“Optionally, *frequent player's clubs may be utilized, such as where points are rewarded for game play. Typically, such a club or system requires player identification*, and preferably includes a second form of player identification, *such as a code or their own personal PIN number.*” *Id.* at [0021]. *See also id.* at [00121] (“In certain applications, it may be desired to have a user identification and a secondary form of identification such as a PIN number or password. These may be utilized when higher levels of functionality such as a frequent player's club are utilized.”).

The 861 Application further discloses that “[o]ne data field” that may be stored “may indicate simply whether the person is a frequent player, and if so, the number of points they possess.” *Id.* at [00123].

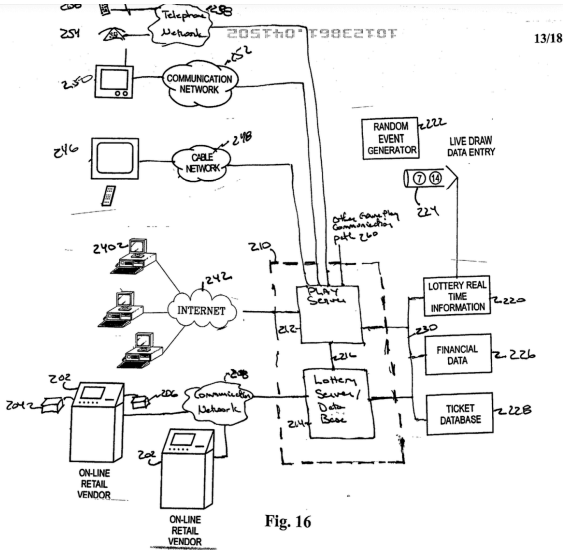
Frequent Player Points	Form of Compensation	Acknowledgment Number
13244	Cash	4220263541000c0ke
0	Airline Miles	164777538865
0	Further Game Play	164777538866
103	Cash	164777538867

Fig. 18e

Id. at Fig. 18.

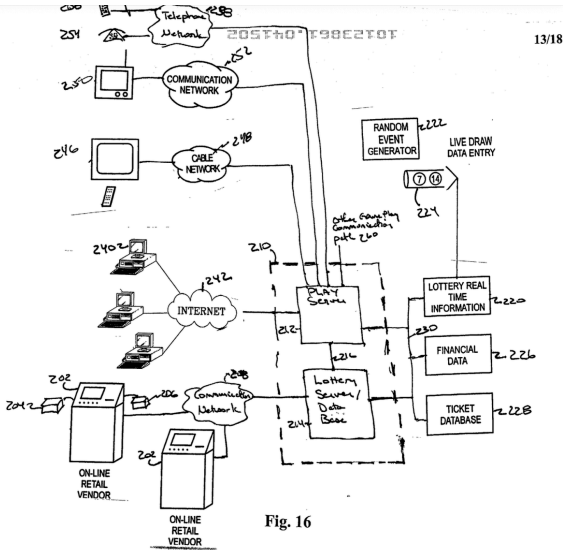
“Alternatively, instead of money, the player may play for points.”

Id. at [0077].

	See Ex2012, ¶90, pp. 57-58; Ex2017, ¶41, pp. 34-36.
[1.c] a play engine coupled to the memory and operating with the processor to:	The inventors conceived of this limitation no later than April 15, 2002. For example, the 861 Application discloses a system for game play in an electronic environment utilizing a remote play engine (a “play server”).  Fig. 16 Ex2014. See <i>id.</i> at [00115]. “[00115] Fig. 16 is a schematic and block diagram of one version of the system for implementing game play of the form described herein. . . . The processing system 210 may include various functionalities, such as the play server 212 and the lottery server 214. <i>The play server 212 may be, for example, a web server for hosting the website accessed by the player.</i>” A POSITA would recognize that the disclosed play server is necessarily coupled with the disclosed memory and operating with the disclosed processor. The discussion of 1[pre] is incorporated by reference.

	See Ex2012, ¶90, pp. 58-61; Ex2017, ¶41, pp. 36-39.
[1.c.i] implement a first set of programmable variable parameters to provide a first game play experience,	The inventors conceived of this limitation no later than April 15, 2002. In connection with the 861 Application, by April 15, 2002 the inventors had conceived and reduced to practice a system that implemented “variable components” in game play, including game selection, difficulty, and prizing. “The system would then access memory utilizing the identification number to determine the <i>variables</i> associated with that ticket identification number. Such <i>variables may include the prize amount, the game to be played and/or the degree of difficulty</i> as previously explained. The system database may then be updated to indicate that the game had been played. <i>The variable information as to the game play is then utilized to conduct game play in accordance with those variables.</i>” Ex2014 at [00125]. Because game play is conducted “in accordance with those variables,” they determine the game play experience, including a first game play experience. See Ex2012, ¶90, pp. 61-62; Ex2017, ¶41, p. 39.
[1.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	The inventors conceived of this limitation no later than April 15, 2002. In connection with the 861 Application, by April 15, 2002 the inventors had already conceived and reduced to practice a system that implemented “variable components” in game play, including

