

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

DK CROWN HOLDINGS INC. (FORMERLY DRAFTKINGS INC.), A
DELAWARE CORPORATION,
Petitioner

v.

DIOGENES LIMITED, COLOSSUS (IOM) LIMITED,
Patent Owner

Case IPR2023-00268
Patent 11,200,779

**DECLARATION OF DWIGHT CREVELT IN SUPPORT OF
PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO.
11,200,779**

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6.	1[f] – “recalculate, by the system controller, the wager information in real time based on the continuously retrieved data;”	67
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8.	1[h] – “determine, by the system controller, that a participant of the one or more participants is eligible to win an award based on one or more of the wager and a potential outcome of the wagering event;”	83
9.	1[i] – “generate, by the system controller, an option in real time for the participant to one or more of fully cash out of the wager or partially cash out of the wager prior to a conclusion of the wagering event for at least a portion of the award;”	87
10.	1[j] – “cause, by the system controller, the option to be presented to the participant via the user interface of the one or more input devices;”	94
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12.	1[l] – “cause, by the trading engine module, the at least the portion of the award to be presented to the participant, such that the user interface displays one or more of a confirmation that the option has been selected and a value of the at least the portion of the award.”	100
B.	Claim 2: “The system of claim 1, wherein the communications interface comprises one or more of: the Internet, an intranet, an extranet, a cellular network, a wired or wireless network, a networked communication system, a cloud-based system, an autonomic system, a client-server based system, a grid based system, a mainframe based system, a utility based system, a peer-to-peer based system, a cloud gaming based system, and a computer network.”	103
C.	Claim 3: “The system of claim 1, wherein the wagering event comprises one or more of an entire event, a partial event, a divisible	

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- D. Claim 5: “The system of claim 1, wherein the wager comprises one or more of an accumulator, parlay, fixed odds single or fixed odds multiple wager comprising one or more combinations, wherein the one or more combinations are selectable by at least one of a participant, a third party, and the system controller, and wherein at any time before completion of the wagering event, at least one further offer is initiated to any number of the one or more participants remaining eligible to win the at least one award.” 106
- E. Claim 6: “The system of claim 1, wherein the award comprises one or more of a credit, a ticket, an electronic notice that is redeemable by the participant, a funding of an account of the participant, monetary awards, a designated monetary amount, a percentage of the designated monetary amount, nonmonetary awards, a prize, a payment, a designated currency, virtual currency, tokens, coupons, services, personal property, real property, virtual property, assets, investments, negotiable instruments, commodities, food, lodging, entertainment, alleviation of obligations, gaming opportunities and wager enhancement.” 110
- F. Claim 7: “The system of claim 1, wherein the wager comprises one or more of fixed odds single wagers, multiple wagers, full cover wagers, full cover wagers with singles, ‘Any to Come’ (ATC) or ‘if cash’ wagers, specialty wagers, forecasts, fixed, variable, guaranteed, parimutuel wagering, tote wagering, fixed-odds wagering, accumulator or parlay wagering, fixed odds, a pool, progressive, fixed pool, variable pool or guaranteed pool.” 111
- G. Claim 8: 112

1. 8[a] – “The system of claim 1, wherein the computer readable instructions, when executed by the processor, further cause the processor to one or more of: “upon receiving the selection of the option, one or more of by the system controller:” 112
2. 8[b] – “terminate the participant's participation in the wagering event, allow the participant to continue to participate in the wagering event with at least a portion of the wager, generate a new wager for the participant, relinquish rights of the participant in at least a portion of the wager, and one or more of transfer, sell or put out for bid or auction at least a portion of one or more of an entitlement, right, or ownership of the participant in at least a portion of the wager to a third party or another participant.” 113
- H. Claim 9: “The system of claim 1, wherein an amount of the award is variable and based on one or more of a calculated probability, an originator of the wager, a negotiation, a bidding process, an auction, the one or more participants, and a third party.” 114
- I. Claim 10: “The system of claim 1, wherein the one or more input devices comprise one or more of: a wagering station, a wagering terminal, a hand held device, a mobile device, a wireless device, a computing system, a smart phone, a telephone, a tablet or desktop computer, a PDA, an interactive television, an internet connected device, and a cashier system.” 117
- J. Claim 16: 118
 1. 16[a] – “A system for conducting a wagering event among one or more participants in real time, the system comprising:” 121
 2. 16[b] – “a system controller comprising a trading engine module;” 122
 3. 16[c] – “a database;” 123
 4. 16[d] – “a plurality of input devices each having a user interface; and” 123
 5. 16[e] – “a communications interface for facilitating communications between the system controller and the plurality of input devices;” 124
 6. 16[f] – “the system controller configured to:” 126

7. 16[g] – “receive, by the trading engine module, a plurality of wagers on the wagering event from the plurality of input devices via the communications interface, the plurality of wagers input by a plurality of participants via the user interfaces of respective input devices from the plurality of input devices,” 126
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 10. 16[j] – “recalculate the wager information in real time based on the continuously retrieved data,” 127
 11. 16[k] – “continuously evaluate the recalculated wager information,” 128
 12. 16[l] – “determine that one or more participants of the plurality of participants is eligible to win an award based on their respective one or more wagers and a potential outcome of the wagering event,” 128
 13. 16[m] – “generate one or more options in real time for the one or more participants to cash out prior to a conclusion of the wagering event for at least a portion of the award,” 128
 14. 16[n] – “cause the one or more options to be presented to the one or more participants via the user interfaces of the respective one or more input devices,” 129
 15. 16[o] – “receive a selection of an option from the one or more options for a participant from at least one input device from the one or more input devices prior to conclusion of the wagering event, and” 129
 16. 16[p] – “cause the at least the portion of the award to be presented to the a least one participant, such that the user interface displays one or more of a confirmation that the option has been selected and a value of the at least the portion of the award.” 129
- K. Claim 17: “The system of claim 16, wherein the communications interface comprises one or more of: the Internet, an intranet, an

- extranet, a cellular network, a wired or wireless network, a networked communication system, a cloud-based system, an autonomic system, a client-server based system, a grid based system, a mainframe based system, a utility based system, a peer-to-peer based system, a cloud gaming based system, and a computer network.” 130
- L. Claim 18: “The system of claim 16, wherein the wagering event comprises one or more of an entire event, a partial event, a divisible component of an event, multiple independent events occurring sequentially or concurrently, and a compilation of related events, including one or more probabilistic events, sporting events, eSports, e-sports, competitive gaming, electronic sports, fantasy events, real games, virtual games, fantasy games, slot machines, keno, poker, video games, racing, lotteries, live events, pre-recorded events, online events, broadcast events, card games, politics, sales, stocks, celebrity gossip, movies, reality TV, football (“soccer”), American football, Australian rules football, baseball, cricket, basketball, golf, hockey, auto racing, legends, rugby, wrestling, surfing, mixed and martial arts.” 130
- M. Claim 21: “The system of claim 16, wherein an amount of the award is variable and based on one or more of a calculated probability, an originator of the wager, a negotiation, a bidding process, an auction, the plurality of participants, and a third party.” 131
- N. Claim 22: “The system of claim 16, wherein the award comprises one or more of a credit, a ticket, an electronic notice that is redeemable by the participant, a funding of an account of the participant, monetary awards, a designated monetary amount, a percentage of the designated monetary amount, nonmonetary awards, a prize, a payment, a designated currency, virtual currency, tokens, coupons, services, personal property, real property, virtual property, assets, investments, negotiable instruments, commodities, food, lodging, entertainment, alleviation of obligations, gaming opportunities, and wager enhancement.” 131
- O. Claim 23: “The system of claim 16, wherein the plurality of wagers comprise one or more of fixed odds single wagers, multiple wagers, full cover wagers, full cover wagers with singles, ‘Any to Come’ (ATC) or ‘if cash’ wagers, specialty wagers, forecasts, fixed, variable, guaranteed, parimutuel wagering, tote wagering, fixed-odds wagering, accumulator or parlay wagering, fixed odds, a pool, progressive, fixed pool, variable pool or guaranteed pool.” 131

P.	Claim 24: “The system of claim 16, wherein the system controller is further configured to: upon receiving the selection of the option, one or more of terminate the participant's participation in the wagering event, allow the participant to continue to participate in the wagering event with at least a portion of the wager, generate a new wager for the participant, relinquish rights of the participant in at least a portion of the wager, and one or more of transfer, sell, or put out for bid or auction at least a portion of one or more of an entitlement, right, or ownership of the participant in at least a portion of the wager to a third party or another participant.”	132
Q.	Claim 25: “The system of claim 16, wherein the plurality of input devices comprise one or more of: a wagering station, a wagering terminal, a hand held device, a mobile device, a wireless device, a computing system, a smart phone, a telephone, a tablet or desktop computer, a PDA, an interactive television, an internet connected device, and a cashier system.”	132
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EXHIBIT LIST

Exhibit No.	Description
Ex.1001	U.S. Patent No. 11,200,779 (“’779 Patent”)
Ex.1002	File History for U.S. Patent ’779 Patent
Ex.1003	File History for U.S. Patent No. 9,117,341
Ex.1004	U.S. Patent Application Publication No. 2008/0113765 A1 (“DeWaal”)
Ex.1005	U.S. Patent Application Publication No. 2008/0311981 A1 (“Schugar”)
Ex.1006	U.S. Patent Application Publication No. 2012/0309489 A1 (“Scott ’489”)
Ex.1007	Reserved
Ex.1008	<i>Curriculum Vitae</i> of Dwight Crevelt
Ex.1009	Vishal Jain & Jyoti Moy Chatterjee, <i>Machine Learning with Health Care Perspective</i> (Springer 2020)
Ex.1010	Christiani Huguenii, <i>The Value of all Chances in Games of Fortune; Cards, Dice, Wagers, Lotteries, &C. Mathematically Demonstrated</i> (printed 1741)
Ex.1011	C.C. Heyde & E. Seneta, <i>Statisticians of the Centuries</i> (Springer 2001)
Ex.1012	Jui-Pin Cheng, <i>The Origin of Probability and The Problem of Points</i> (2000), https://sites.math.rutgers.edu/~cherlin/History/Papers2000/cheng.html
Ex.1013	Nicholas Hammond, <i>The Cambridge Companion to Pascal</i> (Cambridge University Press 2003)
Ex.1014	Prakash Gorroochurn, <i>Thirteen Correct Solutions to the ‘Problem of Points’ and Their Histories</i> , THE MATHEMATICAL INTELLIGENCER (Springer 2014)
Ex.1015	Keith Devlin, <i>The Unfinished Game: Pascal, Fermat, and the Seventeenth-Century Letter that Made the World Modern</i> (Basic Books 2008)
Ex.1016	Anders Hald, <i>A History of Probability and Statistics and Their Applications before 1750</i> (John Wiley & Sons 2003)
Ex.1017	Adam Prügel-Bennett, <i>The Probability Companion for Engineering and Computer Science</i> (Cambridge University Press 2019)

Exhibit No.	Description
Ex.1018	Elizabeth A. Killick & Mark D. Griffiths, <i>In-Play Sports Betting: a Scoping Study</i> , 17 INT J MENT HEALTH ADDICTION 1456 (Apr. 16, 2018)
Ex.1019	<i>What is In-Play Betting: Live Betting Explained by William Hill</i> , WILLIAMHILL.COM (Apr. 20, 2021), https://news.williamhill.com/betting-guides/in-play-betting/
Ex.1020	Mark O’Haire, <i>The History of Betting</i> , TheSetPieces (2021), https://thesetpieces.com/latest-posts/the-history-of-betting/
Ex.1021	U.S. Patent No. 9,117,341 (“the ’341 Patent”)
Ex.1022	Chris Summers, <i>How Does a Betting Exchange Work?</i> , BBC News (Dec. 7, 2007)
Ex.1023	Landi, Gianluca, <i>Betting Exchange: The Sports Trading Revolution</i> (StreetLib 2017)
Ex.1024	Declaration of Bernard J. Marantelli, Australian Patent Application No. 2013333573 (Jun. 18, 2016)
Ex.1025	Vaughan Williams & Donald S. Siegal, <i>The Oxford Handbook of the Economics of Gambling</i> (Oxford University Press 2013)
Ex.1026	Mark Davies <i>et al.</i> , <i>Betfair.com: Five Technology Forces Revolutionize Worldwide Wagering</i> , 23 EUROPEAN MANAGEMENT JOURNAL 533 (Oct. 2005)
Ex.1027	U.S. Patent No. 7,909,694 (“Schugar ’694”)
Ex.1028	Betfair Trading Software, <i>About Bet Angel Software</i> (via The Wayback Machine dated Dec. 26, 2007)
Ex.1029	Green All Over Blog (Dec. 7, 2008)
Ex.1030	Dan Thomas, <i>Betfair’s ‘Cash Out’ Trading Tool Used for the Millionth Time</i> , BETTFAIR (Sept. 13, 2011)
Ex.1031	Betfair Financial Statement (Jun. 29, 2011)
Ex.1032	Dan Thomas, <i>Cash Out Comes to Betfair Mobile</i> , Betfair (Dec. 19, 2011)
Ex.1033	Michael Taylor, <i>Cash In My Bet with William Hill</i> , WILLIAMHILL.COM (Dec. 18, 2012)
Ex.1034	Tal Grant <i>et al.</i> , <i>UK Gaming</i> , Credit Suisse (Aug. 14, 2017)
Ex.1035	James Conrey McMath, <i>Speculation and Gambling in Options, Futures and Stocks in Illinois</i> (Hawkins & Loomis 1921)
Ex.1036	LeRoy Gross, <i>The Conservative Investor’s Guide to Trading Options</i> (Wiley 1999)
Ex.1037	Stuart Banner, <i>Speculation: A History of the Fine Line Between Gambling and Investing</i> (Oxford University Press 2017)

Exhibit No.	Description
Ex.1038	E.V. Smalley, <i>Northern Pacific Railroad Book of Reference</i> (E. Wells Sackett & Rankin 1883)
Ex.1039	Wesley A. Sturges <i>et al.</i> , <i>Stock Option and Stock Purchase Plans</i> (U.S. Gov't Printing Office 1952)
Ex.1040	Michael C. Thomsett, <i>Getting Started in Options</i> (Wiley 2007)
Ex.1041	Lawrence G. McMillan, <i>McMillan on Options</i> (Wiley 2011)
Ex.1042	The Sports Trader, <i>The Diary of a Betdaq Trader</i> (Dec. 5, 2007)
Ex.1043	Betfair Community, <i>Football Forum</i> (Dec. 11, 2009), https://community.betfair.com/football/go/thread/view/94070/23545078/i-didnt-think-you-got-your-green-until-after-events-were-finished?post_id=421340998#421340998#flvWelcomeHeader
Ex.1044	Betfair Community, <i>Golf Forum</i> at 1 (Apr. 9, 2010), https://community.betfair.com/golf/go/thread/view/94086/23563950/masters-day-2---in-running?liveView=0&pg=53
Ex.1045	Betfair Community, <i>General Betting Forum</i> (Dec. 10, 2010)
Ex.1046	Betfair Community, <i>General Betting Forum</i> at 3 (Jun. 8, 2011)
Ex.1047	U.S. Patent Application Publication No. 2001/0136566 A1 (“Acres”)
Ex.1048	Exhibit 338.A to Plaintiffs’ Initial Infringement Contentions, <i>Diogenes Limited v. DraftKings, Inc.</i> , C.A. No. 21-1695-MN-CJB
Ex.1049	Exhibit 341.A to Plaintiffs’ Initial Infringement Contentions, <i>Diogenes Limited v. DraftKings, Inc.</i> , C.A. No. 21-1695-MN-CJB
Ex.1050	Exhibit 439.A to Plaintiffs’ Initial Infringement Contentions, <i>Diogenes Limited v. DraftKings, Inc.</i> , C.A. No. 21-1695-MN-CJB
Ex.1051	Exhibit 516.A to Plaintiffs’ Initial Infringement Contentions, <i>Diogenes Limited v. DraftKings, Inc.</i> , C.A. No. 21-1695-MN-CJB
Ex.1052	Exhibit 716.A to Plaintiffs’ Initial Infringement Contentions, <i>Diogenes Limited v. DraftKings, Inc.</i> , C.A. No. 21-1695-MN-CJB
Ex.1053	Exhibit 779.A to Plaintiffs’ Initial Infringement Contentions, <i>Diogenes Limited v. DraftKings, Inc.</i> , C.A. No. 21-1695-MN-CJB

Exhibit No.	Description
Ex.1054	Exhibit 822.A to Plaintiffs' Initial Infringement Contentions, <i>Diogenes Limited v. DraftKings, Inc.</i> , C.A. No. 21-1695-MN-CJB
Ex.1055	Exhibit 969.A to Plaintiffs' Initial Infringement Contentions, <i>Diogenes Limited v. DraftKings, Inc.</i> , C.A. No. 21-1695-MN-CJB
EX.1056	Exhibit 779.A to Plaintiffs' First Supplemental Initial Infringement Contentions, <i>Diogenes Limited v. DraftKings, Inc.</i> , C.A. No. 21-1695-MN-CJB

I, Dwight Crevelt, declare as follows:

I. Introduction

1. I have been retained on behalf of DK Crown Holdings Inc. (formerly DraftKings Inc.), a Delaware corporation (“DraftKings”) for the above-captioned *inter partes* review (IPR) proceeding. I am being compensated for my time in connection with this IPR at my standard hourly consulting rate. I understand that this proceeding involves U.S. Patent No. 11,200,779 (“the ’779 Patent”) titled “WAGERING APPARATUS, METHODS AND SYSTEMS” by Bernard J. Marantelli.

2. I have been asked to provide my technical review, analysis, insights, and opinions regarding the ’779 Patent and the prior art references that form the basis for the grounds of unpatentability set forth in the Petition for *Inter Partes* Review of the ’779 Patent.

II. Materials Considered

3. The analysis that I provide in this Declaration is based on my education, research, and experience, as well as the documents I have considered, including the ’779 Patent (Ex.1001) and its prosecution history (Ex.1002). I have reviewed and am familiar with the specification of the ’779 Patent. I have reviewed and am familiar with the file history of the ’779 Patent.

4. In preparing this Declaration, I have also reviewed and am familiar with the each of the documents identified in the exhibit list above and/or discussed in my declaration below.

III. Qualifications

5. In formulating my opinions, I have relied upon my training, knowledge, and experience in the relevant art. A copy of my current *curriculum vitae* is provided as Ex.1008, and it provides a comprehensive description of my academic and employment history over the last forty-plus years. My work on this case is being billed at a flat rate of \$400 per hour, with reimbursement for actual expenses. My compensation is not contingent upon the outcome of this proceeding

6. I am an expert in the field of design and operation of gaming machines and systems for the casino industry.

7. I am the founder and presently president of Crevelt Computer System, Inc., a gaming business consulting and engineering development company that is located and incorporated in Las Vegas, Nevada. I founded Crevelt Computer in 1977. Although I discuss my expert qualifications in more detail below, I also attach as Ex.1008 a recent and complete curriculum vitae, which details my educational and professional background.

8. My formal, post-high school education started at the University of Las Vegas in 1973. I continued my education at the U.S. Naval Academy from 1975 to

1977. I then attended Iowa State University, where I received my Bachelor of Science degree in Computer Engineering in 1979.

9. My professional experience in the casino gaming industry started in 1974, when I joined Gamex Industries as a software engineer. As a software engineer, I designed and developed casino game management systems, including an on-line slot accounting and monitoring system, and I also maintained Gamex's on-line casino table game accounting system. I was also responsible for maintaining the system that monitored the play of table games and slot machines as installed in Caesar's Palace, Las Vegas.

10. In 1977, I started my own consulting company, Crevelt Computer System, Inc., and near the end of 1977 I worked at United Audio Visual as a software engineer developing audio/video controllers for multimedia shows.

11. From 1979 to 1980, I continued to work in the gaming industry as a computer engineer for Sircoma (later becoming IGT). At Sircoma, I developed various gaming machines, including video Poker, video Blackjack, video Red Dog and Whirlwin. I also had responsibility for maintaining the software for the video slot machines. I also acted as a technical gaming control liaison, which involved providing the Nevada Gaming Control Board staff with technical information regarding the company's gaming devices. The Nevada Gaming Control Board

regulates the gaming industry in Nevada, overseeing the licensing and compliance of casinos as well as manufacturers and the equipment used in gaming.

12. In 1981, I worked for Mills-Jennings as a Director of Corporate Research. In this role, I assembled and supervised a research and development team that designed a complete line of video casino gaming machines and an on-line casino accounting system.