from the second game play experience, and	game selection, difficulty, and prizing, which could provide different game play experiences. <i>“Such variables may include the prize amount, the game to be played and/or the degree of difficulty as previously explained. The system database may then be updated to indicate that the game had been played. The variable information as to the game play is then utilized to conduct game play in accordance with those variables.”</i> Ex2014 at [00125]. Because game play is conducted “in accordance with those variables,” they determine and provide the game play experience, including a second game play experience as implemented by a second set of such parameters when implemented by the system. A POSITA would understand that the applicable parameters (difficulty, prizing, etc.) are “modified” when a new set of parameters is retrieved from memory and implemented such that game play is conducted “in accordance with those variables”. <i>See</i> Ex2012, ¶90, pp. 62-63; Ex2017, ¶41, pp. 40-41.
[1.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,	The inventors conceived of this limitation no later than December 4, 2002. As discussed above in connection with 1[b.i] and 1[b.i.A], incorporated here by reference, by December 4, 2002 the inventors had conceived of a system that used variable game parameters to achieve a set of objectives defined by the operator of the game as a whole. For example, the notes from the 12/4/02 meeting reflect that the inventors proposed that their invention could raise the global payout

	percentage “to 75%” – a mandated parameter – by “increas[ing] % of wins by the level 2,” <i>i.e.</i>, a secondary game level – a variable parameter. Ex2016. A POSITA would understand this to disclose achieving mandated parameters through first and second game play experiences which are implemented using the first and second variable parameter sets. The discussion of 1[c.i-ii] is incorporated by reference. See Ex2012, ¶90, pp. 63-64; Ex2017, ¶41, pp. 41-42.
[1.d] a decision engine coupled to the memory and operating with the processor to:	The inventors conceived of this limitation no later than April 15, 2002. For example, the 861 Application discloses a system for game play in an electronic environment utilizing a remote play server (a “decision engine”). Figure 16 and its accompanying description disclose such a system:  Fig. 16 Ex2014. “[00115] Fig. 16 is a schematic and block diagram of one version of the system for

	implementing game play of the form described herein. . . . The processing system 210 may include various functionalities, such as the play server 212 and the lottery server 214. <i>The play server 212 may be, for example, a web server for hosting the website accessed by the player.</i> . . . As shown, the play server 212 interfaces with the lottery server 214 over a communication path 216.” A POSITA would recognize that the disclosed decision engine is necessarily coupled with the disclosed memory and operating with the disclosed processor. The discussion of 1[pre] is incorporated by reference. See Ex2012, ¶90, pp. 64-66; Ex2017, ¶41, pp. 42-44.
[1.d.i] (i) analyze game play as a function of the recorded information regarding particular game play events, and	The inventors conceived of this limitation no later than April 15, 2002. As discussed in connection with limitation 1[b.ii], incorporated here by reference, the 861 Application discloses storing information regarding game play events, such as wins, losses, prizes, and points. The 861 Application further discloses performing analytics on the stored game play events. It discloses, for example, that “[s]tatistical processing of survey data or other game play data may be compiled by the system.” <i>Id.</i> at [00126]. See Ex2012, ¶90, p. 66; Ex2017, ¶41, p. 44.
[1.d.ii] (ii) determine the selection of the first or second programmable variable parameter sets utilizing the recorded game play	The inventors conceived of this limitation no later than December 4, 2002. As discussed above in connection with 1[c.iii] and 1[b.i.A], incorporated here by reference, by