13. From 1984 to 1986, as a consultant with Crevelt Computer System Inc., I worked with Electronic Data Technologies, where I designed and developed the first complete on-line Player Tracking System.

14. From 1988 to 1996, I worked for Electronic Data Technologies (EDT) and International Game Technologies (IGT). I was responsible for design, development and implementation of player tracking and accounting systems for casino games. Specifically, I was responsible for the development, deployment and support for over 150 installations of the SMART system and the first cashless system utilized by Caesar's Palace, Las Vegas. In 1995, I was promoted to Product Manager for Cashless Applications. In this role, I prepared business plans and strategies for implementing cashless gaming products, including IGT's first SMART card-based cashless gaming system installed at SBM in Monte Carlo. I also spent time evaluating casino-related intellectual property, particularly patents, especially those pertaining to cashless gaming and progressive systems.

15. As a consultant with Crevelt Computer Systems, I have worked with many gaming equipment manufacturers on the design and development of casino gaming devices, including slots, video games, Keno and Bingo systems. I also have provided independent laboratory analysis of games for regulators in New South Wales, Australia and the state of Mississippi. Additionally, I have conducted mathematical analyses for casino gaming devices.

16. From 1998- 2013, Crevelt Computer System was a Partner in FootTraffic Promotional Gaming LLC. As a Partner with FootTraffic Promotional Gaming LLC, I have designed, developed, managed and marketed a series of promotional games for casinos, retailers and trade shows. These are free-play games that are designed to bring or attract patrons to the casino with an opportunity to win cash and prizes. These games have been very successful and several have been incorporated into permanent promotions at several casinos, including Peppermill Casino (Reno), Casino Fandango (Carson City), and Silver Legacy (Reno).

17. In sum, I have over forty years of engineering and management experience in the gaming industry, both as a consultant and an employee. During this time, I have worked extensively with OEMs, casinos, casino gaming regulators and agencies worldwide, including the Nevada Gaming Control Board. I am also the co-author of two books that relate to the casino gaming industry – Slot Machine Mania and Video Poker Mania – which are still in publication twenty years after

they were first published. Additionally, I have been interviewed for numerous magazines, radio programs and television shows regarding gaming machines and the casino industry, including appearances on Secrets Revealed (a documentary on The Learning Channel) and High Rollers (a documentary on the Discovery Channel). Throughout my career, I have kept up to date with the latest developments in the casino industry by subscribing to casino-related trade publications and attending casino gaming shows. In addition, I am a named inventor on six United States patents related to casino gaming systems (i.e., cashless and progressive gaming systems).

IV. Legal Understanding

A. My Understanding of Claim Construction

18. I understand that during an *inter partes* review proceeding, claims are to be construed in light of the specification as would be read by a person of ordinary skill in the relevant art at the time the application was filed. I understand that claim terms are given their ordinary and customary meaning as would be understood by a person of ordinary skill in the relevant art in the context of the entire disclosure. A claim term, however, will not receive its ordinary meaning if the patentee acted as his own lexicographer and clearly set forth a definition of the claim term in the specification. In this case, the claim term will receive the definition set forth in the patent.

B. My Understanding of Obviousness

19. I understand that a patent claim is invalid if the claimed invention would have been obvious to a person of ordinary skill in the art at the time the application was filed. This means that even if all requirements of the claim cannot be found in a single prior art reference that would anticipate the claim, the claim can still be invalid.

20. To obtain a patent, a claimed invention must have, as of the priority date, been nonobvious in view of the prior art in the field. I understand that an invention is obvious when the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art.

21. I understand that to prove that prior art or a combination of prior art renders a patent obvious, it is necessary to: (1) identify the particular references that, singly or in combination, render the patent obvious; (2) specifically identify which elements of the patent claim appear in each of the asserted references; and (3) explain how the prior art references could have been combined in order to create the inventions claimed in the asserted claim.

22. I also understand that when considering the obviousness of a patent claim, one should consider whether a teaching, suggestion, or motivation to combine

the references exists so as to avoid impermissibly applying hindsight when considering the prior art. I understand this test should not be rigidly applied, but that the test can be important to avoiding such hindsight. I note that, based on my understanding, an *express* motivation to combine taught by a secondary reference is neither circular nor rooted in hindsight because it is expressed in the prior art itself—necessarily before the invention.

23. I understand that certain objective indicia can be important evidence as to whether a patent is obvious or nonobvious. Such indicia include: (1) commercial success of products covered by the patent claims; (2) a long-felt need for the invention; (3) failed attempts by others to make the invention; (4) copying of the invention by others in the field; (5) unexpected results achieved by the invention as compared to the closest prior art; (6) praise of the invention by the infringer or others in the field; (7) the taking of licenses under the patent by others; (8) expressions of surprise by experts and those skilled in the art at the making of the invention; and (9) the patentee proceeded contrary to the accepted wisdom of the prior art.

24. I also understand that “obviousness” is a legal conclusion based on the underlying factual issues of the scope and content of the prior art, the differences between the claimed invention and the prior art, the level of ordinary skill in the prior art, and any objective indicia of non-obviousness. For that reason, I am not rendering a legal opinion on the ultimate legal question of obviousness. Rather, my

testimony addresses the underlying facts and factual analysis that would support a legal conclusion of obviousness or non-obviousness, and when I use the term obvious, I am referring to the perspective of one of ordinary skill at the time of invention.

C. Level of Ordinary Skill in the Art

25. I understand that a person of ordinary skill in the relevant art (“POSITA”) is presumed to be aware of all pertinent art, thinks along conventional wisdom in the art, and is a person of ordinary creativity—not an automaton.

26. I have been asked to consider the level of ordinary skill in the field that someone would have had at the time the claimed invention was made. In deciding the level of ordinary skill, I considered the following:

- the levels of education and experience of persons working in the field;
- the types of problems encountered in the field; and
- the sophistication of the technology.

27. My opinion below explains how a POSITA would have understood the technology described in the references I have identified herein around the September 2012 timeframe.

28. Based on the disclosure of the ’779 Patent, a POSITA would be a person with a bachelor’s degree in electrical engineering, computer science, or a

similar field; and at least two years of experience in the wager based gaming industry. A person with less education but more relevant practical experience may also meet this standard. This description is approximate, and a higher level of education or skill may make up for less experience, and vice-versa.

V. Background of the Technology

29. I understand that analyzing the state of gaming systems during the years prior to the earliest possible priority date of the '779 Patent can provide valuable insight into what people of ordinary skill in the art were aware of at the time, and in what direction the industry was going.

A. Cash Out and the Problem of Points

30. At the heart of the '779 Patent is the concept of offering payouts, or “cash outs,” before a wagering event is complete:

In one embodiment, at any desired time after initiation of an event (such as at any time after a “ticket” is purchased until completion of an event, after each leg has been completed, between legs, including potentially as a leg is “in-play”, and/or during a designated span of time before, during and/or after any of the legs), any desired number of players who remain eligible for a prize (and potentially those still eligible for bonus and/or consolation prizes) or to win or have correct (win) predictions for each of the events or legs that are completed, may be offered a “buy-out” or an opportunity to sell their tickets (in whole or

alternatively may be in part (i.e., a fractional amount) to the game operator or through the game operator (or alternatively directly) to a third party (e.g., one or more system operator(s), business entity or entities such as a merchant(s), one or more other persons, other player(s), etc.).

'779 Patent at 35:42-57. Originally known as the “Problem of Points,”¹ this concept is as old as the theory of probability itself. In fact, it is the very foundation of the theory.

31. The Problem of Points was first identified as a mathematical thought experiment in 1400. See C.C. Heyde & E. Seneta, *Statisticians of the Centuries* at 5 (Springer 2001) (Ex. 1011); Jui-Pin Cheng, *The Origin of Probability and The Problem of Points* at 2 (2000), <https://sites.math.rutgers.edu/~cherlin/History/Papers2000/cheng.html> (Ex.1012). In a manuscript dated to this time, an unknown author correctly solved the problem

¹ Today, this concept is known as “Expected Value.” See, e.g., Vishal Jain & Jyoti Moy Chatterjee, *Machine Learning with Health Care Perspective* at 319 (Springer 2020) (Ex.1009); Christiani Hugonii, *The Value of all Chances in Games of Fortune; Cards, Dice, Wagers, Lotteries, &C. Mathematically Demonstrated* at 2 (printed 1741) (Ex. 1010).

of how to amicably settle a best-of-three wagering event before all three legs were completed. *Id.* at 6. And while the author could not solve this problem when a fourth leg was added, it remained a mathematical curiosity throughout the sixteenth century. *Id.*

32. The Problem of Points was more firmly embraced as a gambling concept, as well as one of probability, in 1654 when it was proposed to French mathematicians Pierre de Fermat and Blaise Pascal by the Chevalier de Méré, a well-known 17th century author and gambler. Nicholas Hammond, *The Cambridge Companion to Pascal* at 42-43 (Cambridge University Press 2003) (Ex.1013); Prakash Gorroochurn, *Thirteen Correct Solutions to the ‘Problem of Points’ and Their Histories*, *THE MATHEMATICAL INTELLIGENCER* at 56 (Springer 2014) (Ex.1014). The solution to the problem is borne out in a series of letters between Fermat and Pascal in which the two discuss how to fairly divide the wager in a six-throw game of dice when the game is stopped before the sixth throw. Keith Devlin, *The Unfinished Game: Pascal, Fermat, and the Seventeenth-Century Letter that Made the World Modern* at 2 (Basic Books 2008) (Ex.1015); Anders Hald, *A History of Probability and Statistics and Their Applications before 1750* at 55-56 (Wiley 2003) (Ex. 1016).

33. The solution ultimately involved counting combinations and summing binomial coefficients. *See* Hammond at 44; Devlin at 67. But, because the labor of

calculating all the different combinations was “excessive,” Pascal devised a “shortcut,” or “abridgement,” that involved a ground-breaking procedure for calculating expectations recursively. Hammond at 44; Hald at 59-60.

34. The final mathematical step in the path to solving the Problem of the Points was an extremely powerful mathematical formula developed nearly 100 years later by Thomas Bayes—an obscure eighteenth-century Presbyterian minister in England who studied mathematics as a hobby and is the namesake of Bayesian probability theory. Heyde at 68-69; Delvin at 135.

35. Although Bayes’ method went largely ignored for another 200 years because it too was computationally laborious, it has grown in popularity (and accuracy) since the 1970s alongside the computer and increased computing power, which have made it possible to run the process quickly and iteratively with large amounts of data. Devlin at 138-39; Adam Prügel-Bennett, *The Probability Companion for Engineering and Computer Science* at 188 (Cambridge University Press 2019) (Ex.1017). Thus, the use of computers to calculate a “cash out” value before a wagering event is complete has been well known since at least the 1970s.

B. Cash Out and In-Play Betting

36. “In-play” betting refers to wagering on an event that has already started but not yet finished. Elizabeth A. Killick & Mark D. Griffiths, *In-Play Sports Betting: a Scoping Study*, 17 INT J MENT HEALTH ADDICTION 1456, 1457 (Apr. 16,

2018) (Ex.1018); *What is In-Play Betting: Live Betting Explained by William Hill*, WILLIAMHILL.COM (Apr. 20, 2021), <https://news.williamhill.com/betting-guides/in-play-betting/> (Ex. 1019). This form of betting first appeared in the 1990s when bookmakers began taking bets over the telephone while a sporting event was in progress. Killick at 1457; Mark O’Haire, *The History of Betting*, TheSetPieces at 2 (2021), <https://thesetpieces.com/latest-posts/the-history-of-betting/> (Ex. 1020). It gained even more popularity with the birth and growth of the internet. *Id.*; O’Haire 2-3.

37. In-play betting is now more popular than pre-event wagering. *See* Killick at 1457 (“Bet365 reported that 80% of all their sports betting revenue is derived from in-play bets alone”).

38. The rise of the internet and advances in computing also led to the advent of the betting exchange marketplace, which first appeared in 2000. Chris Summers, *How Does a Betting Exchange Work?*, BBC News at 1 (Dec. 7, 2007) (Ex.1022); Gianluca Landi, *Betting Exchange: The Sports Trading Revolution* at 17 (StreetLib 2017) (Ex.1023); *see also* Declaration of Bernard J. Marantelli, Australian Patent Application No. 2013333573 at ¶ 2 (Jun. 18, 2016) (Ex. 1024) (“Around 2001 I was introduced to betting exchanges, primarily the leading exchange Betfair, which had launched in 2000.”). A betting exchange is a marketplace that allows bettors to “back” (*i.e.*, bet that an outcome will occur) and “lay” (*i.e.*, bet that an outcome will

not occur) a wager on the outcome of an event. Summers at 2; Landi at 25. It is characterized by real-time online betting with attributes analogous to a modern stock exchange. Vaughan Williams & Donald S. Siegal, *The Oxford Handbook of the Economics of Gambling* at 138, 140 (Oxford University Press 2013) (Ex.1025). Betfair—the first such marketplace—is the most recognizable and popular example of a betting exchange. Williams at 140 (citing Mark Davies *et al.*, *Betfair.com: Five Technology Forces Revolutionize Worldwide Wagering*, 23 EUROPEAN MANAGEMENT JOURNAL 533 (Oct. 2005) (Ex.1026)); Summers at 1.

39. Leveraging on the exchange, Betfair permitted a way to “Cash Out” that was called “greening up,” whereby bettors on the Betfair betting exchange were able sell, or trade back, their bets in the middle of a wagering event as the odds changed, thereby locking in profits before the wagering event concluded. Betfair Trading Software, *About Bet Angel Software* at 1, 3 (via The Wayback Machine dated Dec. 26, 2007) (Ex.1028);² Green All Over Blog at 8-9 (Dec. 7, 2008) (Ex.1029). Betfair subsequently rebranded this technology as “Cash Out” in February 2011 and released the technology on its mobile platform by December of

² MPEP 2128 II E. Wayback Machine (“Prior art obtained via the Wayback Machine® sets forth a prima facie case that the art was publicly accessible at the date and time provided in the time stamp.”).

that same year. *See* Dan Thomas, *Betfair's 'Cash Out' Trading Tool Used for the Millionth Time*, BETTFAIR at 1-2 (Sept. 13, 2011) (Ex.1030); Betfair Financial Statement at 13 (Jun. 29, 2011) (Ex.1031); Dan Thomas, *Cash Out Comes to Betfair Mobile*, Betfair at 1-2 (Dec. 19, 2011) (Ex.1032). Others soon followed suit, with reputed betting company William Hill launching similar technology on their sportsbook in December 2012. *See* Michael Taylor, *Cash In My Bet with William Hill*, WILLIAMHILL.COM at 2 (Dec. 18, 2012) (Ex.1033); Tal Grant *et al.*, *UK Gaming*, Credit Suisse at 51 (Aug. 14, 2017) (Ex.1034). Thus, real-time cash-outs as part of in-play betting via a networked betting system were well known prior to the earliest claimed priority date of the Asserted Patents.

C. Partial Cash Outs

40. It is no coincidence that betting exchanges, like Betfair, operate like a modern stock exchange. Playing the stock market has long been likened to gambling, particularly options trading. *See, e.g.*, James Conrey McMath, *Speculation and Gambling in Options, Futures and Stocks in Illinois* at 3-5 (Hawkins & Loomis 1921) (Ex.1035); LeRoy Gross, *The Conservative Investor's Guide to Trading Options* at 96 (Wiley 1999) (Ex.1036); Stuart Banner, *Speculation: A History of the Fine Line Between Gambling and Investing* at 1, 73, 76, 83 (Oxford University Press 2017) (Ex.1037). And the concept of the partial exercise, or partial

cash out, of a position in an option is as old as the concept of the option itself. See, e.g., E.V. Smalley, Northern Pacific Railroad Book of Reference at 318-320 (E. Wells Sackett & Rankin 1883) (Ex.1038); Wesley A. Sturges et al., Stock Option and Stock Purchase Plans at 47-48 (U.S. Gov't Printing Office 1952) (Ex.1039).

41. A “partial exercise” allows the owner of an option to sell, or cash out, a portion of his or her position before the strike date while holding the remainder until the actual strike date. *See, e.g.*, Smalley at 320; Michael C. Thomsett, Getting Started in Options at 322 (Wiley 2007) (Ex.1040); *see also, e.g.*, Lawrence G. McMillan, McMillan on Options at 595 (Wiley 2011) (Ex.1041) (“partial profits”). Betfair began allowing players to do this via its betting exchange at least as early as December 2007. Specifically, Bet Angel software allowed bettors to partially “green up” on the Betfair betting exchange by selling, or trading back, a portion of a bet at a profit while allowing the remainder of the bet to play out until the conclusion of the wagering event. *See, e.g.*, Betfair Trading Software, About Bet Angel Software at 1, 3 (via The Wayback Machine dated Dec. 26, 2007) (Ex.1028); The Sports Trader, The Diary of a Betdaq Trader at 4 (Dec. 5, 2007), https://thesportstrader.typepad.co.uk/the_sports_trader/2008/09/index.html (Ex.1042); Betfair Community, Football Forum at 1 (Dec. 11, 2009), <https://community.betfair.com/football/go/thread/view/94070/23545078/i-didnt-think-you-got-your-green-until-after-events-were->

finished?post_id=421340998#421340998#flvWelcomeHeader (Ex.1043); Betfair Community, Golf Forum at 1 (Apr. 9, 2010), <https://community.betfair.com/golf/go/thread/view/94086/23563950/masters-day-2---in-running?liveView=0&pg=53> (Ex.1044); Betfair Community, General Betting Forum at 2 (Dec. 10, 2010), https://community.betfair.com/general_betting/go/thread/view/94082/26488561/greening-up?liveView=0 (Ex.1045); Betfair Community, General Betting Forum at 3 (Jun. 8, 2011), https://community.betfair.com/general_betting/go/thread/view/94082/27736281/greening-up---does-it-really-pay-long-term?liveView=0&pg=2 (Ex.1046).

42. This concept also began appearing in patent applications at around the same time. For example, U.S. Patent Application Publication No. 2008/0311981 to Schugar (Ex.1005) (“Schugar”) discloses an instance in which a bettor “can be ‘winning’ before the game is over” and, therefore, “may wish to have a way to cash in on the winning state before completing the game.” Schugar at ¶ [0077]. Schugar discloses an example in which a bettor has made a \$100 wager on a Yankee’s game and by the fifth inning the expected payout of that wager is \$132. *Id.* at ¶ [0120]. In this example, the bettor “may use \$1 of that amount and make a second wager,” which will result in \$1.52 (i.e., the adjusted value of that dollar based on the new odds) being “subtracted from the original \$100 wager to result in a \$98.48 wager

remaining on the Yankees.” *Id.* Thus, Schugar discloses a partial cash out method similar to what was available in Betfair at the time. Schugar also makes clear that “the player need not be in a positive expectation situation in order to utilize the method of cashing in value for a current wager in progress in order to place a second wager.” *Id.*

43. In addition, Schugar explains that its partial cash out method “can be applied to all games, including live table games or live sporting events,” and that it also may be implemented in “any wagering machine game, such as a slot machine, video poker machine, or machine game which plays any game which can have multiple states (e.g., games which a player can wager on a progression).” *Id.* at ¶¶ [0104], [0106]. Thus, real-time partial cash-outs also were well known prior to the earliest claimed priority date of the Asserted Patents.

VI. The ’779 Patent

A. Priority Date

44. The application that led to the ’779 Patent was filed June 10, 2021 as U.S. Patent Application No. 17/344,313, and is a continuation of U.S. Patent Application No. 17/225,489 filed April 8, 2021, which is a continuation in part of U.S. Patent Application No. 17/109,616 filed December 2, 2020, which is a continuation of U.S. Patent Application No. 16/515,916 filed July 18, 2019, which is a continuation of U.S. Patent Application No. 15/422,348 filed January 31, 2018,

which is a continuation of U.S. Patent Application No. 15/422,348 filed February 1, 2017, which is a continuation of U.S. Patent Application No. 15/212,392 filed July 18, 2016, which is a continuation of U.S. Patent Application No. 14/990,538 filed January 7, 2016, which is a continuation of U.S. Patent Application No. 14/833,572 filed August 24, 2015, which is a continuation of U.S. Patent Application No. 14/449,541 filed August 1, 2014, which is a continuation-in-part of U.S. Patent Application No. 14/275,136 filed May 12, 2014, which is a continuation of U.S. Patent Application No. 13/958,028 filed August 2, 2013, which is a continuation-in-part of U.S. Patent Application No. 13/605,813, which was filed September 6, 2012. Ex.1001 at (63). For purposes of my analysis and opinions, I have assumed that the '779 Patent has the priority date of the earliest filed application to which it claims priority—September 6, 2012.