information with predefined criteria including at least one of: a game structure and a prizing structure,	December 4, 2002 the inventors had conceived of a system that used variable game parameters to achieve a set of mandated parameters. The notes of the 12/4/02 meeting identify several examples of mandated parameters that must be achieved by the system as a whole, including examples of win rates and global payout percentages. Ex2016. The discussion of 1[b.1] and 1[b.iA] is incorporated by reference. A POSITA would recognize that, in using variable parameters to achieve a mandated parameter, such as a win rate or a global payout percentage, the system would necessarily evaluate the recorded win/loss or prizing events as discussed in 1[b.ii] incorporated by reference, against predefined criteria such as the existing game structure (e.g., its difficulty as suggested by the win rate) or the existing prize structure (e.g., the amount won to date) to determine whether to continue play under the original set of game play parameters, or to implement a different set of parameters. For example, the notes from the 12/4/02 meeting reflect that the inventors proposed that their invention could raise the global payout percentage “to 75%” – a mandated parameter – by “increas[ing] % of wins by the level 2,” <i>i.e.</i>, a secondary game level – a variable parameter. Ex2016. A POSITA would understand this to disclose determining the selection of a first or second set of variable parameters using a predefined criterion including a prizing structure. As another example, the 12/4/02 Notes disclose ensuring a “certain amount of low tier wins” within “every X plays.” A POSITA would know that achieving that mandated parameter necessarily requires evaluation of the recorded win/loss or prizing events as discussed in 1[b.ii],
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	against the predefined criteria such as the existing game structure (e.g., its difficulty as suggested by the win rate) or the existing prize structure (e.g., the amount won to date) to determine whether to continue play under the original set of game play parameters, or to implement a different set of parameters to ensure the required amount of low tier prizing. <i>See</i> Ex2012, ¶90, pp. 67-68; Ex2017, ¶41, pp. 44-46.
[1.e] a display system for displaying at least the player club points, and	The inventors conceived of this limitation no later than April 15, 2002. The 861 Application discloses that the game play devices are capable of displaying information. Ex2014 at [0023]. <i>See also id.</i> at [0060] (“The total display 18 shows the total amount of money, points, prizes (cash or non-cash) or other winnings accumulated by the player.”); [0070]; [0081]; [0090] (“Multiple players may play in parallel against the house, with the display for the other players being included upon all player's screens.”). <i>See also id.</i> at [00106], [00116], [00121], [00124], Figs. 2, 19. The 861 Application discloses storing in memory player identification information and the amount of player points. “Optionally, <i>frequent player's clubs may be utilized, such as where points are rewarded for game play. Typically, such a club or system requires player identification</i>, and preferably includes a second form of player identification, such as a code or their own personal PIN number.” <i>Id.</i> at [0021]. <i>See also id.</i> at [00121].

	As a further example, in connection with Figure 18C, the 861 Application discloses storage of player points as part of the user’s club. <i>See id.</i> at [00118]. Similarly, the 861 Application discloses that “[o]ne data field” that may be stored “may indicate simply whether the person is a frequent player, and if so, the number of points they possess.” <i>Id.</i> at [00123]. <table><tr><th>Frequent Player Points</th><th>Form of Compensation</th><th>Acknowledgment Number</th></tr><tr><td>13244</td><td>Cash</td><td>4220263541000c0ke</td></tr><tr><td>0</td><td>Airline Miles</td><td>164777538865</td></tr><tr><td>0</td><td>Further Game Play</td><td>164777538866</td></tr><tr><td>103</td><td>Cash</td><td>164777538867</td></tr></table> <i>Fig. 18e</i> <i>Id.</i> at Fig. 18. The 861 Application discloses that the points may be displayed: “The total display 18 shows the total amount of money, points, prizes (cash or non-cash) or other winnings accumulated by the player.” <i>Id.</i> at [0060]. <i>See</i> Ex2012, ¶90, pp. 68-70; Ex2017, ¶41, pp. 46-48.	Frequent Player Points	Form of Compensation	Acknowledgment Number	13244	Cash	4220263541000c0ke	0	Airline Miles	164777538865	0	Further Game Play	164777538866	103	Cash	164777538867
Frequent Player Points	Form of Compensation	Acknowledgment Number														
13244	Cash	4220263541000c0ke														
0	Airline Miles	164777538865														
0	Further Game Play	164777538866														
103	Cash	164777538867														
[1.f] a system input for receiving player input.	The inventors conceived of this limitation no later than April 15, 2002. The 861 Application discloses game play with communication devices having an input to receive player input: “[00116] . . . <i>Any form of electronic communication enabled device may be utilized, whether wired or wireless, such as a cell phone, personal digital assistant, pager, messaging system, wireless application protocol (WAP) system, or other form of communication tool.</i>”															

	“[0069] <i>A selection system 90, such as an array of buttons is utilized for player input of the desired selection. However, any mode or manner of input may be utilized.</i> For example, a computer mouse, voice detection system or other input mechanism permitting the player to interface with the machine may be utilized consistent with the goals and objects of this invention.” <i>See</i> Ex2012, ¶90, pp. 70-71; Ex2017, ¶41, pp. 48-49.
3. The system for electronic game play of claim 1 wherein the player's club information includes information on non-cash items.	The inventors conceived of this limitation no later than April 15, 2002. For example, the 861 Application discloses non-monetary (“non-cash”) prizes in the form of point awards or awards of free play: “Alternatively, other positive results such as a free play or a reduction in the number of negative events is possible.” Ex2014 at [0028]. “While any number of pay-out schemes may be utilizes, one preferred method is to share the jackpot amongst those hitting the target number on the nose, and to give those players who were within the predetermined distance from the target number an incentive for future game play, such as a free game play or reduced entry fee play.” <i>Id.</i> at [00100]. “In yet another mode of game play, a network, such as the internet, may be utilized to permit game play, whether for a monetary amount or to

	provide other points or indications of score.” <i>Id.</i> at [0032]. “The total display 18 shows the total amount of money, points, prizes (cash or non-cash) or other winnings accumulated by the player.” <i>Id.</i> at [0060]. “Alternatively, instead of money, the player may play for points.” <i>Id.</i> at [0077]. The 861 Application discloses storing in memory player identification information and the amount of player points – a non-cash item. “Optionally, <i>frequent player's clubs may be utilized, such as where points are rewarded for game play. Typically, such a club or system requires player identification</i>, and preferably includes a second form of player identification, <i>such as a code or their own personal PIN number.</i>” <i>Id.</i> at [0021]. <i>See also id.</i> at [00121] (“In certain applications, it may be desired to have a user identification and a secondary form of identification such as a PIN number or password. These may be utilized when higher levels of functionality such as a frequent player's club are utilized.”). As a further example, in connection with Figure 18C, the 861 Application discloses storage of player points as part of the user’s club. <i>See id.</i> at [00118] (“Figs. 18A through E depict various types of data fields and particular data which may be <i>stored within the system.</i>”). Similarly, the 861
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	Application discloses that “[o]ne data field” that may be stored “may indicate simply whether the person is a frequent player, and if so, the number of points they possess.” <i>Id.</i> at [00123]. <table><tr><th>Frequent Player Points</th><th>Form of Compensation</th><th>Acknowledgment Number</th></tr><tr><td>13244</td><td>Cash</td><td>4220263541000c0ke</td></tr><tr><td>0</td><td>Airline Miles</td><td>164777538865</td></tr><tr><td>0</td><td>Further Game Play</td><td>164777538866</td></tr><tr><td>103</td><td>Cash</td><td>164777538867</td></tr></table> <i>Fig. 18e</i> <i>See</i> Ex2012, ¶90, pp. 72-74; Ex2017, ¶41, pp. 49-51.	Frequent Player Points	Form of Compensation	Acknowledgment Number	13244	Cash	4220263541000c0ke	0	Airline Miles	164777538865	0	Further Game Play	164777538866	103	Cash	164777538867
Frequent Player Points	Form of Compensation	Acknowledgment Number														
13244	Cash	4220263541000c0ke														
0	Airline Miles	164777538865														
0	Further Game Play	164777538866														
103	Cash	164777538867														
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.	The inventors conceived of this limitation no later than April 15, 2002. The discussion of Claim 3 is incorporated by reference. The 861 Application further discloses that the communication device may include the capability of displaying images. “Preferably, the system includes a graphical display capability, most preferably including the ability to display both static and dynamic images, preferably at variable degrees of resolution, ranging from low resolution to normal resolution to high resolution.” Ex2014 at [00116]. A POSITA would know that the player’s club information could include displaying the point amount as an image. <i>See</i> Ex2012, ¶90, pp. 74-75; Ex2017, ¶41, p 52.															
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.	The inventors conceived of this limitation no later than April 15, 2002. For example, the 861 Application discloses game play involving multiple users:															

	“[0033] The game may be played by a single individual, or may be played with multiple players. The multiple players may play against one another, for scoring, or may merely play in parallel without further interaction.” Ex2014 at [0033]. “[00126] In yet another variation, game play may be enabled between multiple players. Buddy lists or other <i>association groupings may be utilized to form competitive game play pairings.</i>” Ex2014 at [00126]. The 861 Application further discloses recording information regarding game play events for multiple users. The discussion of 1[b.ii] is incorporated by reference. For example, it describes that “[t]he game play server/lottery system would then access the system memory to retrieve the stored information associated with the identification data, such as to determine whether the player wins or loses, and if they win, <i>the amount and form of their win.</i> The system records would be updated to indicate that game play occurred.” Ex2014 at [00124]. <i>See also id.</i> at [00118] (“Figs. 18A through E depict various types of data fields and particular data which may be <i>stored within the system.</i>”). Similarly, the 861 Application discloses that “[o]ne data field” that may be stored “may indicate simply whether the person is a frequent player, and if so, the number of points they possess.” <i>Id.</i> at [00123]. Figure 18d, for example, shows that game play information is recorded for multiple users.
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		16/18				
		Citizenship Information	Computer Address	E-mail Address	Physical Address	Registered Frequent Player
		469384323FR	1324597223	jami@hotmail.com	3 rue de la Seine, Paris, FR	yes
		3555462NL	3968736293	FRStone@aol.com	unknown	no
		SSN 564-35-1283	6945112442	unknown	unknown	no
		SSN 523-25-3232	6978854645	dons@earthlink.net	1243 Main St, Yuba, CA 91331	yes
		Fig. 18d As a further example, the 861 Application discloses that “[s]tatistical processing of survey data or other game play data may be compiled by the system.” <i>Id.</i> at [00126]. This discloses both storing game play events, and analyzing them. A POSITA would know that the determination of first or second variable parameter sets could involve analyzing recorded game play information, including the recorded game play information across multiple users. A POSITA would further understand that the discussion of global payout percentages and win rates in the December 4, 2002 notes encompassed win rates and global payout percentages for the gaming system as a whole – across all users. This again necessarily entails assessment of multiple users’ play. <i>See</i> Ex2012, ¶90, pp. 75-77; Ex2017, ¶41, pp. 52-54.				
6. The system for electronic game play of claim 1 wherein the game play information includes information on a loss.		The inventors conceived of this limitation no later than December 4, 2002. The 861 Application discloses recording information regarding game play events. The discussion of limitation 1[b.ii] is incorporated by reference. For example, it describes that “[t]he game play server/lottery system would then access the system memory to retrieve the stored information associated with the identification data, such as to determine whether the player wins or loses, and if they win, <i>the amount and</i>				