B. Overview

45. The '779 Patent, entitled “Wagering Apparatus, Methods and Systems,” states that it is directed to “a new betting product developed for a wide range of applications, including any event where betting may be utilized or even scenarios where play is just for fun.” '779 Patent at 3:66-4:2.

46. The challenged claims appear to be directed toward a system for conducting a wagering event using continuous and real-time computer operations, wherein a player is offered the option of fully or partially “cashing out” a wager

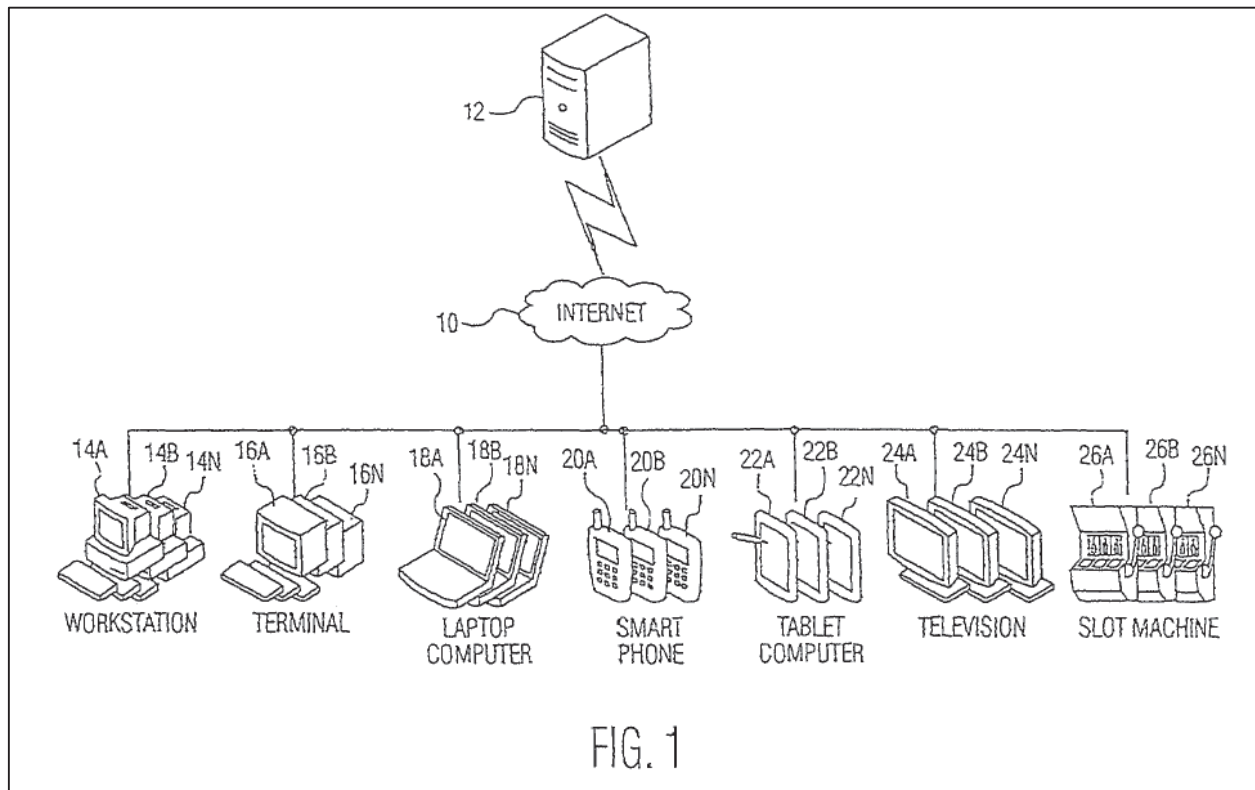
before the wagering event ends. Describing the concept of cashing out, the '779 Patent states as follows:

In one embodiment, at any desired time after initiation of an event (such as at any time after a “ticket” is purchased until completion of an event, after each leg has been completed, between legs, including potentially as a leg is “in-play”, and/or during a designated span of time before, during and/or after any of the legs), any desired number of players who remain eligible for a prize (and potentially those still eligible for bonus and/or consolation prizes) or to win or have correct (win) predictions for each of the events or legs that are completed, *may be offered a “buy-out” or an opportunity to sell their tickets (in whole or alternatively may be in part (i.e., a fractional amount) to the game operator or through the game operator (or alternatively directly) to a third party (e.g., one or more system operator(s), business entity or entities such as a merchant(s), one or more other persons, other player(s), etc.).*

'779 Patent at 35:42-57.

47. The concept of a “buy out” or “cash out” described in the '779 Patent is broad. For example, the '779 Patent explains that “the value or price of any full and/or partial buy-out/cash-in offers and acceptances, as well as the form in which they are made, should be broadly construed.” *Id.* 32:16-19.

48. As to the wagering system in which the buy-out/cash-out concept may be used, as shown in FIG. 1 below, the system includes “a system controller” and “a plurality of wager input devices such as wagering stations 14, wagering terminals (including self-service wagering terminals) 16, and internet connected computing systems 18.” *Id.* 5:5-13.



Id. FIG. 1.

49. Briefly addressing these primary components of the system, as the '779 Patent states, “the term ‘system controller’ should be broadly construed to comprise any hardware device or devices that includes at least one central processing unit (CPU) or other processing device and associated memory.” *Id.* at 5:16-20. The

system controller is described as “most critically” including the “Cash-In 422 program.” *Id.* at 9:20-21. The “Cash-In 422 program is responsible for determining when an offer to buy-out a ticket holder will be made, and the price that will be offered. Within the Cash-In 422 program, the Offers Generation 452 routine is the trading engine that, when triggered, will generate a set of offers over all of the tickets that are still potential winners and then publish the offers and receive/process the acceptances of these offers.” *Id.* at 9:23-31.

50. The wager stations and wagering terminals may be a “conventional wager terminal” “as known in the art.” *Id.* at 6:8-13; *see also id.* at 12:7-10 (“The embodiments as generally illustrated in FIG. 1 may include, as known in the art, a display device which displays the betting options.”), 12:38-40 (“Any other suitable types of products or devices commercially known may also be utilized where desired in accordance with the needs of a particular implementation.”), 26:16-18 (“The present disclosure may be implemented in various configurations for gaming machines or wager terminals known in the art.”). The wager stations and terminals include a plurality of “input devices,” which “can include any suitable device which enables the player to produce an input signal which is received by the processor” of the wager station or wager terminal. *Id.* 13:12-15.

51. In addition, the ’779 Patent explains that “the concepts herein may also be applied to gaming machines, so gaming machine 26,” which itself includes input

devices, “is depicted as an additional input device.” *Id.* at 5:20-24. Notable with respect to my analysis and opinions herein, the ’779 Patent recognizes that its “present disclosure” may be implemented in the “gaming machines and their respective operations in both stand alone and pool or progressive games ... disclosed in detail in U.S. Patent No. 8,105,149, incorporated herein by reference,” which is the issued patent version of the DeWaal publication reference that I have analyzed in this declaration. *Id.* 26:29-32.

52. In addition to the system components being “broadly construed,” “conventional” and “known in the art,” the ’779 Patent also recognizes that many of the basic operations of the wagering system for providing a wagering event, and the software for implementing those operations, were known in the prior art. For example, the ’779 Patent states that the server “may include software programs for wagering software functionality such as registration, deposit tracking, withdrawals, account sections that may include current and previous bet histories, fixtures, results, historical data, rules and regulations,” but recognizes that “[t]hese types of software programs having these functionalities are in place in various totalizer facilities and are thus known in the art.” *Id.* 8:19-26; *see also id.* 8:29-32 (“The program for the known functionality of a totalizer facility noted above would be incorporated in the Micro Tote 408 program, as discussed further below.”).

C. Prosecution History

53. I have reviewed the prosecution history of the '779 Patent. In the first non-final office action, the Examiner issued a nonstatutory double patenting rejection for all pending claims in the application. '779 Patent File History at 62-66 (Ex.1002). A terminal disclaimer was filed and approved. *Id.* at 88-89, 92. All pending claims were then allowed without issuing a single prior art rejection. *Id.* at 29-34.

VII. Claim Construction

54. I have been instructed that the challenged claims of the '779 Patent are to be given their ordinary and customary meaning as understood by one of ordinary skill in the art at the time of the invention in light of the specification and the prosecution history pertaining to the patent. I have followed these principles in my analysis set forth in this document.

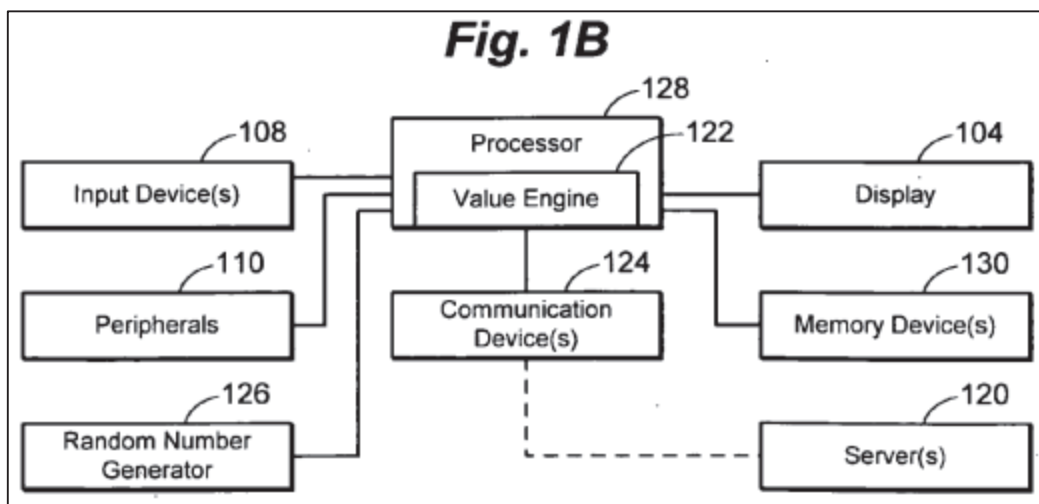
55. Based on this understanding it is my opinion that no terms of the '779 Patent require construction beyond their plain and ordinary meaning.

VIII. Overview of Prior Art – Scott (Ex.1006)

56. U.S. Patent Publication No. 2012/0309489 A1 to inventor James R. Scott (hereinafter, "Scott"), entitled "Value Engine Providing Current Cash Value for Wagering Game Indicia," was published on December 6, 2012. The application leading to Scott, U.S. Patent Application No. 13/134,299 was filed June 3, 2011, roughly fifteen months prior to the assumed priority date of the '779 Patent. *See*

Scott at (21), (22). Scott is directed to “electronic wagering games and systems, particularly to a gaming machine configured to provide value for partial or incomplete game outcomes.” *Id.* at ¶[0002]. In one embodiment, such a game comprises “accepting a wager at the gaming machine, presenting one or more game symbols that do not form a winning outcome on a display of the gaming machine, and presenting a cash value for the game symbols to the player before the game has ended.” *Id.* ¶[0019].

57. The general components of the system include one or more “gaming machines,” “one or more controllers or processors for controlling the gaming machine,” “gaming servers,” and a “value engine.” *Id.* at ¶¶[0008]-[0010], [0040]-[0043], [0048], [0055]. The general architecture of Scott’s system is shown below in FIG. 1B.



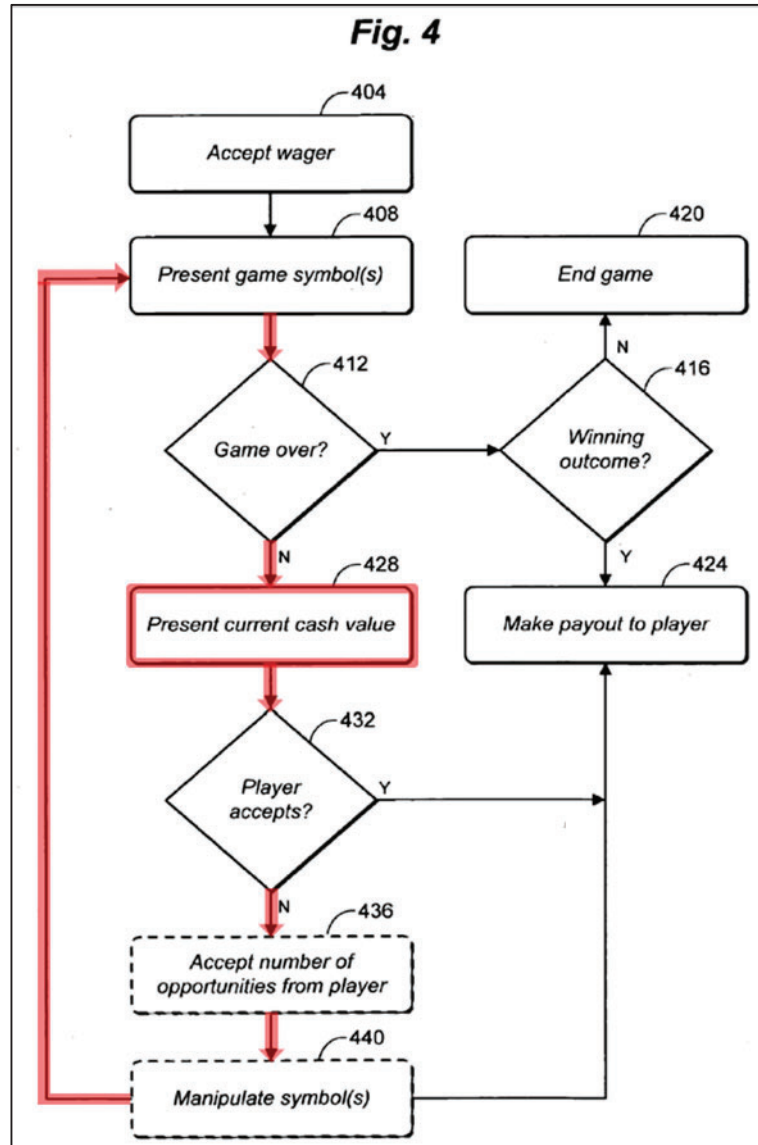
58. Scott discloses “[a] value engine for determining and presenting current cash value of a player’s cards, symbols, or other game indicia.” *Id.* at ¶[0008]. The

“value engine provides a current cash value for non-final sets of symbols or hands,” and presents the player with “an option to take the current cash value or continue play[ing] to achieve a winning outcome.” *Id.* The value engine and current cash value option are described as a critical component that provides several advantages and benefits. *See, e.g., Id.* ¶¶[0035] (“The value engine is advantageous in that it adds a new element to wagering games that is compatible with a wide variety of wagering games.”), [0038] (“This gives players a sense of control which makes the game challenging and more entertaining.”), [0039] (“The value engine may also attract new players who are attracted to games where they can easily see the results of their actions....the value engine also provides the benefit of offering but not requiring players to act upon a cash value presented by the value engine....This reduces, if not eliminates, the risk that players of particular games will be alienated by the value engine.”), [0067] (“This provides an animated presentation which may be engaging to players.”).

59. Scott discloses detailed processes for performing these operations. For example, “FIG. 4 provides a high level illustration of the operation of the value engine that may be used with a variety of wagering games, such as slot type games, poker type games, keno games, bingo games, or other games.” *Id.* at ¶[0070]. As shown below, once the wager is accepted, the operation of value engine and game enters a loop that continues until it is determined that the game is over at step 412 or

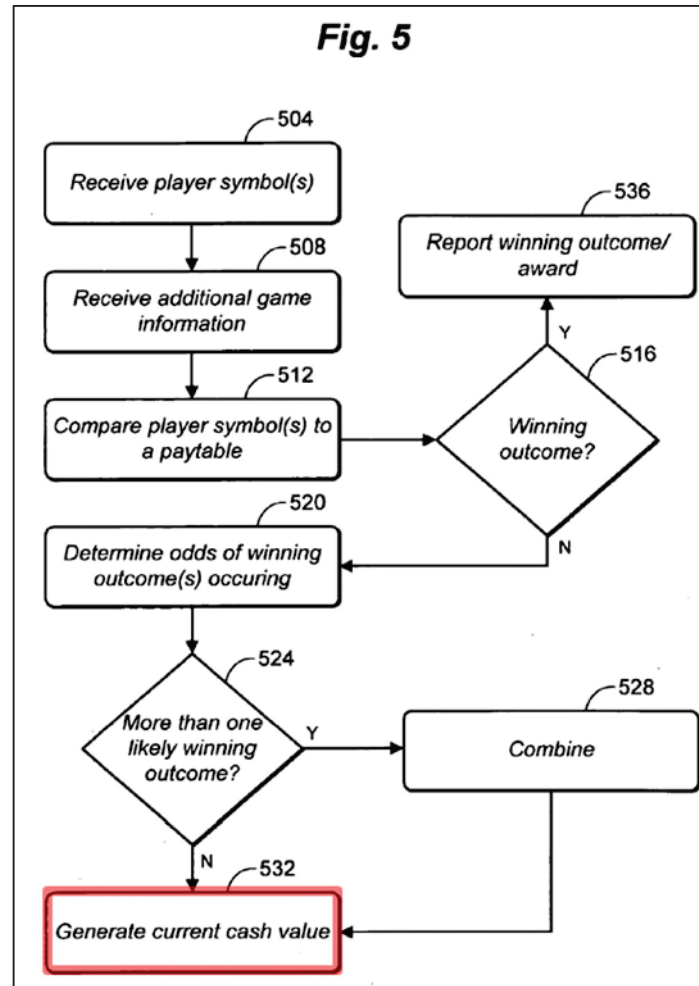
until it is determined that the player has accepted the current cash value at step 432.

See, e.g., id. at ¶[0081] (“the process of presenting current cash value for a player’s game symbols may continue with newly presented game symbols until the game is over at decision step 412 or until the player accepts a current cash value for his or her set of symbols at decision step 432.”). Of note, steps 436 and 440 are optional steps that are not relied on herein as part of the analysis. *See, e.g., id.* at ¶¶[0079]-[0080]. This continuous loop is shown in the annotated version of FIG. 4 below.



60. This continuously looped process includes step 428, at which “a current cash value for the player's current game symbols may be generated and presented by the value engine of the gaming machine.” *Id.* at ¶[0073]. Scott discloses that the continuously looped step 428 for generating a current cash value itself utilizes a sub-process. In this regard, Scott discloses that “FIG. 5 is a flow diagram illustrating how current cash value may be determined by an exemplary value engine.” *Id.* at ¶[0082].

As an initial matter, Scott discloses that this sub-process for generating a current cash value “may occur in real time or in substantially real time.” *Id.* ¶[0067]. The real time and continuously looped process for generating the current cash value is shown below.



IX. Claims 1-3, 5-10, 16-18, and 21-25 are Anticipated and/or Rendered Obvious by Scott

61. In this section, I will explain why claims 1-3, 5-10, 16-18, and 21-25 of the '779 Patent are anticipated and/or rendered obvious by the disclosures of Scott.

I note that in this discussion, I may focus on the particular language in specific

claims, but it should be understood that my analysis applies to the corresponding limitations of all claims containing identical or substantially identical language. In addition, where I analyze a dependent claim, my analysis of that dependent claim incorporates by reference my analysis of the independent claim and any additional intervening dependent claims.

A. Claim 1

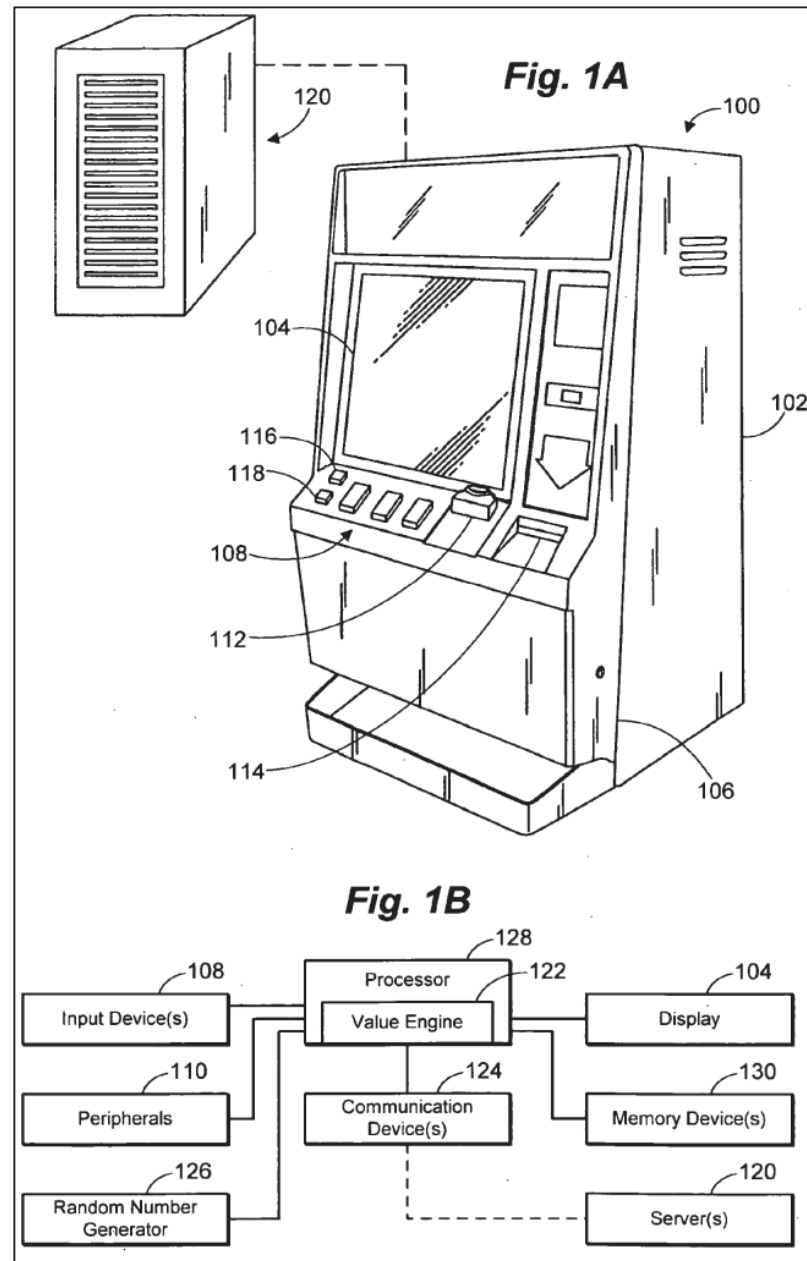
62. In my opinion, a POSITA would have understood that claim 1 of the '779 Patent was anticipated by Scott because Scott discloses each and every element of claim 1. In addition, or alternatively, to the extent my opinions regarding anticipation for a claim element are not accepted, I have explained why any such differences are minor, would have been known to a POSITA, and would have been obvious in view of the knowledge of a POSITA and common sense. These opinions are supported by the sections that follow.

1. 1[a] – “A system comprising”

63. Limitation 1[a] is the preamble of claim 1 of the '779 Patent. In my opinion, and to the extent the preamble is limiting, a POSITA would have understood that Scott discloses this limitation for at least the reasons that follow.

64. For example, corresponding to “*a system*,” Scott discloses that “[t]he invention relates to electronic wagering games and systems, particularly to a gaming

machine configured to provide value for partial or incomplete game outcomes,” and depicts such systems in FIGS. 1A and 1B, for example, shown below. Scott ¶[0002].



65. Scott further discloses that the system includes a “gaming machine 100” and a “gaming server” 120 connected by a network. *See, e.g.*, ¶[0055] (“[T]he gaming machine 100 may be configured as a client-type device and obtain game

code or game outcome information from a remote server 120 through network or other communications.”). Furthermore, the system may comprise “a number of players electronically connected,” *i.e.*, via a number of connected gaming devices, to form a multiplayer system. ¶[0096].

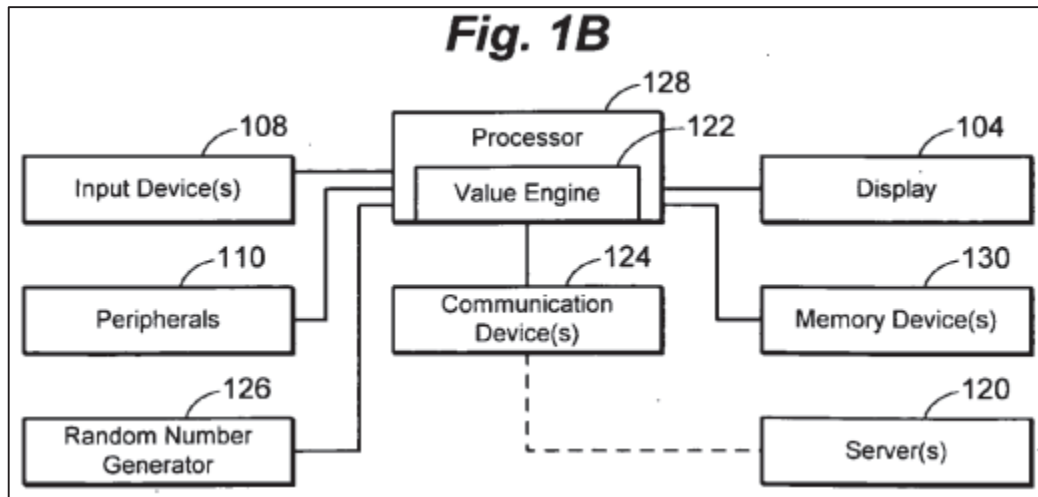
66. Accordingly, a POSITA would have understood that Scott discloses 1[a].

2. **1[b] – “a processor operatively coupled to a memory configured to store computer-readable instructions that, when executed by the processor, cause the processor to”**

67. In my opinion, a POSITA would have understood that Scott discloses limitation 1[b]. In fact, Scott discloses that there are several “*processor[s] operatively coupled to a memory configured to store computer-readable instructions.*”

68. With respect to a “*processor operatively coupled to a memory configured to store computer-readable instructions,*” Scott discloses that the system includes “[a] **processor 128 may be a microprocessor**, chip, electronic circuit, or the like” and that “[a] **processor 128 may access one or more memory devices 130,**” which is “**configured to store the machine readable code to implement and/or operate one or more wagering games.**” Scott ¶[0048], ¶[0051]. Scott discloses various instances of these components within the system.

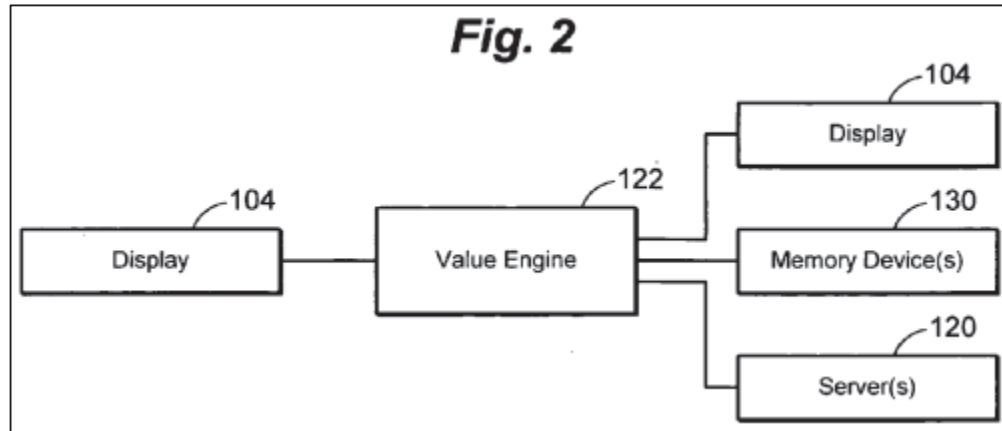
69. For example, Scott discloses that “**a gaming machine configured to present one or more wagering games may comprise a memory device ... and a processor.**” *Id.* ¶[0015]. FIG. 1B illustrates this.



70. Scott also discloses “**gaming servers,**” which, by virtue of them being “servers,” a POSITA would understand to include at least one processor for executing and associated memory for storing computer-readable instructions to implement its server functions. *See, e.g., id.* ¶[0055].

71. Additionally, Scott discloses that the value engine may be “provided by the processor 128 of FIG. 1B,” which is within the gaming machine, or that it may be a separate device from the gaming machine processor with its own processor and access to one or more memory devices. *See id.* ¶[0050] (“It is noted that the **value engine 122 may be a separate component, comprising for example a separate processor 128.**”), ¶[0057]. In either event, Scott discloses that “the value engine 122 may be **in communication with...memory devices 130.**” *Id.* FIG 1 above

illustrates the value engine being within the gaming machine and FIG. 2 below illustrates the separate device embodiment.



72. From these disclosures, POSITA would have understood that Scott discloses “a processor” because Scott expressly states that the system includes processors such as a microprocessors.

73. A POSITA would have understood that Scott discloses a “memory configured to store computer-readable instructions” because Scott expressly states that the system includes one or more memory devices configured to store machine readable code, and would understand that computers are machines such that there is no difference between computer-readable instructions and machine readable code—these are simply different expressions of the same thing.

74. A POSITA would have understood that the processors are “operatively coupled to a memory” because Scott expressly states that the processor may access the one or more memory devices.

75. Finally, regarding the instructions being “*executed by the processor*,” Scott discloses that “**processor 128 may retrieve and execute machine readable code.**” ¶[0052]. And, as discussed in the sections that follow addressing limitations 1[c] through [11], such instructions, “*when executed by the processor, cause the processor to*” perform the functions recited in those limitations.

3. 1[c] – “**receive, by a trading engine module of a system controller, a wager on a wagering event from one or more input devices via a communications interface, the wager input via a user interface of the one or more input devices;**”

76. In my opinion, a POSITA would have understood that Scott discloses limitation 1[c]. Limitation 1[c] recites structural components including “*a trading engine module*,” “*a system controller*,” “*one or more input devices*,” “*a communications interface*,” and “*a user interface of the one or more input devices*.” Scott’s disclosure of each of these components is discussed in turn.

77. Corresponding to the claimed “*trading engine module*,” Scott discloses value engine 122, which may be a software module that is executed by the processor to provide the value engine’s features and functionalities. *Id.* at ¶[0052] (“As stated, a memory device 130 may store machine readable code to implement a value engine 122. For example, a processor 128 may retrieve and execute machine readable code to provide the value engine 122, its features, or its functionality as disclosed herein.”). Regarding such functionalities, which will be discussed in greater detail, Scott discloses that the value engine 122 generally “is configured to evaluate game

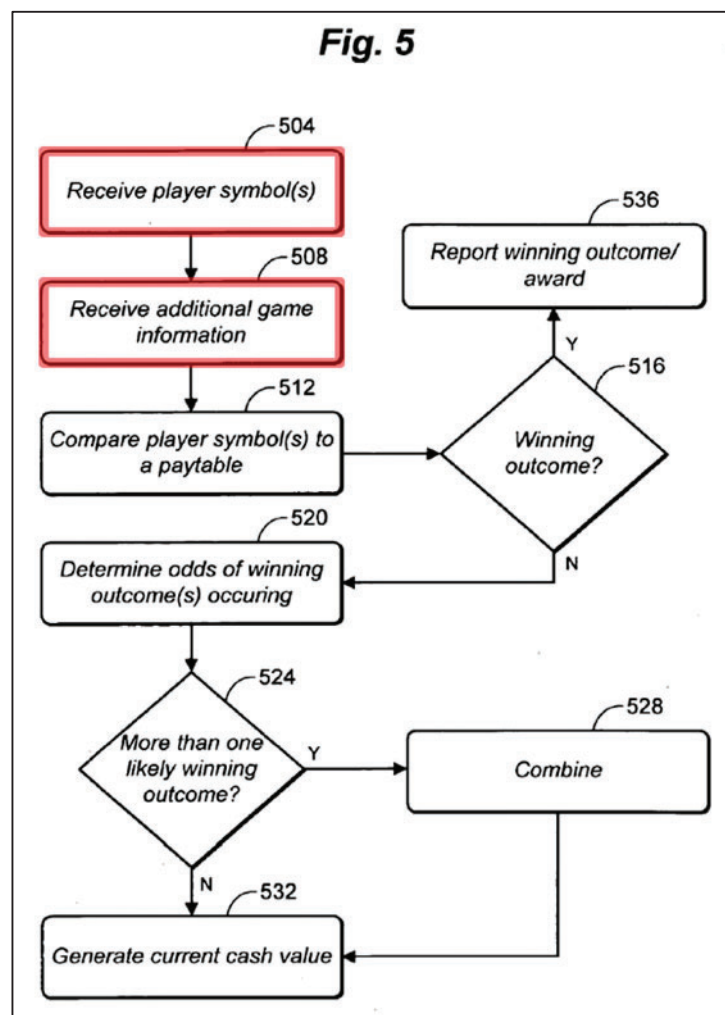
outcomes at various stages of a game” and “determine a monetary or cash value for the current game outcome and present this value to a player.” *Id.* at ¶[0033].

78. With respect to the “*system controller*,” the ’779 Patent defines this term “broadly” to comprise “any hardware device or devices that includes at least one central processing unit (CPU) or other processing device and associated memory.” ’779 Patent at 5:16-20. A POSITA would understand that any of the wagering machines, gaming servers, and value engine, individually and collectively, would meet the ’779 Patent’s definition of “system controller” because, as described above for limitation 1[b], they each comprise at least one processor and can access associated memory.

79. Therefore, Scott discloses “*a trading engine module of a system controller*” because, as described in the preceding paragraphs, the value engine is among or “of” the three devices that individually and collectively satisfy the ’779 Patent’s definition of “system controller.”

80. Here, the claim specifies that the function of “*receive...a wager*” is “*by the trading engine module*.” Disclosing this, Scott discloses with reference to FIG. 5, that “[a]t step 504, **one or more game symbols or indicia belonging to a player may be received by the value engine**,” and that “[a]t step 508,” highlighted below, “**additional information may be received or retrieved by the value engine**,” including “**the amounts wagered**.” ¶¶[0082]-[0083]; *see also id.* ¶[0061].

Therefore, a POSITA would have understood that Scott discloses this limitation because Scott expressly states that the value engine receives the amounts wagered as well as the wagered upon symbols or indicia belonging to a player and constituting “a wager.” These functions are illustrated in FIG. 5, below, which “is a flow diagram illustrating how current cash value may be determined by an exemplary value engine.” *Id.* ¶[0082].



81. Corresponding to the received wager being placed “on a wagering event,” Scott discloses that its system supports wagering on “various games, such as

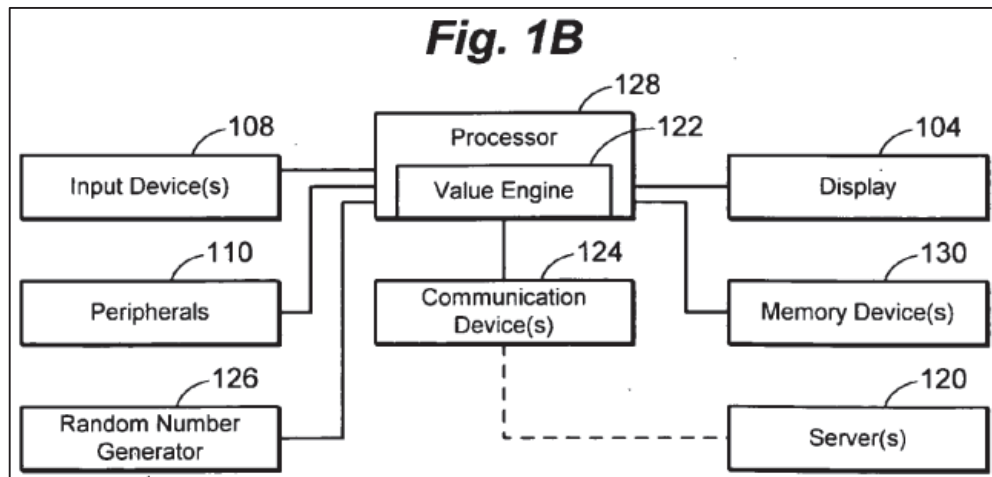
poker games, card games, or slot games.” ¶[0010]; *see also id.* ¶[0035] (“It is contemplated that the value engine may be used with any wagering game where game symbols or indicia (e.g., playing card symbols, slot machine symbols, keno numbers, bingo numbers, etc...) are revealed in subsequent stages or steps of a game.”), ¶[0044] (“These may include games in Class III, such as video poker games, keno, slot-type games, and blackjack or other card, dice or various other games now known or later developed, as well as games in Class II, including central determinant games such as video lottery, bingo and bingo-based games, and other games now known or later developed.”). A POSITA would have understood that a poker game, card game, or slot game on which a wager is received is a “*wagering event*” because a game is an “event,” and the player places a wager on that event, thereby making it a “*wagering*” event.

82. Corresponding to the wager being received “*from one or more input devices*” and the wager being “*input via a user interface of the one or more input devices*,” Scott discloses a display device of the wagering machine that includes a touch display user interface through which a user can interact with and input information into the system including inputting a wager. For instance, Scott discloses that a “gaming machine 100 preferably includes at least one *display device* 104 configured to display game information” to a player. *Id.* at ¶[0042]. Scott further discloses that the display device 104 may include a “*touch-screen display*,”

for example, that “may be utilized by the player to facilitate game play.” *Id.* at ¶[0045]. A POSITA would have understood that Scott’s display device is an “*input device*” because it includes a “*user interface*” such as a touch screen via which a user can input information into the gaming system. And specifically with respect to the touch screen (“*user interface*”) of the display device (“*input device*”) being utilized to submit the wager that is received by the value engine, Scott discloses that the user-interface touch screen may provide “touch buttons on a display 104,” such as a “‘bet’ button 108B” that “may be used to wager a desired amount of credits or currency,” “‘hold’ buttons 108A [that] may be used to hold one or more of the cards,” and a “‘deal’ button 108C is used to deal and/or replace one or more cards 304.” *Id.* at ¶[0061]. Thus, a POSITA would have understood that Scott discloses the wager being input via and received from a user-interfacing touch screen of a display device of the wagering machine.

83. Corresponding to the wager being received from the one or more input devices “*via a communications interface*,” Scott discloses that “[t]he processor 128 may communicate with input devices 108, peripherals 110, and one or more displays 104 (or other output devices) to allow a player to interact with and play a wagering game at the gaming machine 100.” *Id.* ¶[0050]. The communications interfaces that facilitate such communication between those computer components are illustrated by, for example, the lines in FIG. 1B connecting the various components of the

system to the processor and value engine therein, and a POSITA would have understood that such lines, as was well known in the art, represent wired or wireless electronic circuitry for enabling the communication between the connected computer components.



84. In addition, in the embodiment described above where the value engine is a separate component not within the gaming machine's processor, Scott discloses that the wagering machine and its display input device would communicate with the external value engine device "through one or more communication devices," which a POSITA would also know serves as a communications interface because it is a device for communicating over to "a network or other communications" medium. *Id.* ¶[0055].

85. Therefore, a POSITA would have understood that Scott discloses this limitation.

4. **1[d] – “store, by the system controller, the wager in a record within a database, the record comprising wager information for one or more wagers associated with one or more participants;”**

86. In my opinion, a POSITA would have understood that Scott discloses limitation 1[d]. In the event it is determined that Scott does not disclose limitation 1[d], however, it is my opinion that this limitation would have been obvious to a POSITA. These opinions are explained below.

87. Corresponding to “*store, by the system controller, the wager in a record,*” Scott discloses that “information related to the play or execution of a game and the value engine 122 such as but not limited to...*amounts wagered...[and] cards/symbols dealt...may be stored in the memory device 130*” of the gaming machine. Scott at ¶[0051]. A POSITA would have understood that storing this wager in the memory of the gaming device was storing “*by the system controller*” because, as discussed above with respect to limitation 1[c], the wagering machine, value engine, and server individually and collectively constitute a “system controller.”

88. Further, corresponding to “*the record comprising wager information for one or more wagers associated with one or more participants,*” Scott discloses that “**information related to the play or execution of a game and the value engine 122** such as but not limited to...odds for a winning outcome, cards/symbols dealt, jackpot amounts, bonuses, and randomly generated numbers **may be stored in a**

memory device 130.” *Id.* at ¶[0051]. A POSITA would have understood that each of these types of data correspond to “*wager information for one or more wagers associated with the one or more participants*” because this information, such as the odds of a winning outcome, for example, are well-known types of information pertaining to a player’s wager, and Scott discloses that they are all “related” to the instance of the game being played and executed.

89. Moreover, a POSITA would have understood the storage of the wager and wager information to be “*in a record*” because that information is recorded in memory, and would have understood such record to be “*within a database*” because it is the storage of a collection of “related” information regarding a particular player’s wagering game. Therefore, although Scott does not use the term “*database*,” a POSITA would have understood that Scott discloses the use of a “*database*,” as that term is understood in the art, to store a record of the wager comprising a collection of “related” information.