	<i>form of their win.</i> The system records would be updated to indicate that game play occurred.” Ex2014 at [00124]. The notes of the 12/4/02 meeting identify several examples of mandated parameters that must be achieved by the system as a whole, including a “fair number of low tier prize winners,” “force an even distribution of prizing,” “within every X plays, certain amount of low tier wins,” “guarantee[] the payout,” or increasing the percentage payout of a lottery game. Ex2016. The example of ensuring a “certain amount of low tier wins” “within every X plays.” is a guaranteed win rate – an example of what the 279 Patent calls a “mandated parameter.” <i>See, e.g.,</i> Ex1001 at 5:11-15 (“Exemplary mandated parameters may consist of prize pay 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.”). The notes also describe an example of guaranteeing a payout percentage (“>50% payout to 75%.”)(Ex2016). A POSITA would recognize that, in using variable parameters to achieve a mandated parameter, such as a win rate, the system would necessarily record the number of wins and non-wins (losses) in order to determine a win rate. A POSITA would understand that by definition a “win rate” reflects the number of game plays out of all game plays that result in a win – with the non-wins representing a loss. As another example, the notes from the 12/4/02 meeting reflect that the inventors proposed that their invention could raise the global payout percentage “to 75%” – a mandated parameter – by “increas[ing] % of wins by the level 2,” <i>i.e.,</i> a secondary game level – a variable parameter.
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	Ex2016. A POSITA would understand this necessarily requires tracking wins and losses to determine a “% of wins”. <i>See</i> Ex2012, ¶90, pp. 77-78; Ex2017, ¶41, pp. 54-56.
7. The system for electronic game play of claim 1 wherein the game play information includes information on a series of outcomes.	The inventors conceived of this limitation no later than December 4, 2002. The discussion of Claim 6 is incorporated by reference. <i>See</i> Ex2012, ¶90, p. 78; Ex2017, ¶41, p. 56.
8. The system for electronic game play of claim 1 wherein the game play information includes information on the number of wins.	The inventors conceived of this limitation no later than December 4, 2002. The discussion of Claim 6 is incorporated by reference. <i>See</i> Ex2012, ¶90, p. 78; Ex2017, ¶41, p. 56.
9. The system for electronic game play of claim 1 wherein the game play information includes information on a first game play event.	The inventors conceived of this limitation no later than December 4, 2002. The discussion of limitation 1[b.ii] and Claim 6 is incorporated by reference. <i>See</i> Ex2012, ¶90, p. 79; Ex2017, ¶41, p. 56.
13. The system for electronic game play of claim 1 wherein the game play information includes information tracking the users play.	The inventors conceived of this limitation no later than December 4, 2002. The discussion of limitation 1[b.ii] and Claim 6 is incorporated by reference. <i>See</i> Ex2012, ¶90, p. 79; Ex2017, ¶41, p. 56.
17. The system for electronic game play of claim 1 wherein the prizing structure is modified by modifying bonus prizing.	The inventors conceived of this limitation no later than April 15, 2002. For example, the 861 Application discloses variable parameters relating to modifying bonus prizing:

	“Yet another <i>variable component</i> might constitute the degree of difficulty of game play, the level of game play at which the player can begin game play, and/or an <i>indication of a bonus set of points or other form of advantage in game play.</i>” Ex2014 at [00114] <i>See</i> Ex2012, ¶90, p. 79; Ex2017, ¶41, p. 56.
18. The system for electronic game play of claim 1 wherein the prizing structure is modified by modifying awarding of non-cash prizes.	The inventors conceived of this limitation no later than April 15, 2002. For example, the 861 Application discloses variable parameters relating to modifying awarding of non-cash prizing, such as points: “The <i>information may be variable</i> as to the prize amount, as shown in Fig. 15B, <i>the form of the prize</i> (e.g., cash prize, <i>points based prize</i>, goods or services as a prize), the amount of the prize, or some other factor such as a multiplier of a prize amount.” Ex2014 at [00114] The discussion of limitation 1[b.i], 1[c.i], and 1[c.ii] is incorporated by reference. <i>See</i> Ex2012, ¶90, pp. 79-80; Ex2017, ¶41, p. 57.
23. The system for electronic game play of claim 1 wherein the decision engine for game analytics tracks user specific play.	The inventors conceived of this limitation no later than April 15, 2002. As discussed in connection with limitation 1[b.ii], incorporated here by reference, the 861 Application discloses storing information regarding game play events, such as wins, losses, prizes, and points. The 861 Application further discloses “[s]tatistical processing of survey data or other game play data may be compiled by the system.” <i>Id.</i> at [00126].

The information tracked by the system includes results for specific users from their game play. For example, it describes that “[t]he game play server/lottery system would then access the system memory to retrieve the stored information associated with the identification data, such as to determine whether the player wins or loses, and if they win, *the amount and form of their win*. The system records would be updated to indicate that game play occurred.” Ex2014 at [00124].

Similarly, the 861 Application discloses that “[o]ne data field” that may be stored “may indicate *simply whether the person is a frequent player, and if so, the number of points they possess*.” *Id.* at [00123]. Figure 18d, for example, shows that game play information is recorded for multiple users.

16/18

Citizenship Information	Computer Address	E-mail Address	Physical Address	Registered Frequent Player
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3555462NL	3968736293	FRStone@aol.com	unknown	no
SSN 564-35-1283	6945112442	unknown	unknown	no
SSN 523-25-3232	6978854645	dons@earthlink.net	1243 Main St, Yuba, CA 91331	yes

Fig. 18d

This discloses tracking user specific play.

See Ex2012, ¶90, pp. 80-81; Ex2017, ¶41, p. 57-58.

25. The system for electronic game play of claim 1 wherein the predefined criteria is a predefined prizing criteria.

The inventors conceived of this limitation no later than December 4, 2002.

The discussion of 1[d.ii] is incorporated by reference.

A POSITA would recognize that, in using variable parameters to achieve a mandated

	parameter, such as a win rate or a global payout percentage, the system would necessarily evaluate the recorded win/loss or prizing events as discussed in 1[b.ii], against the predefined criteria such as the existing game structure (e.g., its difficulty as suggested by the win rate) or the existing prize structure (e.g., the amount won to date) to determine whether to continue play under the original set of game play parameters, or to implement a different set of parameters. For example, the notes from the 12/4/02 meeting reflect that the inventors proposed that their invention could raise the global payout percentage “to 75%” – a mandated parameter – by “increas[ing] % of wins by the level 2,” <i>i.e.</i>, a secondary game level – a variable parameter. Ex2016. A POSITA would understand this to disclose determining the selection of a first or second set of variable parameters using a predefined criterion including a prizing structure. As another example, the 12/4/02 Notes disclose ensuring a “certain amount of low tier wins” within “every X plays.” A POSITA would know that achieving that mandated parameter necessarily requires evaluation of the recorded win/loss or prizing events as discussed in 1[b.ii], against the predefined criteria such as the existing prize structure (e.g., the amount won to date) to determine whether to continue play under the original set of game play parameters, or to implement a different set of parameters to ensure the required amount of low tier prizing. <i>See</i> Ex2012, ¶90, pp. 81-82; Ex2017, ¶41, pp. 58-59
26. The system for electronic game play of claim 1 wherein the predefined criteria is the number of wins.	The inventors conceived of this limitation no later than December 4, 2002.

	The discussion of Claim 25 is incorporated by reference. <i>See</i> Ex2012, ¶90, p. 82; Ex2017, ¶41, p. 59.
28. The system for electronic game play of claim 1 wherein the predefined criteria is the amount of time played.	The inventors conceived of this limitation no later than December 4, 2002. The discussion of 1[d.ii] is incorporated by reference. The discussion of Claim 25 is incorporated by reference. The 861 Application discloses games with a history file that “may include various information, such as the number of times the game medium was played, information about how many times the particular player has played, information about different habits of the player, and general information as to what has transpired in the game.” Ex2014 at [00014]. The 861 Application further discloses that the information that may be stored by the system regarding game play includes “the date of play and time of play.” <i>Id.</i> at [00122]. A POSITA would understand this data could be used as a predefined criteria to trigger modification of variable parameters to achieve some mandated parameter, such as a certain win rate over time. <i>See</i> Ex2012, ¶90, pp. 82-83; Ex2017, ¶41, pp. 59-60.
29. The system for electronic game play of claim 1 wherein the predefined criteria is the number of plays for a player.	The inventors conceived of this limitation no later than December 4, 2002. The discussion of 1[d.ii] is incorporated by reference. The discussion of Claim 25 is incorporated by reference. The 861 Application discloses recording information regarding game play events. The