90. In addition, Scott discloses the use of “player tracking cards” and “player tracking account[s]” to store and track wager information for particular players, as was well known in the prior art. *Id.* at ¶[0046]-[0047]. For example, admitted prior art to the ’779 Patent teaches that storing a player’s wager and wager information in a player profile database was known in the prior art. ’779 Patent at 26:30-32 (“These types of gaming machines and their respective operation in both

stand alone and pool or progressive games are disclosed in detail in U.S. Patent No. 8,105,149, incorporated herein by reference.”). Specifically, the admitted prior art states, for example, that “[p]layer tracking systems are also known,” that such systems include “a player profile” that includes the “cumulative history of a particular player’s gaming activity,” and that “player tracking system tracks any suitable information, such as any amounts wagered, average wager amounts, ... the times these wagers were placed” as well as “the player’s recent gaming sessions.” DeWaal at ¶¶0005], ¶¶0096]. A POSITA would have understood that Scott’s “player tracking account” is a database because it is an “account,” *i.e.*, a structured dataset related to a particular player, and would have understood the player tracking account to store a record comprising the wager and wager information because such a database is for storing this precise type of information.

91. Alternatively, to the extent that Scott’s disclosures above are insufficient to disclose a database, that the record of the wager is stored “*within a database*” would have been obvious to a POSITA even though Scott does not expressly use the term “database” to describe the storage structure. A generic database for performing the generic function of “stor[ing]” a record as claimed here is simple technology. Further, that the record of the wager is stored “in a database” is a minor and trivial limitation in view of the subject matter of the alleged invention. Indeed, the use of a database to store the record of the wager is not linked to the

concept of providing a player the option of cashing out their wager. Nor is it recited or utilized in connection with any other claim limitation. And, in the specification of the '779 Patent, at no time is storing a record of a wager “within a database” described as being a core feature to the invention or a complex technology. Thus, within the context of the '779 Patent, this feature is insignificant.

92. Further, a POSITA would have known that the “various storage technologies” disclosed in Scott includes databases because databases were and still are a well-known and conventional storage structure for storing records of a player’s wagers. Scott at ¶[0053]. For example, admitted prior art to the '779 Patent teaches that storing a player’s wager and wager information in a player profile database was known in the prior art. '779 Patent at 26:30-32 (“These types of gaming machines and their respective operation in both stand along and pool or progressive games are disclosed in detail in U.S. Patent No. 8,105,149, incorporated herein by reference.”). Specifically, the prior art that is incorporated by reference into the '779 Patent states, for example, that “[p]layer tracking systems are also known,” that such systems include “a player profile” of the tracking system includes the “cumulative history of a particular player’s gaming activity,” and that “player tracking system tracks any suitable information, such as any amounts wagered, average wager amounts, ... the times these wagers were placed” as well as “the player’s recent gaming sessions.” DeWaal at ¶[0005], ¶[0096]. The '779 Patent specification also recognizes that

“wagering software functionality such as registration, deposit taking, withdrawals, account sections that include current and previous bet histories, fixtures, results, historical data, rules and regulations ... are in place in various totalizer facilities and are thus known in the art.” ’779 Patent 8:19-26.

93. In addition, it would be common sense to store the record of the wager and the wager information as a structured set, thereby forming a database, because all such information is “related to the play or execution of a game” and the value engine and is stored in order to “implement and/or operate the value engine.” ¶[0051]. That is, it would have been common sense for a POSITA to store all of this information in a structured way, *i.e.*, thereby forming a database, to maintain its relationship to the play or execution of a game and the value engine. Moreover, the use of a database to store the record of the wager would have been obvious and within common sense and common knowledge of a POSITA because it is using a database for its exact intended purpose, *i.e.*, to structure a set of data to make it more readily accessible and organized.

94. Therefore, because the database element involves a simple and well-known technology in the prior art and is not important to the claimed invention, it would have been obvious to store the record of the wager “*within a database*” based on Scott, the knowledge of a POSITA, and common sense.

5. 1[e] – “continuously retrieve, by the system controller, data in real time related to a progress of the wagering event;”

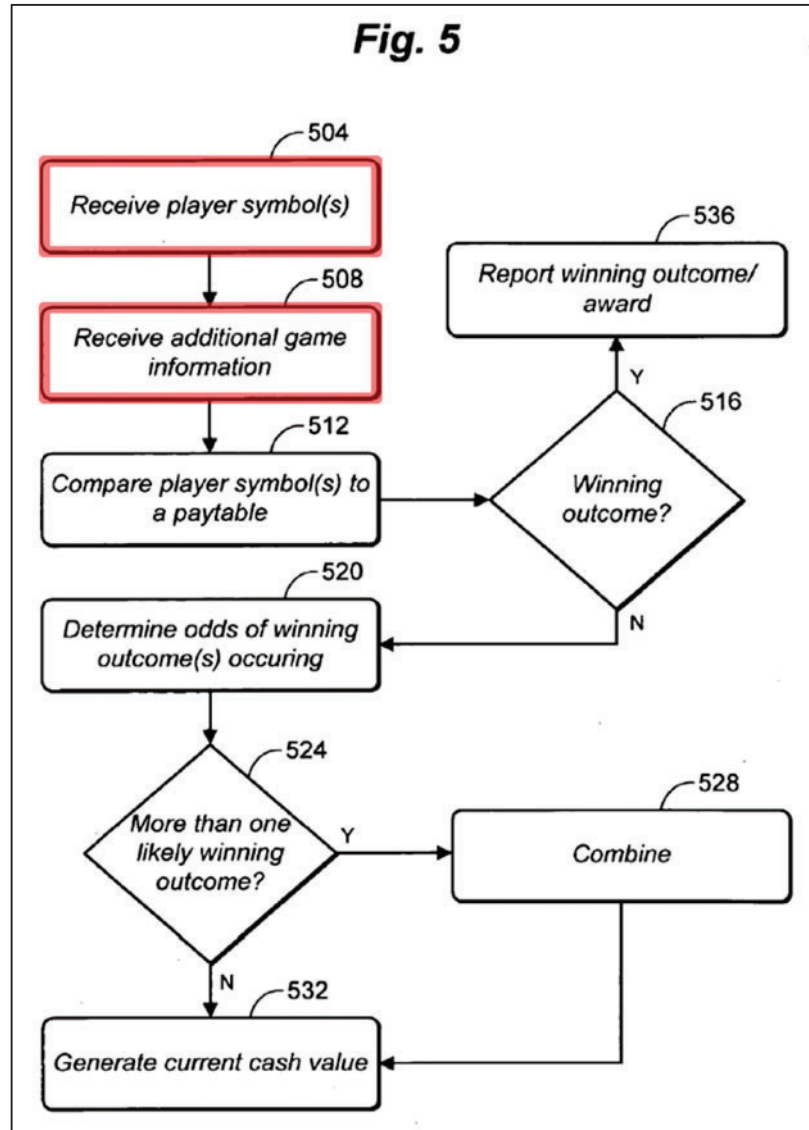
95. In my opinion, a POSITA would have understood that Scott discloses that limitation [1e] occurs as part of the system’s process for determining the current cash value of a user’s wager in real time.

96. For example, Scott discloses a “value engine for determining and presenting current cash value of a player’s cards, symbols, or other game indicia” and presenting a player with “an option to take the current cash value or to continue play[ing] to achieve a winning outcome.” *Id.* at ¶[0008]. Scott discloses that the “current cash value may be determined and presented....**in real time** or in substantially real time” as each event occurs during the wagering game, such as “as each individual playing card or slot symbol is revealed” during the wagering game. *Id.* at ¶[0067]. In addition to being real time, Scott discloses that the calculation and presentation of the current cash value is “*continuous*[.]” throughout the wagering game in that it “**may continue with newly presented game symbols until the game is over...or until the player accepts a current cash value for his or her set of symbols.**” *Id.* at ¶[0081]. This is consistent with the use of the term “continuously” in the ’779 Patent. For example, similar to Scott’s disclosure that the current cash value is determined as each game indicia or event is revealed, the ’779 Patent describes “continuously” performing certain operations “as each bet is placed and accepted, and as each event result occurs within the pool.” ’779 Patent at 11:5-10.

As Scott recognizes, the real time and continuous determination and presentation of the current cash value is “**dynamic**” and “provides an **animated presentation** which may be engaging to players.” *Id.* at ¶¶[0065], [0067].

97. Also similar to the ’779 Patent, Scott juxtaposes a “real time” and continuous determination of the current cash value against the “alternative[]” of determining the current cash value at discrete time points during the game, such as “at the end of each dealing stage of a game.” *Id.* at ¶[0067]; *see also* ’779 Patent at 17:52-57 (“The server system 12 may make this determination at any time, such as, and without limitation, at certain discrete time points of a wagering event (e.g., halftime of a sporting event) or it may continuously evaluate the wagering event and incoming wagers and make multiple determinations in real time.”). In fact, Scott explains that such continuous and real-time determinations are advantageous because, for example, “some events that occur during a wagering game may change the odds or other characteristics of a game without changing the game symbols or indicia.” *Id.* at ¶[0036].

98. The value engine’s real-time and continuous process for determining the current cash value is illustrated and described with respect to FIG. 5, shown below. *Id.* at ¶[0082] (“FIG. 5 is a flow diagram illustrating how current cash value may be determined by an exemplary value engine.”).



99. Because Scott's system determines the current cash value continuously and in real time, as shown above, a POSITA would have understood that each step in Scott's process for determining the current cash value, including the "retrieve" step, is also performed continuously as each event occurs in the game in real-time. Indeed, because the current cash value is determined based on the retrieved game information, a POSITA would understand that such information must be retrieved

continuously in real time because it would not be possible for the value engine to determine the cash value continuously as each event occurs in the game in real time unless the value engine also retrieved the current game information continuously in real time. *See, e.g., Id.* at ¶[0082] (“In general, the process may begin by the value engine receiving various game information from which it may generate a current cash value.”). That is, a POSITA would understand that the background processes, such as retrieving the game information, for performing the primary process of determining the current cash value continuously as each event occurs in real time must also be performed continuously as each event occurs in real time in order to satisfy the primary process. Indeed, any delay or interruption in the background process would propagate to introduce delays or interruptions in the primary process. In other words, a POSITA would have understood that each of the background processes must have the same priority and timing constraint as the primary process (*i.e.*, continuously and in real time) in order to avoid delays in the primary process. This is simply a specific application of the understanding of the old saying that “you are only as fast as your slowest player.”

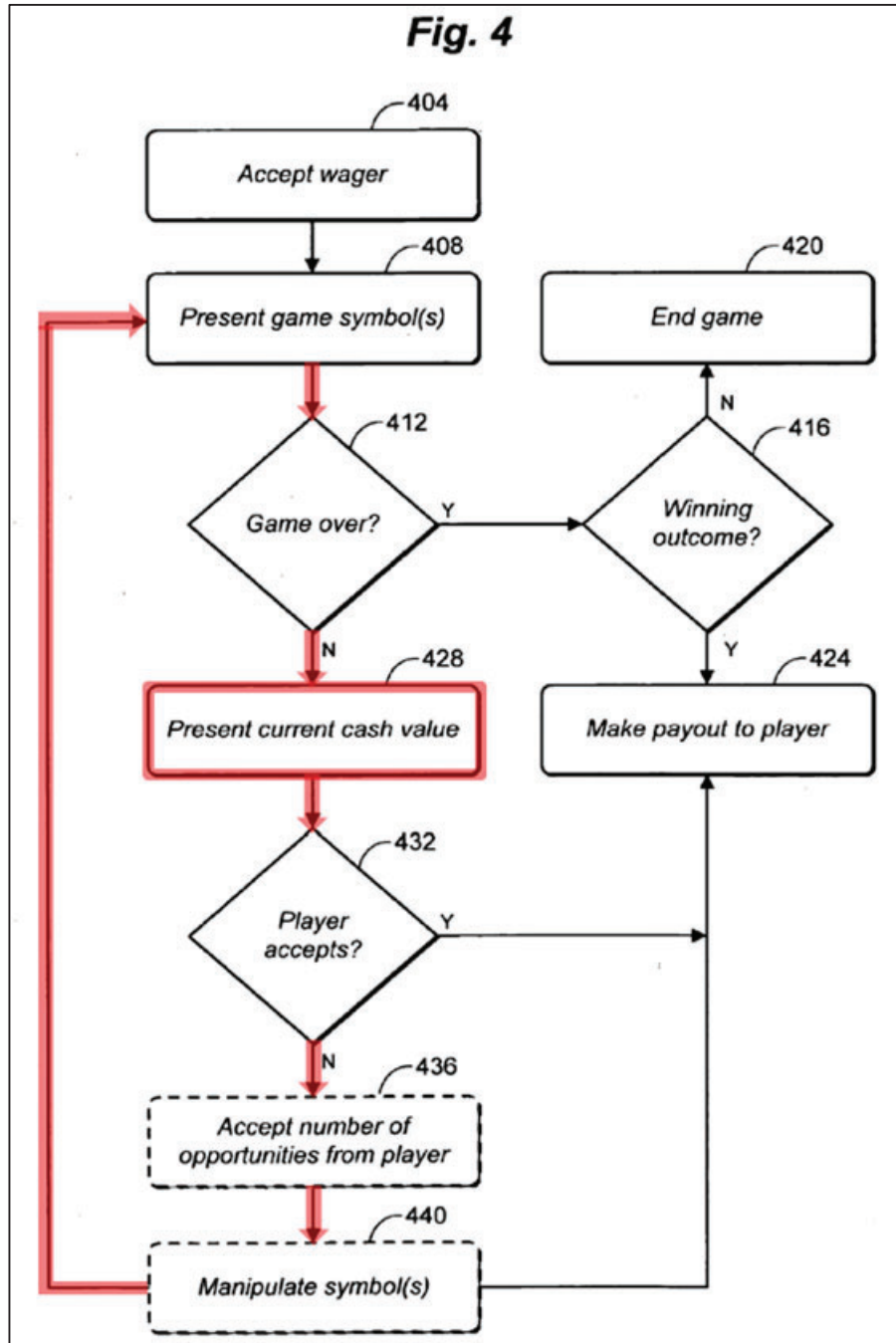
100. Therefore, corresponding to “*continuously retrieve, by the system controller, data in real time related to a progress of the wagering event,*” Scott discloses, as part of the real time and continuous process for determining the current cash value, that “**the value engine 122 may retrieve game information** from a

memory device 130 of the gaming machine.” *Id.* at ¶[0058]. As discussed previously with respect to limitation [1b] and [1c], a POSITA would understand that the “*continuously retrieve*” is “*by the system controller*” because it is by the value engine alone or in combination with the wagering machine and/or gaming servers.

101. Further, the retrieved game information may include, for example, information “identifying the game symbols or indicia the player currently has, the odds the player will win (or lose), the amount the player has wagered, or various combinations thereof.” *Id.* at ¶[0058]; *see also Id.* at ¶[0083] (“At a step 508, additional information may be received or retrieved by the value engine. For example, the amount wagered, cards or symbols remaining to be dealt, credits remaining, and other information related to a wagering game may be collected at the value engine. This information may be used in determining a current cash value.”). A POSITA would have understood that “game information” such as the player’s current game indicia, odds, and other information related to a wagering game is “data...related to a progress of the wagering event” because, for example, the current game information relates at least to a current status of the wagering game.

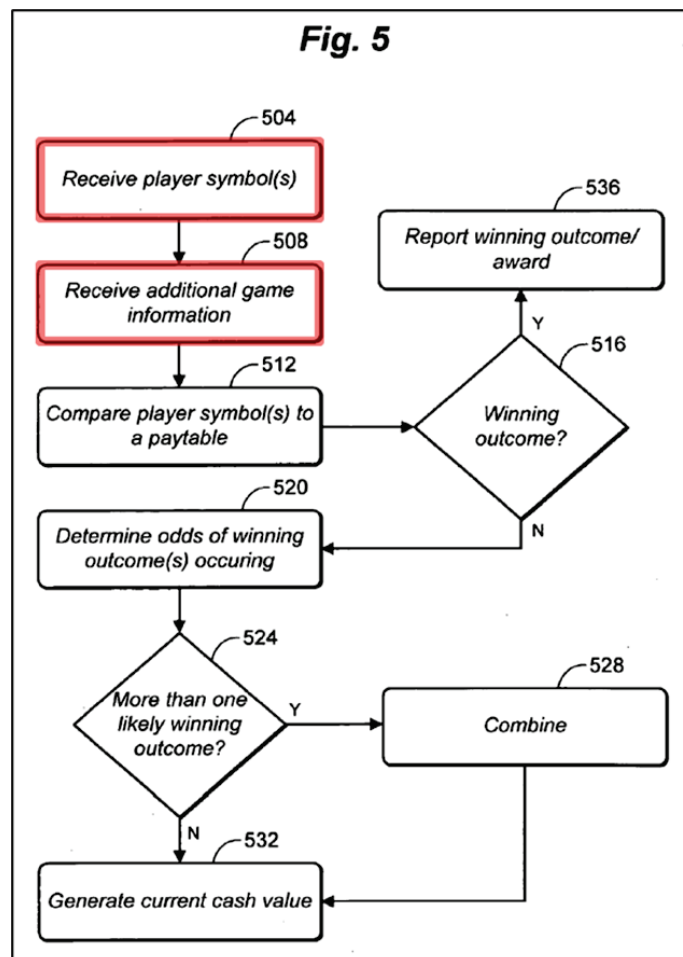
102. FIG. 4 and FIG. 5 in conjunction further demonstrate that Scott discloses this claim element. FIG. 4. As Scott states, “FIG. 4 provides a high level illustration of the operation of the value engine that may be used with a variety of wagering games, such as slot type games, poker type games, keno games, bingo

games, or other games.” *Id.* at ¶[0070]. As shown below, once the wager is accepted, the operation of value engine and game enters a loop that continues until it is determined that the game is over at step 412 or until it is determined that the player has accepted the current cash value at step 432. *See, e.g., Id.* at ¶[0081] (“the process of presenting current cash value for a player’s game symbols may continue with newly presented game symbols until the game is over at decision step 412 or until the player accepts a current cash value for his or her set of symbols at decision step 432.”). Of note, steps 436 and 440 are optional steps that are not relied on herein as part of the analysis. *See, e.g., Id.* at ¶¶[0079]-[0080].



103. This continuously looped process includes step 428, at which “a current cash value for the player's current game symbols may be generated and presented by the value engine of the gaming machine.” *Id.* at ¶[0073]. Scott discloses that the continuously looped step 428 for generating a current cash value itself utilizes a sub-

process. In this regard, Scott discloses that “FIG. 5 is a flow diagram illustrating how current cash value may be determined by an exemplary value engine.” *Id.* at ¶[0082]. As mentioned above, Scott discloses that this sub-process for generating a current cash value “may occur in real time or in substantially real time.” *Id.* at ¶[0067]. As shown in the annotated version of FIG. 4 reproduced below, the real time and continuously looped process for generating the current cash value includes step 504 of retrieving player symbols and additional game information.



104. A POSITA would understand that these steps 504 and 508 for retrieving the player's current game indicia and additional game information are performed continuously because they are invoked as part of the continuously looped process illustrated in FIG. 4 and are performed in real time because they are part of the process for generating a current cash value that is performed in real-time.

105. Therefore, a POSITA would have understood that Scott discloses this limitation.

6. 1[f] – “recalculate, by the system controller, the wager information in real time based on the continuously retrieved data;”

106. In my opinion, a POSITA would have understood that Scott discloses that limitation [1f] occurs as part of the system's process for determining the current cash value of a user's wager in real time.

107. For example, the value engine's real-time and continuous process for determining the current cash value is illustrated and described with respect to FIG. 5, shown below. *Id.* at ¶[0082] (“FIG. 5 is a flow diagram illustrating how current cash value may be determined by an exemplary value engine.”); *Id.* at ¶[0067] (“current cash value may be determined and presented ... in real time or in substantially real time. For example, as each individual playing card or slot symbol is revealed, a new current cash value may be calculated. This provides an animated presentation which may be engaging to players.”).

108. As part of this real time process, and corresponding to “recalculate...the wager information,” Scott discloses that “[t]he method may also include determining odds of a winning outcome occurring from the symbols, and generating the cash value based on the odds.” *Id.* at ¶[0021]. As discussed above regarding limitation [1d], a POSITA would have understood that a player’s odds of winning or losing their wager is “wager information.” Specifically, Scott discloses, with references to the real time process depicted in FIG. 5, that “the likelihood or odds that the player will achieve a winning outcome from his or her current symbols may be determined at a step 520. For example, the player's symbols may be compared to each winning outcome in a payable to determine odds on whether the winning outcome will be achieved from the players' current symbols. For example, in a poker type game, the players' current hand may be compared to winning poker hands to determine how likely it is for the player to achieve each of these hands with his or her current hand. The percentage determined at this step for the winning outcomes may be stored on a memory device.” *Id.* at ¶[0086].

109. Further, as described above, the process for determining and presenting the current cash value occurs “**in real time or in substantially real time**” as each event occurs during the wagering game, such as “as each individual playing card or slot symbols is revealed” during the wagering game. *Id.* at ¶[0067]. Thus, each time a new event occurs, the step 520 in FIG. 5 of “[d]etermine odds of winning

outcome(s) occurring” involves “*recalculate[ing]*” the odds based on the player’s current symbols. Regarding the number of recalculations of the odds, Scott discloses that the calculation and presentation of the current cash value, and thus the odds underlying such a calculation, is continuous throughout the wagering game in that it **“may continue with newly presented game symbols until the game is over...or until the player accepts a current cash value for his or her set of symbols.”** *Id.* at ¶[0081].

110. For example, Scott discloses that determining the player’s current odds includes “*recalculat[ing]*” the odds and determining that the odds have changed because the current cash value, which is reflective of the odds, “is **dynamic and may be based on the current situation of the game being played.**” *Id.* at ¶[0065]. “To illustrate, in FIG. 3A the player has four cards to a royal flush and thus is close to achieving the royal flush. As such, the value engine has determined a current cash value for this set of cards 304 as 30 credits. In FIG. 3B, the player requires two cards to achieve a royal flush. Because of the lower odds that a winning outcome will be achieved, the value engine has determined a lower current cash value of 15 credits for this set of cards 304.” *Id.* at ¶¶[0065]-[0066]. Therefore, FIG. 3A and FIG. 3B illustrate an example where the value engine “*recalculate[d]*” the odds and determined that the current cash value should be lower based on the lower odds. As another example of recalculating the odds, Scott teaches, for example, “in the keno

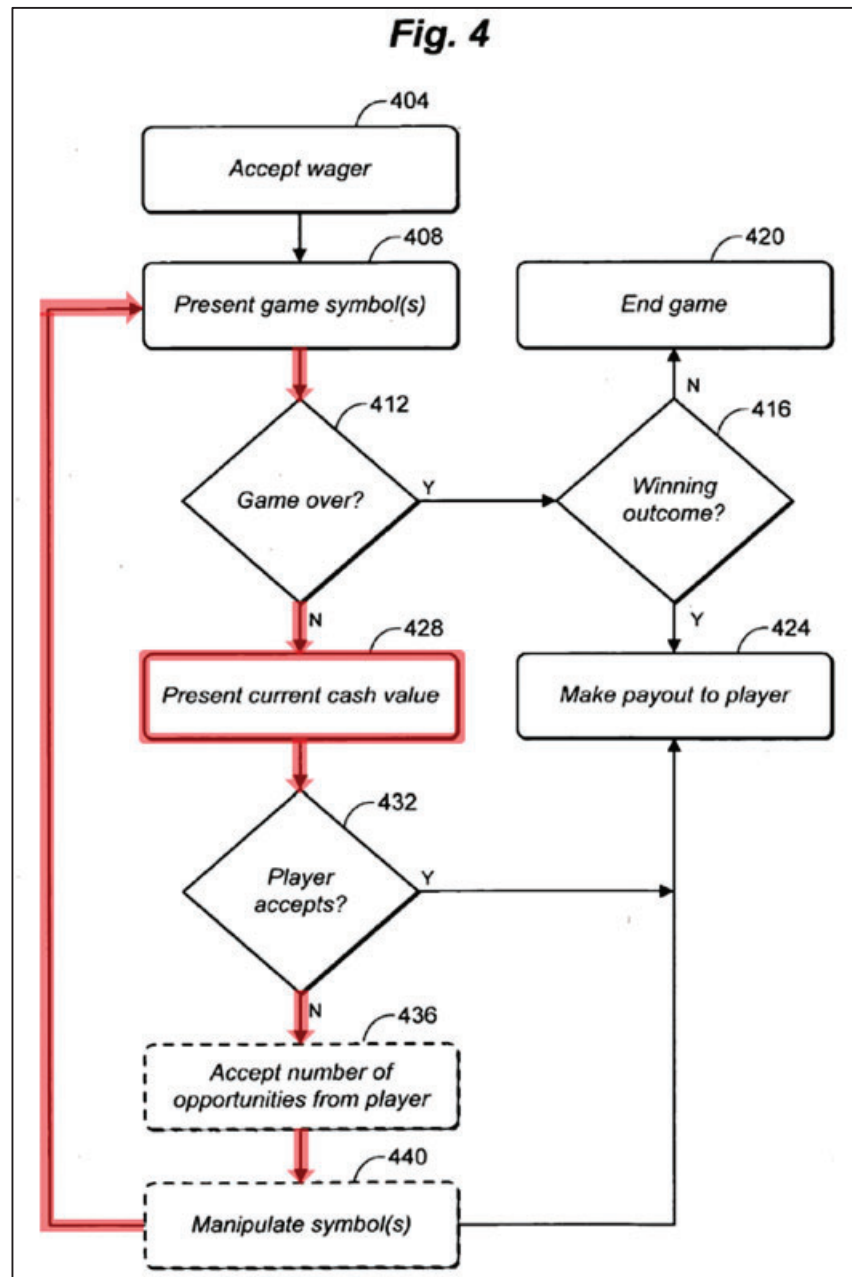
example, **the odds of a player winning may be altered when each subsequent number is revealed**, even though each number is not marked on the player's keno card (i.e., the player's keno card remains unchanged)” *Id.* at ¶[0036]. Thus, as Scott discloses, it is “advantageous” to recalculate the odds based on “various events” that occur during a game because “**some events that occur during a wagering game may change the odds or other characteristics of a game** without changing the game symbols or indicia.” *Id.* at ¶[0036].

111. In addition, Scott discloses that the recalculation of the wager information is “*in real time*” for the same reasons discussed above with respect to the “retrieve” recited in limitation [1e], the analysis of which is herein incorporated by reference. Specifically, for example, because Scott’s system determines the current cash value continuously and in real time, as shown above, a POSITA would have understood that each step in Scott’s process for determining the current cash value, including the “*recalculate*” step, is also performed continuously as each event occurs in the game in real-time. Indeed, because the current cash value is determined based on the current odds, a POSITA would understand that the odds must be recalculated continuously in real time because it would not be possible for the value engine to determine the cash value continuously as each event occurs in the game in real time unless the value engine also calculated the odds of winning in real time. *See, e.g., id.* at ¶[0021] (“The method may also include determining odds of a

winning outcome occurring from the symbols, and generating the cash value based on the odds.”); *Id.* at ¶[0059] (“The value engine 122 may process the game information to produce a current cash value for presentation to the player. In general, the value engine 122 will provide a current cash value based on the likelihood that a player will win an award and/or the amount of that award. For example, as will be described further below, a player of a poker game may be given a current cash value for his or her partial hand based on the likelihood (i.e., odds) that the partial (or non-final) hand will become one or more particular winning hands as the poker game progresses.”); *Id.* at ¶[0074] (“[T]he odds of achieving a particular winning outcome and the award amount for this outcome may be used to determine current cash value”). That is, a POSITA would understand that the background functions, such as calculating the odds of winning, for performing the primary function of determining the current cash value continuously as each event occurs in real time must also be performed continuously as each event occurs in real time in order to satisfy the primary function. Indeed, any delay or interruption in the background function would introduce delays or interruptions in the primary function. In other words, a POSITA would have understood that each of the background functions must have the same priority and timing constraint as the primary function (i.e., continuously and in real time) in order to avoid delays in the primary function. This is simply an

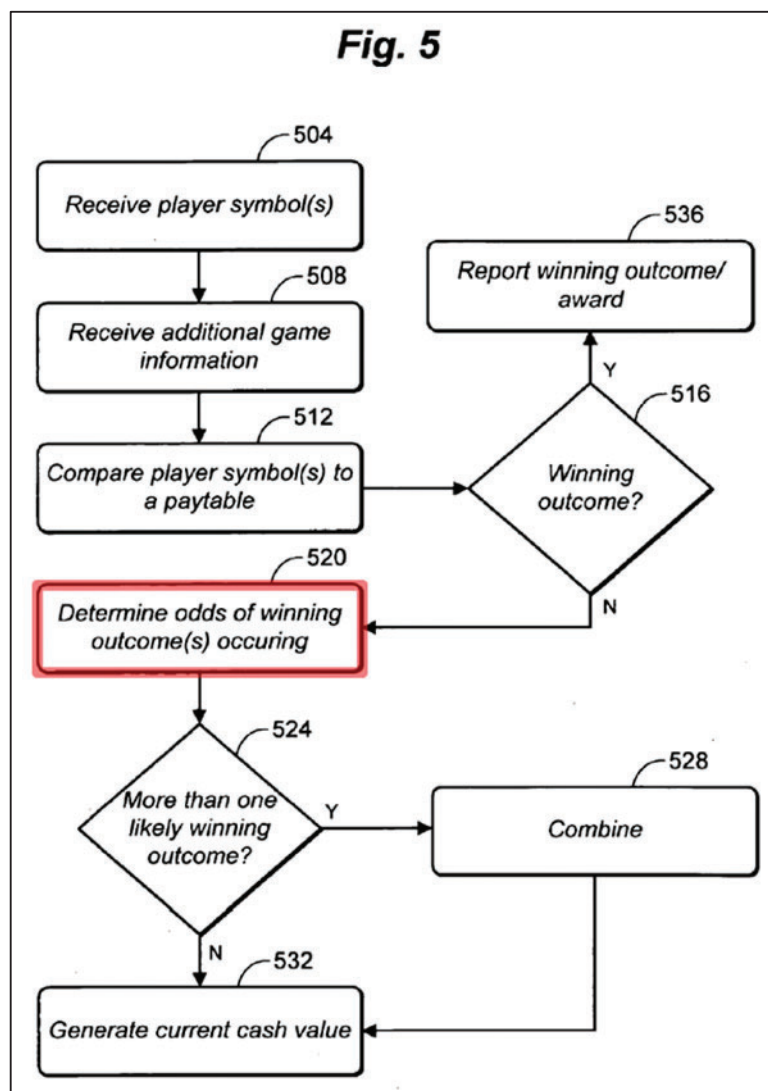
application of the understanding of the old saying that “you are only as fast as your slowest player.”

112. FIG. 4 and FIG. 5 in conjunction further demonstrate that Scott discloses this claim element. FIG. 4. As Scott states, “FIG. 4 provides a high level illustration of the operation of the value engine that may be used with a variety of wagering games, such as slot type games, poker type games, keno games, bingo games, or other games.” *Id.* at ¶[0070]. As shown below, once the wager is accepted, the operation of value engine and game enters a loop that continues until it is determined that the game is over at step 412 or until it is determined that the player has accepted the current cash value at step 432. *See, e.g., id.* at ¶[0081] (“the process of presenting current cash value for a player’s game symbols may continue with newly presented game symbols until the game is over at decision step 412 or until the player accepts a current cash value for his or her set of symbols at decision step 432.”). Of note, steps 436 and 440 are optional steps that are not relied on herein as part of the analysis. *See, e.g., id.* at ¶¶[0079]-[0080].



113. As shown above, this continuously looped process includes step 428, at which “a current cash value for the player's current game symbols may be generated and presented by the value engine of the gaming machine.” *Id.* at ¶[0073]. Scott discloses that the continuously looped step 428 for generating a current cash value itself utilizes a sub-process. Specifically, Scott discloses that “FIG. 5 is a flow

diagram illustrating how current cash value may be determined by an exemplary value engine.” *Id.* at ¶[0082]. As mentioned above, Scott discloses that this sub-process for generating a current cash value “may occur in real time or in substantially real time.” *Id.* at ¶[0067]. As shown in the annotated version of FIG. 4 reproduced below, the real time and continuously looped process includes “determining [the] odds of winning outcome(s) occurring.”



114. A POSITA would understand that this step 520 for determining the odds of winning based on the current game indicia is performed continuously because it is invoked as part of the continuously looped process illustrated in FIG. 4 and is performed in real time because it is part of the process for generating a current cash value that is performed in real-time. Further, as stated above, the act of determining the odds is a recalculation during every additional loop around the process illustrated in FIG. 4 after the first loop.

115. Moreover, the recalculation of the wager information (*e.g.*, the odds of winning), is *based on the continuously retrieved data*” identified above with respect to limitation [1e], such as the player’s current game symbols or indicia. *See, e.g., id.* at ¶[0058] (indicating that the continuously retrieved game information may include, for example, information “identifying the game symbols or indicia the player currently has.”). Specifically, Scott discloses that “[t]he value engine may be configured to determine the odds of at least one of the winning outcomes occurring from the game symbols.” *Id.* at ¶[0011], ¶[0013] (“For instance, the value engine may generate the current cash value by calculating the current cash value from at least the odds of at the least one of the winning outcomes occurring from the game symbols.”), ¶[0021] (“The method may also include determining odds of a winning outcome occurring from the symbols, and generating the cash value based on the odds.”). A POSITA would have understood that Scott discloses recalculating the

odds based on the player's current game symbols (which are continuously retrieved) because Scott discloses that the calculation of the odds is "from the game symbols."

116. Finally, for the reasons discussed above with respect to limitations 1[b] and 1[c] regarding the "*system controller*," A POSITA would have understood that the calculation and recalculation of the odds was "*by the system controller*" because it is disclosed as being by the value engine alone or in combination with the wager machines and/or the game servers.

117. Therefore, a POSITA would have understood that Scott discloses this limitation.

7. 1[g] – "continuously evaluate, by the system controller, the recalculated wager information;"

118. In my opinion, a POSITA would have understood that Scott discloses that limitation [1g] occurs as part of the system's process for determining the current cash value of a user's wager in real time.

119. Corresponding to "*evaluate...the recalculated wager information*," Scott discloses that "**the value engine 122 may evaluate game information to determine a current cash value.**" *Id.* at ¶[0058]. The game information that is evaluated to determine the current cash value may include, for example, "*the odds of achieving a particular winning outcome.*" *Id.* at ¶[0074] ("**the odds of achieving a particular winning outcome and the award amount for this outcome may be used to determine the current cash value.**"); *Id.* at ¶[0013] ("For instance, the value

engine may **generate the current cash value by calculating the current cash value from at least the odds of the at least one of the winning outcomes occurring** from the game symbols.”); *Id.* at ¶[0021] (“The method may also include determining odds of a winning outcome occurring from the symbols, and **generating the cash value based on the odds.**”); *Id.* at ¶[0059] (“For example, as will be described further below, a player of a poker game may be given a current cash value for his or her partial hand based on the likelihood (i.e., odds) that the partial (or non-final) hand will become one or more particular winning hands as the game progresses.”). The odds of winning based on the player’s current indicia that is evaluated to determine the current cash value is, as shown above with respect to limitation [1f], an example of “*recalculated wager information*,” and the analysis of that limitation is herein incorporated by reference.

120. Mapping Scott’s evaluation of the game information to determine a current cash value to limitation [1g] is consistent with the ’779 Patent specification. *See, e.g.*, ’779 Patent at 17:47-57 (“The server system 12 may make a determination of what the appropriate value would be to make an offer to cash out to one or more players....The server system 12 may make this determination at any time, such as, and without limitation, at certain discrete time points of a wagering event (e.g., halftime of a sporting event) or it may continuously evaluate the wagering event and incoming wagers and make multiple determinations in real time.”).

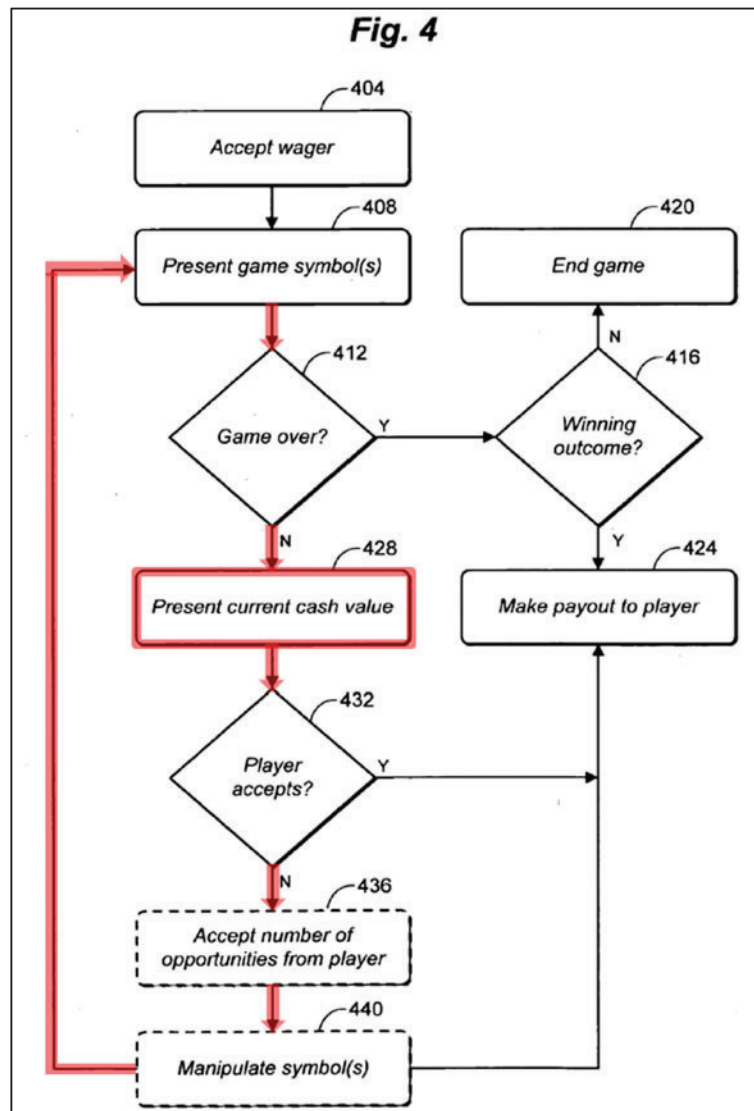
121. Corresponding to the evaluation to determine the current cash value being performed “*continuously*,” Scott discloses that the “current cash value may be determined and presented....in real time or in substantially real time” as each event occurs during the wagering game, such as “as each individual playing card or slot symbol is revealed” during the wagering game. *Id.* at ¶[0067]. In addition to being real time, Scott discloses that the calculation and presentation of the current cash value is continuous throughout the wagering game in that it “may **continue with newly presented game symbols until the game is over**...or until the player accepts a current cash value for his or her set of symbols.” *Id.* at ¶[0081]; *see also id.* at ¶[0035] (“For example, in a keno type game, the value engine may generate a cash value for a player’s keno card based on the numbers the player currently has marked. The value engine may **reevaluate the keno card as additional numbers are marked to determine a cash value as each keno number is revealed and/or as individual numbers are marked on the keno card**.”). This is consistent with the use of the term “continuously” in the ’779 Patent. For example, similar to Scott’s disclosure that the current cash value is determined as each game indicia or event is revealed, the ’779 Patent describes “continuously” performing certain operations “as each bet is placed and accepted, and as each event result occurs within the pool.” ’779 Patent at 11:5-10. As Scott recognizes, the real time and continuous evaluation

and determination of the current cash value is “dynamic” and “provides an animated presentation which may be engaging to players.” Scott at ¶¶[0065], [0067].