	discussion of limitation 1[b.ii] is incorporated by reference. For example, it describes that “[t]he game play server/lottery system would then access the system memory to retrieve the stored information associated with the identification data, such as to determine whether the player wins or loses, and if they win, <i>the amount and form of their win.</i> The system records would be <i>updated to indicate that game play occurred.</i>” Ex2014 at [00124]. As a further example, the 861 Application discloses that “[s]tatistical processing of survey data or other game play data may be compiled by the system.” <i>Id.</i> at [00126]. This discloses both storing game play events, and analyzing them. The notes of the 12/4/02 meeting identify several examples of mandated parameters that must be achieved by the system as a whole, including a “fair number of low tier prize winners,” “force an even distribution of prizing,” “within every X plays, certain amount of low tier wins,” “guarantee[] the payout,” or increasing the percentage payout of a lottery game. Ex2016. The example of ensuring a “certain amount of low tier wins” “within every X plays.” is a guaranteed win rate – an example of what the 279 Patent calls a “mandated parameter.” <i>See, e.g.,</i> Ex1001 at 5:11-15 (“Exemplary mandated parameters may consist of prize pay 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.”). The notes also describe an example of guaranteeing a payout percentage (“>50% payout to 75%.”)(Ex2016). A POSITA would recognize that, in using variable parameters to achieve a mandated
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	parameter, such as a win rate, the system would necessarily record the number of wins and non-wins (losses) in order to determine a win rate. A POSITA would understand that by definition a “win rate” reflects the number of game plays out of all game plays that result in a win – with the non-wins representing a loss. As another example, the notes from the 12/4/02 meeting reflect that the inventors proposed that their invention could raise the global payout percentage “to 75%” – a mandated parameter – by “increas[ing] % of wins by the level 2,” <i>i.e.</i>, a secondary game level – a variable parameter. Ex2016. A POSITA would understand this necessarily requires tracking wins and losses, <i>i.e.</i>, the number of plays, to determine a “% of wins”. A POSITA would further understand that the number of plays would be part of the predefined criteria that would be used to trigger modification of the variable game play parameters. Ex2012, ¶90, pp. 83-84; Ex2017, ¶41, pp.60-62.
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b. Reasonably Diligent Work on the Invention Continued Through the Filing of the Patent Application on September 2, 2003

Conception by December 4, 2002 cannot reasonably be disputed in this case, as shown by inventor and non-inventor declarations, as well as contemporaneous documents describing the claimed invention, including drawings from the 861 Application that correspond to most of the figures of the 279 Patent, and notes from a December 4, 2002 meeting with Milestone’s patent attorney unambiguously showing that the inventors had conceived of using variable parameters to achieve mandated parameters by that date. *See supra*; Ex2012, 2013, 2017. The evidence

also shows that the inventors worked diligently and reasonably continuously from conception to constructively reduce the claimed inventions to practice with the filing of the September 2, 2003 application.

The Federal Circuit has emphasized that diligence need only be reasonably continuous, not be perfectly continuous. *Arctic Cat*, 919 F.3d at 1331. “[P]eriods of inactivity within the critical period do not automatically vanquish a patent owner’s claim of reasonable diligence.” *Id.* (quoting *Perfect Surgical Techniques, Inc. v. Olympus America, Inc.*, 841 F.3d 1004, 1009 (Fed. Cir. 2016)). The ultimate purpose of the diligence inquiry “is not to scour the patent owner’s corroborating evidence in search of intervals of time where the patent owner has failed to substantiate some sort of activity.” *Id.* Rather, the purpose is “determined by whether, in light of the evidence as a whole, the invention was not abandoned or unreasonably delayed.” *Id.* (internal quotations and citations omitted). The critical period for the evaluation of diligence “begins just prior to the competing reference’s effective date and ends on the date of the invention’s reduction to practice.” *See Perfect Surgical*, 841 F.3d at 1007 (citing *Monsanto Co. v. Mycogen Plant Sci., Inc.*, 261 F.3d 1356, 1363 (Fed. Cir. 2001))). Accordingly, here the critical period to evaluate diligence is just prior to May 1, 2003 – Walker’s effective date – and September 2, 2003, the filing date of the earliest priority application for the 279 Patent.