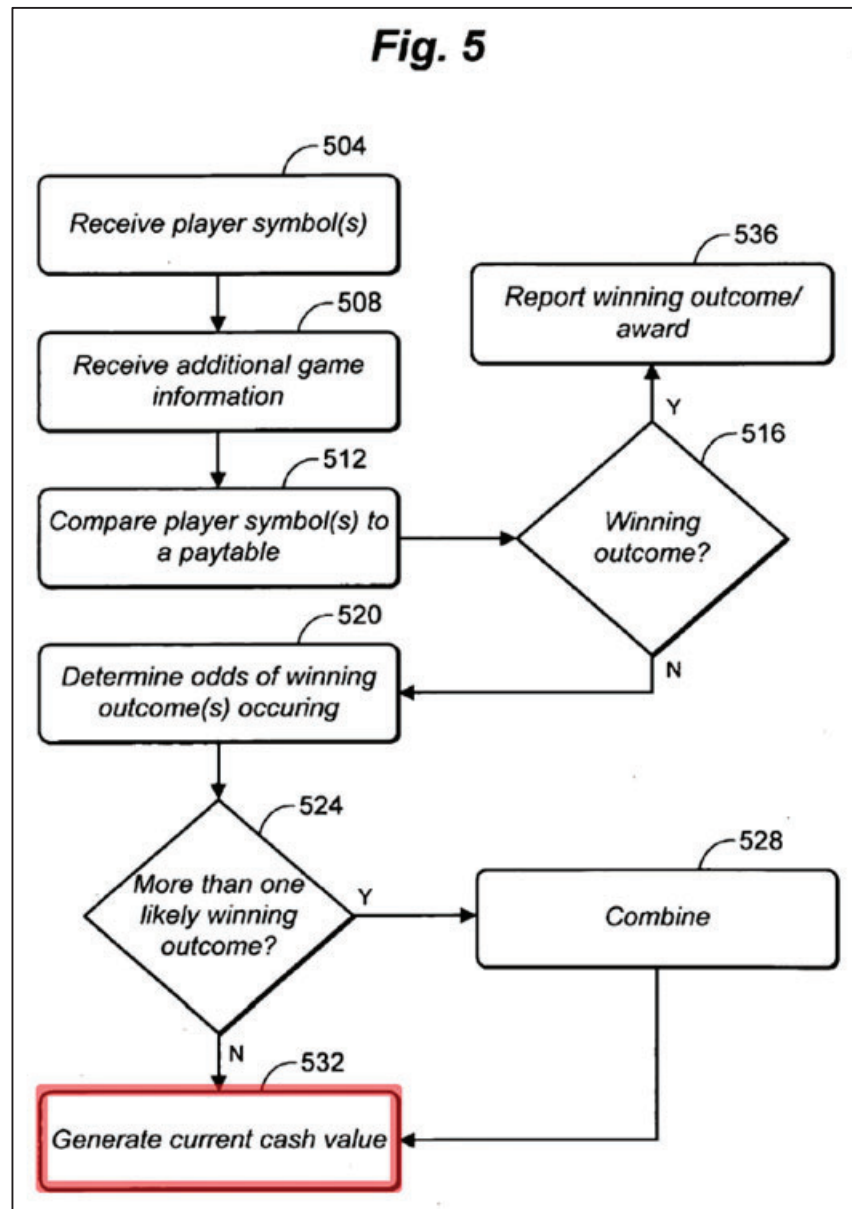
122. Also similar to the '779 Patent, Scott juxtaposes a real time and continuous evaluation and determination of the current cash value against the “alternative[]” of determining the current cash value at discrete time points during the game, such as “at the end of each dealing stage of a game.” *Id.* at ¶[0067]; *see also* '779 Patent at 17:52-57 (“The server system 12 may make this determination at any time, such as, and without limitation, at certain discrete time points of a wagering event (e.g., halftime of a sporting event) or it may continuously evaluate the wagering event and incoming wagers and make multiple determinations in real time.”). In fact, Scott explains that such continuous and real-time determinations are advantageous because, for example, “some events that occur during a wagering game may change the odds or other characteristics of a game without changing the game symbols or indicia.” Scott at ¶[0036].

123. FIG. 4 and FIG. 5 in conjunction further demonstrate that Scott discloses this claim element. FIG. 4. As Scott states, “FIG. 4 provides a high level illustration of the operation of the value engine that may be used with a variety of wagering games, such as slot type games, poker type games, keno games, bingo games, or other games.” *Id.* at ¶[0070]. As shown below, once the wager is accepted, the operation of value engine and game enters a loop that continues until it is

determined that the game is over at step 412 or until it is determined that the player has accepted the current cash value at step 432. *See, e.g., id.* at ¶[0081] (“the process of presenting current cash value for a player’s game symbols may continue with newly presented game symbols until the game is over at decision step 412 or until the player accepts a current cash value for his or her set of symbols at decision step 432.”). Of note, steps 436 and 440 are optional steps that are not relied on herein as part of the analysis. *See, e.g., id.* at ¶¶[0079]-[0080].



124. As shown above, this continuously looped process includes step 428, at which “a current cash value for the player's current game symbols may be generated and presented by the value engine of the gaming machine.” *Id.* at ¶[0073]. Scott discloses that the continuously looped step 428 for generating a current cash value itself utilizes a sub-process. Specifically, Scott discloses that “FIG. 5 is a flow diagram illustrating how current cash value may be determined by an exemplary value engine.” *Id.* at ¶[0082]. As mentioned above, Scott discloses that this sub-process for generating a current cash value “may occur in real time or in substantially real time.” *Id.* at ¶[0067]. As shown in the annotated version of FIG. 4 reproduced below, the real time and continuously looped process includes “generat[ing a] current cash value.”



125. A POSITA would understand that this step 532 for generating a current cash value is performed continuously because it is invoked as part of the continuously looped process illustrated in FIG. 4 and is performed in real time because it is part of the process for generating a current cash value that is performed in real-time.

126. Finally, confirming that the evaluation is performed “*by the system controller,*” Scott discloses that “the value engine 122 may evaluate game information to determine a current cash value.” ¶[0058]. As discussed above regarding limitations 1[b] and 1[c], for example, a POSITA would have understood that the evaluation was by the system controller because it is disclosed as being by the value engine alone or in combination with the wager machines and/or game servers.

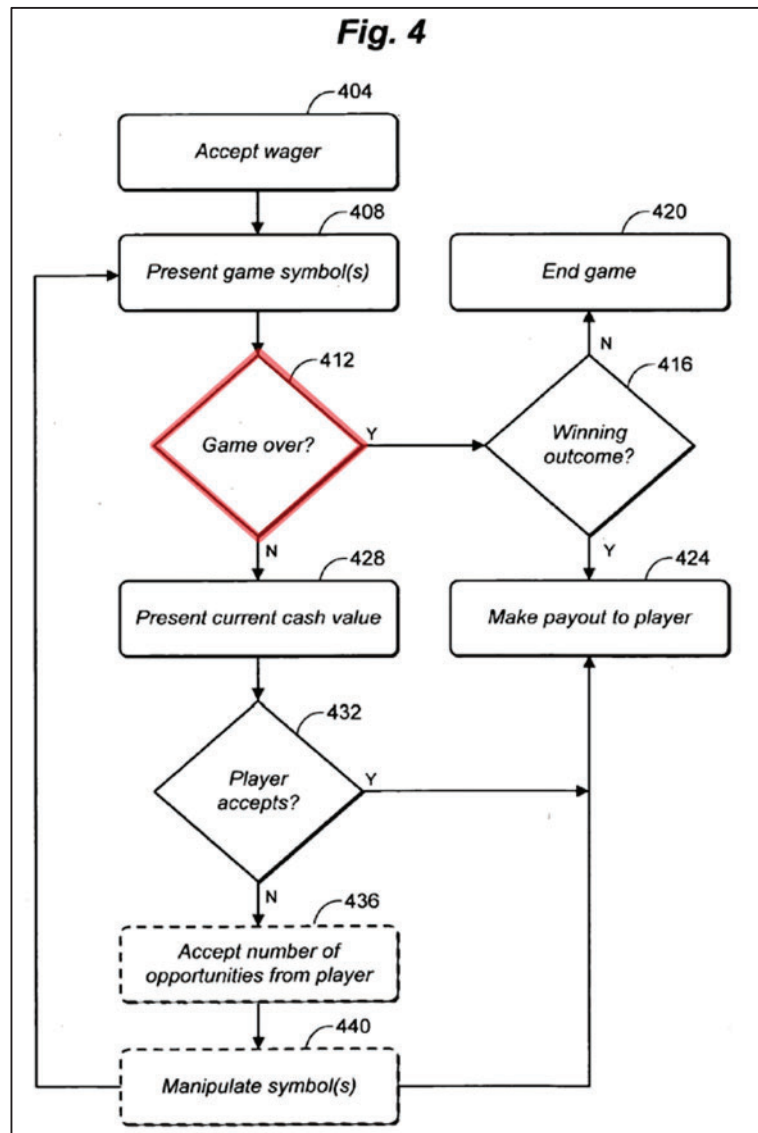
127. Therefore, a POSITA would have understood that Scott discloses this limitation.

8. 1[h] – “determine, by the system controller, that a participant of the one or more participants is eligible to win an award based on one or more of the wager and a potential outcome of the wagering event,”

128. In my opinion, a POSITA would have understood that Scott discloses limitation 1[h]. For example, corresponding to “*determine...that a participant of the one or more participants is eligible to win an award,*” Scott discloses that “it may be determined if the game is over or has concluded,” such that the player’s wager is no longer active, as a prerequisite to offering a current cash out value. *Id.* at ¶[0072] (“At decision step 412, **it may be determined if the game is over or has concluded.**”). As Scott explains, “[t]he game may be ended by determining if the game symbols and the additional game symbols form a winning outcome....Alternatively, the player's acceptance of the cash value may be received,

and if so, the game may be ended immediately thereafter by paying the player the cash value.” *Id.* at ¶[0020]. A POSITA would have understood that determining that the game is not over (*e.g.*, by determining that the player’s indicia do not correspond to a winning outcome) is a determination that a participant is eligible to win an award because it is a determination that the game is still active and that the player has not yet achieved a winning outcome but has a chance to do so by continuing to play the game.

129. Indeed, confirming that the player is eligible to win an award if it is determined that the game is not over, Scott discloses that “[a]t decision step 412, **if the game is not over**, at a step 428,” such that the player has not yet won and the wager is still active, then “a current cash value for the player’s current game symbols may be generated and presented by the value engine of the gaming machine.” *Id.* at ¶[0073]. And, if the player “forgo[es] the current cash value,” they can “attempt to achieve a winning outcome (and possibly a larger award).” *Id.* at ¶[0008]. Therefore, a POSITA would have understood that generating a current cash value and presenting a player with the option to accept the current cash value reflects that the system has determined that the player is eligible to win an award because if the player declines the current cash value they continue to play to attempt to achieve a winning outcome.



130. Scott confirms that such determining is “*by the system controller*” because it discloses that the process illustrated in “FIG. 4,” which includes Steps 412 and 428 pertaining to determining that a player is eligible to win an award, “provides a high level illustration of the operation of the value engine.” *Id.* at ¶[0070]. As discussed above regarding limitations 1[b] and 1[c], a POSITA would understand

this limitation is “by the system controller” because it is by the value engine alone or in combination with the wager machines and/or the gaming servers.

131. Scott discloses that determining whether the game is over and generating and presenting the current cash value are “*based on one or more of the wager and a potential outcome of the wagering event.*” For example, to determine whether the player has achieved a “winning combination or winning outcome,” thus ending the game, Scott discloses that “the player’s game symbols” upon which the wager is placed “may be compared to a payable or otherwise evaluated to determine if they meet the requirements to be deemed a winning combination or winning outcome.” *Id.* at ¶[0072]. To confirm, Scott discloses that the paytables “defin[e] winning outcomes and their associated awards,” and a POSITA would have understood that such winning outcomes correspond to potential outcomes of the wagering event because they define winning combinations or criteria that may potentially be achieved during game play. Thus, Scott discloses this element because the claimed determining is “*based on...a potential outcome of the wagering event.*”

132. Likewise, to generate the current cash value, Scott discloses that “the odds of achieving a particular winning outcome and the award amount for this outcome may be used to determine current cash value. In addition, the amount wagered may also be used.” *Id.* at ¶[0074]; *see also id.* at ¶[0083] (“For example,

since a winning award may vary based on the amount wagered, the current cash value may also vary based on the amount wagered.” Thus, Scott discloses this element because generating the current cash value is “*based on*” both “*the wager and a potential outcome of the wagering event*.”

133. Therefore, a POSITA would have understood that Scott discloses this limitation.

9. **1[i] – “generate, by the system controller, an option in real time for the participant to one or more of fully cash out of the wager or partially cash out of the wager prior to a conclusion of the wagering event for at least a portion of the award;”**

134. In my opinion, a POSITA would have understood that Scott discloses limitation 1[i]. As an initial matter, it is my understanding based on the claim’s use of “*one or more of fully cash out of the wager or partially cash out of the wager*” that the claim requires that the option be for one of a full cash out or a partial cash out, i.e., an option for both may satisfy the claim but is not required. Therefore, as set forth below, Scott discloses this limitation with respect to full cash out. For example, corresponding to “*generate, by the system controller, an option in real time for the participant to one or more of fully cash out of the wager or partially cash out of the wager*,” Scott discloses, for example, that “[a]t the decision step 412, if the game is not over,” i.e., the participant is eligible to win an award as discussed above with respect to limitation [1h], “at step 428, **a current cash value for the player’s**

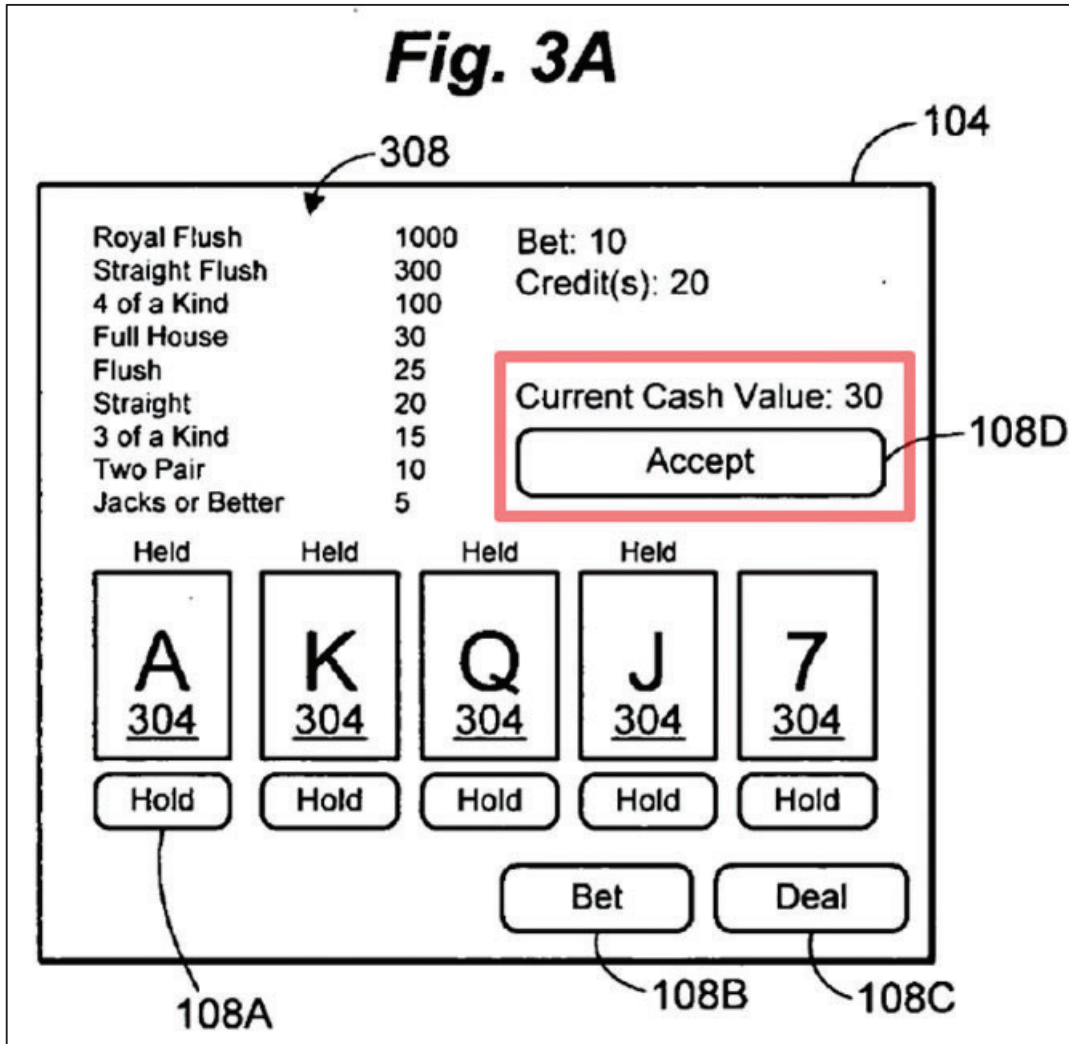
current game symbols may be generated and presented by the value engine of the gaming machine.” Scott at ¶[0073]. Thus, as discussed above regarding limitations 1[b] and 1[c], a POSITA would have understood the generation was by the system controller because it is by the value engine alone or in combination with the wager machines and/or the gaming server.

135. Scott discloses that the generated current cash value is “*an option*,” and namely “**an option to take the current cash value** or to continue player [sic] to achieve a winning outcome.” *Id.* at ¶[0008]; *see also id.* at ¶[0020] (“**An option for the player to accept the cash value may then be presented.**”). That is, Scott discloses that “**the player has a choice**,” *i.e.*, an option, “**to accept the current cash value or to forgo this value and continue playing the game.**” *Id.* at ¶[0063].

136. Regarding the option being generated “*in real time*,” Scott discloses that the “**current cash value may be determined and presented....in real time** or in substantially real time” as each event occurs during the wagering game, such as “as each individual playing card or slot symbol is revealed” during the wagering game. *Id.* at ¶[0067]. In addition to being generated in real time, Scott discloses that the calculation and presentation of the current cash value is continuous throughout the wagering game in that it “may continue with newly presented game symbols until the game is over...or until the player accepts a current cash value for his or her set of symbols.” *Id.* at ¶[0081]. As Scott recognizes, the real time and continuous

generation and presentation of the current cash value is “**dynamic**” and “**provides an animated presentation** which may be engaging to players.” *Id.* at ¶¶[0065], [0067].

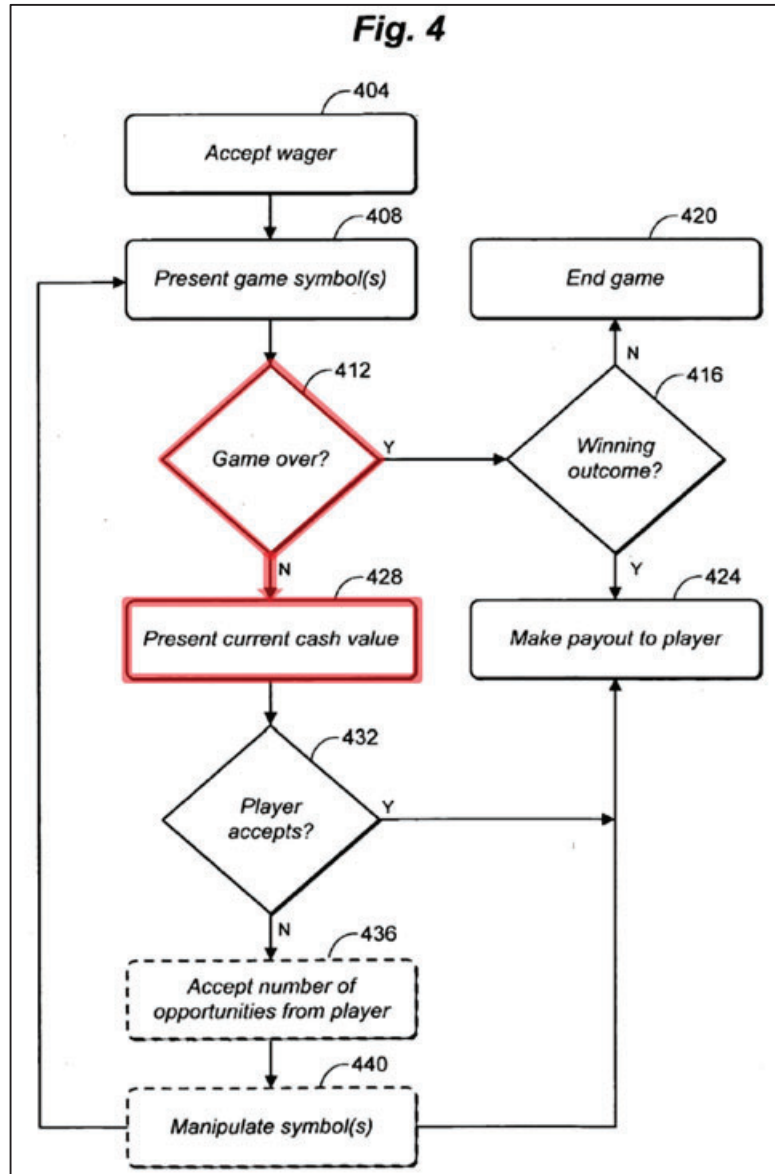
137. Also similar to the '779 Patent, Scott juxtaposes a “real time” and continuous determination of the current cash value against the “alternative[]” of determining the current cash value at discrete time points during the game, such as “at the end of each dealing stage of a game.” ¶[0067]; *see also* '779 Patent at 17:52-57 (“The server system 12 may make this determination at any time, such as, and without limitation, at certain discrete time points of a wagering event (e.g., halftime of a sporting event) or it may continuously evaluate the wagering event and incoming wagers and make multiple determinations in real time.”). In fact, Scott explains that such continuous and real-time determinations are advantageous because, for example, “**some events that occur during a wagering game may change the odds or other characteristics of a game without changing the game symbols or indicia.**” ¶[0036]. The option to accept the current cash value is shown, for example, in FIG. 3A below.