Like other issues associated with prior invention, testimonial evidence from an inventor regarding reduction to practice must be corroborated by independent evidence. *Loral Fairchild Corp. v. Matsushita Elec. Indus. Co.*, 266 F.3d 1358, 1363-65 (Fed. Cir. 2001). The sufficiency of such corroborating evidence is evaluated under the “rule of reason,” which considers all of the pertinent evidence to determine whether the inventor(s)’ testimony regarding reduction to practice is credible. *Id.*; see also *E.I. du Pont de Nemours & Co. v. Unifrax I LLC*, 921 F.3d 1060, 1077 (Fed. Cir. 2019). Under the rule of reason, proof of reduction to practice “does not require corroboration for every factual issue contested by the parties.” *Cooper v. Goldfarb*, 154 F.3d 1321, 1330 (Fed. Cir. 1998). Rather, the corroborating evidence must merely be sufficient to render the inventor’s testimony credible. *Id.* In *Cooper*, the Federal Circuit held that the inventor's testimony was sufficiently corroborated by testimony of his co-workers that he had told them of his reduction to practice, and that they had seen him obtain materials of the type necessary to practice the invention. *Id.* at 1330.

Here, the evidence supporting the inventors’ testimony is much more robust than that of *Cooper*. As described in the declarations of Mr. Katz and non-inventor David Murphy, the Milestone inventors worked on the claimed inventions steadily and diligently as they could under the circumstances, from conception through the date the original priority application was filed. See Ex2013, ¶¶21-25; Ex2017, ¶¶25-

40. And the circumstances here were unusual and challenging. As discussed in Mr. Katz's Declaration, shortly after the December 4, 2002 meeting with Milestone's patent attorney Mr. Murphy, Mr. Katz was diagnosed with acute t-cell lymphoblastic lymphoma, a very rare and aggressive cancer. Ex2017, ¶¶25-28. The diagnosis was confirmed through a biopsy on March 25, 2003. *Id.* Mr. Katz immediately began an intensive course of chemotherapy that continued through the "critical period" of May 1, 2003 through September 2, 2003, the date of filing of the original priority application for the 279 Patent. *Id.*, ¶¶29-40. The treatment was time-intensive, requiring repeated hospital stays and physician follow ups, daily injections and blood tests, and additional medicines. *Id.* Beyond the illness itself, the treatment was also deleterious to Mr. Katz's health, producing side effects such as infections, anemia, fatigue, and painful mouth sores requiring morphine. *Id.*

Mr. Katz's life-threatening illness, and the intensive therapy regimen he undertook to save his life, naturally slowed progress on constructively reducing the claimed inventions to practice through the creation and filing of the priority application. *Id.* Nevertheless, as Mr. Katz and Mr. Murphy describe in their declarations, Mr. Katz worked with Mr. Murphy as frequently, and for as long, as his health and treatment regime permitted. Ex2013, ¶¶21-25; Ex2017, ¶¶25-40. The first patent application based off of the December 4, 2002 disclosure was filed September 2, 2003, as SN 10/654,585, just as Mr. Katz was completing his initial

course of chemotherapy. Mr. Katz's perseverance in working to reduce the claimed inventions to practice by this date, during a harrowing course of illness and treatment, unquestionably shows reasonably continuous diligence in reduction to practice. In view of the circumstances, "in light of the evidence as a whole, 'the invention was not abandoned or unreasonably delayed.'" *Perfect Surgical*, 841 F.3d at 1009 (quoting *Monsanto*, 261 F.3d at 1379).

Accordingly, because the claimed inventions of the 279 Patent were conceived by December 4, 2002, and the inventors worked diligently thereafter to reduce the claimed inventions to practice, Walker is not prior art to the challenged claims. For at least that reason, Walker cannot render the challenged claims unpatentable, and the Petition should be denied.

VI. CONCLUSION

All of Petitioners' grounds fail to establish invalidity or obviousness of the challenged claims of the 279 Patent. Consequently, all of Petitioners' grounds should be rejected.

Dated: January 12, 2026

Respectfully submitted,

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CERTIFICATION OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.24(b)(1) and (d), the undersigned hereby certifies that the Patent Owner's Preliminary Response complies with the type-volume limitation 37 C.F.R. § 42.24(b)(1) permitting a response of up to 14,000 words because, exclusive of the exempted portions, the response contains 13,967 words, as identified by Microsoft Word's word-counting feature.

Dated: January 12, 2026

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CERTIFICATION OF SERVICE (37 C.F.R. §§ 42.6(e), 42.105(a))

The undersigned hereby certifies that on January 12, 2026, copies of PATENT OWNER MILESTONE ENTERTAINMENT LLC'S RESPONSE TO PETITION were served via Electronic Mail to the following:

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