138. Corresponding to “for the participant to one or more of fully cash out of the wager or partially cash out of the wager,” Scott discloses that the option is “for the participant to...fully cash out of the wager.” For instance, when a player accepts the current cash value, the gaming machine is caused to “**pay out the current cash value to the player**” and, confirming the option is for a full cash out, fully “**end a wagering game after an indication that the player is accepting the current cash value is received.**” *Id.* at ¶[0014]; *id.* at ¶[0020] (“[T]he player’s acceptance of the cash value may be received, and if so, the game may be ended

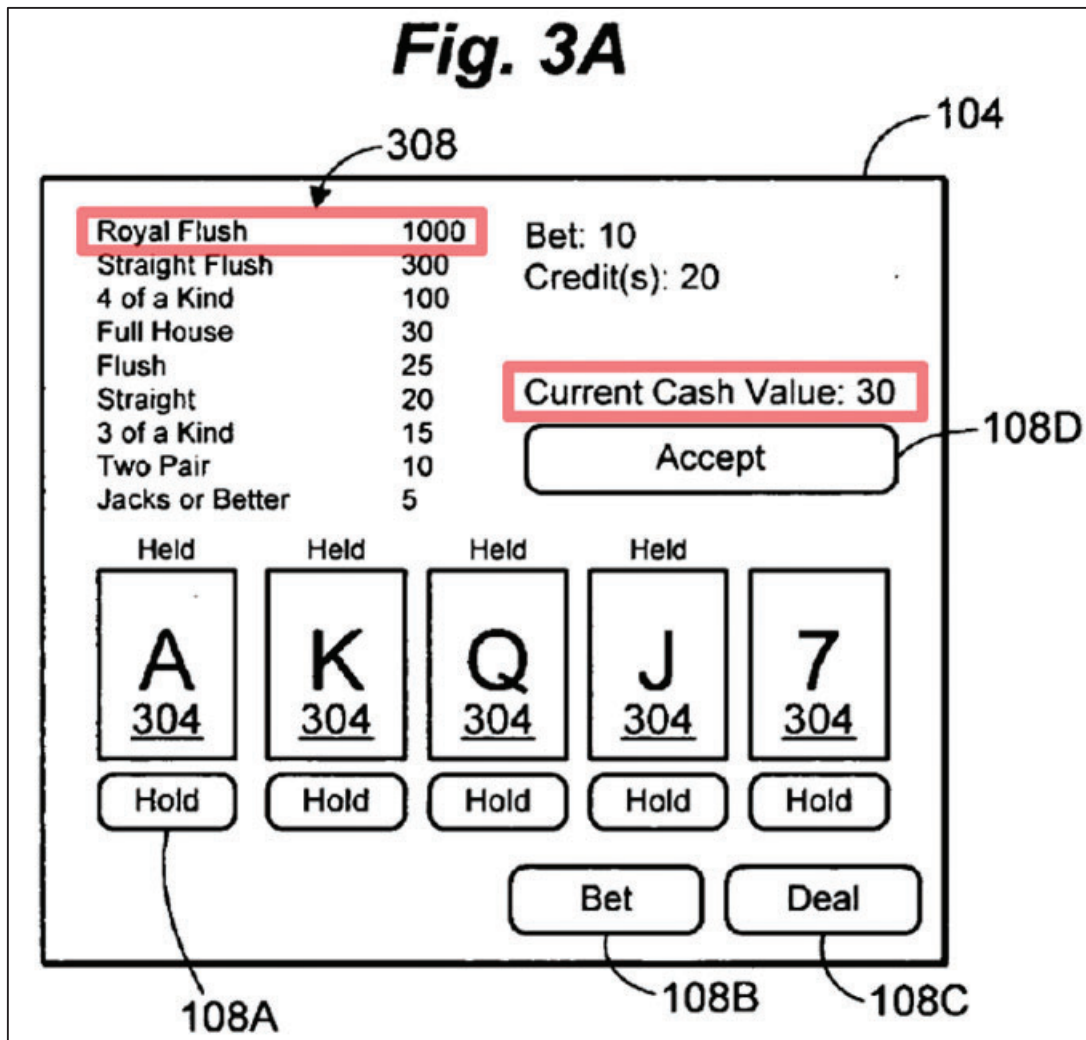
immediately thereafter by paying the player the cash value.”); *id.* at ¶[0076] (“If the player accepts the current cash value for his or her game symbols at decision step 432, the current cash value may be paid to the player at step 424. The game may then end.”).

139. Corresponding to generating the option to fully cash out of the wager “*prior to a conclusion of the wagering event*,” Scott discloses “determining” and “presenting” “a current cash value for the one or more game symbols to the player **before the game has ended.**” *Id.* at ¶[0019], [0051], [0083]. This is also confirmed, for example, by FIG. 4, which discloses that the current cash value option is only generated and presented in step 428 if the determination of whether the game is over in prior step 412 is no. *See, e.g., id.* at ¶[0073] (“At the decision step 412, if the game is not over, at step 428, a current cash value for the player’s current game symbols may be generated and presented by the value engine of the gaming machine.”).



140. Finally, corresponding to the option to fully cash out being “*for at least a portion of the award*,” Scott discloses that “**the cash value may be set to an amount less than an award amount associated with the winning outcome.**” *Id.* at ¶[0021]. As Scott explains, where “**the current cash value will typically be lower than the amount the player would win** if he or she achieved one of the winning hands,” “**the current cash value is an enticing amount, but is less than the**

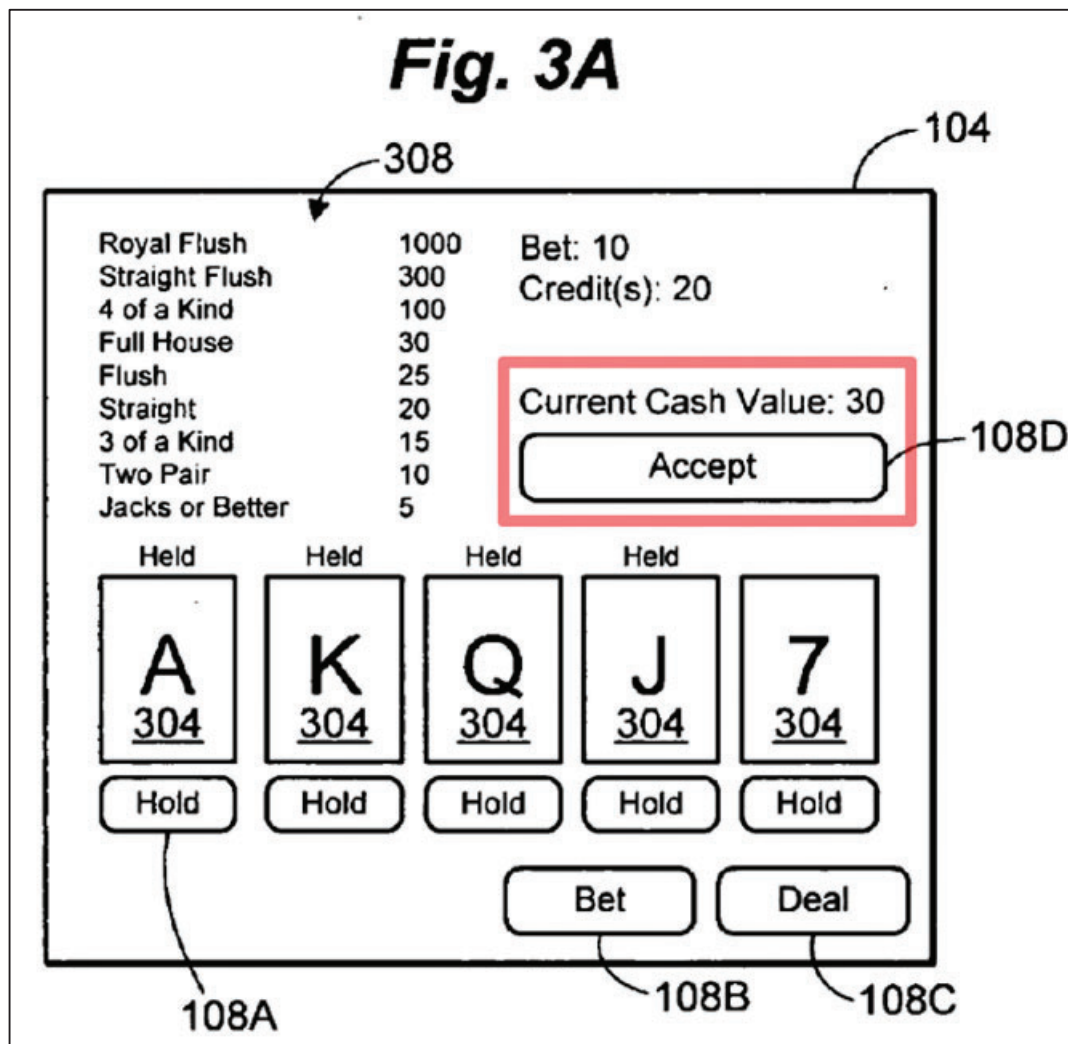
amount the player could possibly win” if they continued playing with an attempt to win the potential award. *Id.* at ¶[0059]. A POSITA would have understood that the current cash value being less than the amount of the potential award for achieving a winning outcome indicates that the current cash value is “for at least a portion of the award” because the lesser value is some portion of the larger award. Illustrating that the option to accept the current cash value is “*for at least a portion of the award*,” Scott discloses in FIG. 3A that “the value engine has evaluated the player’s cards 304 in light of the paytable 308 and determined a current cash value for the cards of 30 credits,” which is “higher than the player’s wager of 10 credits and so is enticing to the player,” but “**the current cash value of 30 credits is less than the 100 credits the player could win** if he or she obtains the one card 304 needed to complete a royal flush.” *Id.* at ¶[0062].



10. 1[j] – “cause, by the system controller, the option to be presented to the participant via the user interface of the one or more input devices;”

141. In my opinion, a POSITA would have understood that Scott discloses limitation 1[j]. For example, corresponding to “*cause, by the system controller, the option to be presented to the participant via the user interface of the one or more input devices,*” Scott discloses that, “as can be seen” with respect to FIG. 3A, “**the value engine 122 may communicate the current cash value to a display 104 to present the current cash value to the player for evaluation**” along with “an option

for the player to accept the cash value.” Scott at ¶¶[0060], [0020], [0061] (“FIGS. 3A-3B illustrate an exemplary display 104 showing the **presentation of a current cash value** at a poker-type game.”). In the example depicted in FIG. 3A, the “option” is presented in the form of an “accept” button. *Id.* at ¶[0060] (“[A]n ‘accept’ button, may be provided to allow a player to indicate whether or not the player wishes to accept or take the current cash value.”).



142. A POSITA would have understood that Scott discloses “*the system controller*” “*cause[s]*” the option to be presented because, Scott discloses that the value engine communicates the option to the display to presented and, as discussed above with respect to limitations 1[b] and 1[c], the value engine alone and/or in combination with the wager machines or system controller are a “*system controller*.”

143. With respect to the presentation being “*via the user interface of the one or more input devices*,” Scott discloses, as stated above, that “**display 104...present[s] the current cash value to the player**” along with an “accept” button to allow the player to accept the current cash value. *Id.* at ¶¶[0060], [0069]. As was described above regarding limitation [1c], for example, such a display device may include a touch screen user interface that displays such information. Thus, a POSITA would understand that this portion of limitation [1j] is disclosed in Scott because Scott discloses that the current cash value option is caused to be displayed on the user interface touchscreen of the display input device.

144. Therefore, a POSITA would have understood that Scott discloses this element.

11. 1[k] – “receive, by the system controller, a selection of the option for the participant from the one or more input devices prior to conclusion of the wagering event; and”

145. In my opinion, a POSITA would have understood that Scott discloses limitation 1[k]. For example, corresponding to “*receive, by the system controller, a*

selection of the option for the participant,” Scott discloses that an “accept” button presented on the display is provided, as shown for example in FIG. 3A, “to allow a player to accept a current cash value presented on a display 104 by the value engine.” ¶[0056]. Further, Scott discloses that the “**accept**” button is “**provided to allow a player to indicate whether or not the player wishes to accept or take the current cash value.**” Scott at ¶[0060]; *see also id.* at ¶[0075] (“For instance, **the player may engage a ‘accept’ button or the like to indicate the current cash value has been accepted.**”). Thus, a POSITA would have understood that Scott discloses a means for a user to input a selection of the option to select the current cash value and that engaging the accept button indicates that the current cash value has been selected and accepted.

146. Further, regarding “*receive, by the system controller,*” the selection of the option to take the current cash value, Scott discloses that the value engine, receives a selection of the current cash value because it makes specific decisions and takes action depending on whether the current cash value has been accepted. For example, Scott discloses that “**FIG. 4 provides a high level illustration of the operation of the value engine,**” and that “**it may be determined at a decision step 432**” of the value engine’s operation “**whether or not the current cash value is accepted by the player.**” *Id.* at ¶¶[0070], [0075]. A POSITA would have understood that the value engine therefore receives an indication that a player has accepted the

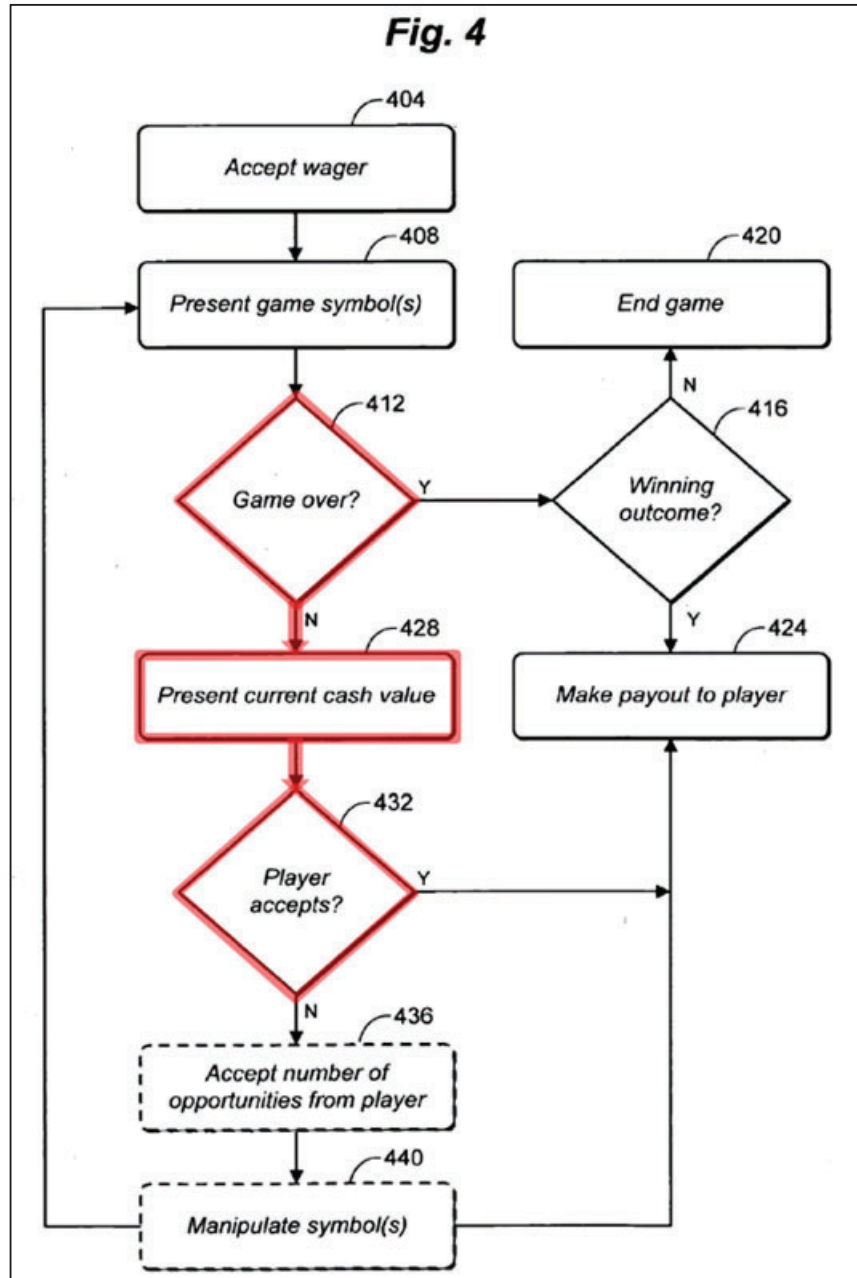
current cash value option because it must make decisions based on whether such an indication is received. Further, a POSITA would understand that this corresponds to the system controller receiving the indication because, as discussed above regarding limitations 1[b] and 1[c], for example, the value engine is a system controller alone and in combination with the wager machines and gaming servers.

147. Further, a POSITA would have understood that Scott discloses that the selection of the current cash value option is received “*from the one or more input devices*” because, as discussed above, an indication that a player has selected the option to accept the current cash value is input into the system via an “accept” button displayed on the user interface of an input device, *e.g.*, on the touchscreen of the display device. *See, e.g., id.* at ¶[0075] (“For instance, **the player may engage a ‘accept’ button or the like to indicate the current cash value has been accepted.**”); *id.* at ¶[0014] (“**One or more input devices may be used to receive an indication that the player is accepting the current cash value.**”).

148. Finally, a POSITA would have understood that value engine receives the selection of the current cash value “*prior to conclusion of the wagering event*” because Scott discloses that the player can only accept a current cash value option if it is previously determined that the game is not over. Specifically, Scott discloses “**determining**” and “**presenting**” “**a current cash value for the one or more game symbols to the player before the game has ended.**” *Id.* at ¶[0019], [0051], [0083].

Further, Scott discloses that “the player’s acceptance of the cash value may be received, and if so, the game may be ended immediately,” which a POSITA would understand to mean that a received indication that the player has selected the option occurs prior to the game ending because Scott states that the game ends after such an indication is received.

149. This is also confirmed, for example, by FIG. 4, which discloses that the current cash value option is only generated and presented in step 428 if the determination of whether the game is over in prior step 412 is no. *See, e.g., id.* at ¶[0073] (“At the decision step 412, if the game is not over, at step 428, a current cash value for the player’s current game symbols may be generated and presented by the value engine of the gaming machine.”). In addition, as shown in FIG. 4 below depicting the operation of a game, the decision step of determining whether the player has accepted and selected the option based on receiving an indication of such a selection in step 428 cannot be reached unless the processor first determines that the game is not over, as indicated by the path labeled “N” out of decision step 412.



12. 1[l] – “cause, by the trading engine module, the at least the portion of the award to be presented to the participant, such that the user interface displays one or more of a confirmation that the option has been selected and a value of the at least the portion of the award.”

150. In my opinion, a POSITA would have understood that Scott discloses limitation 1[l]. For instance, Scott discloses “*cause, by the trading engine module,*

the at least the portion of the award to be presented to the participant.” For example, Scott discloses that “[i]f the player accepts the current cash value for his or her game symbols at decision step 432, the current cash value may be paid to the player at step 424.” Scott at ¶[0076]. A POSITA would have understood that paying the current cash value to the player is presenting “*the at least the portion of the award...to the participant*” because it is an act of giving and/or awarding the current cash value to the participant that selected the current cash value option. Further, with respect to “*cause, by the trading engine module,*” the current cash value award to be presented to the player, Scott discloses that the value engine causes awarding the current cash value to a player. *See, e.g. id.* at ¶[0056] (“For example, the value engine 122 may utilize a ticket printer or coin dispenser to award a current cash value to a player.”).

151. In addition, Scott discloses that the presenting of the current cash value award is “*such that the user interface displays one or more of a confirmation that the option has been selected*” because Scott discloses that the touch screen of the display device displays “*a confirmation that the option has been selected.*” For example, Scott discloses that “**display 104...presents the number of credits the player has**” on the user interface touch screen, for example, and that when a player engages the “accept” button and thereby selects the current cash value option, the system “**credit[s] the current cash value to the player’s credits**” displayed on the touchscreen. ¶¶[0062]-[0063]. A POSITA would have understood that the act of

crediting (*i.e.*, adding) the player's displayed current credits in response to the player engaging the "accept" button is a displayed confirmation that the option has been selected because it is proof, recognition, and validation of the player's decision to select the option and take the current cash value.

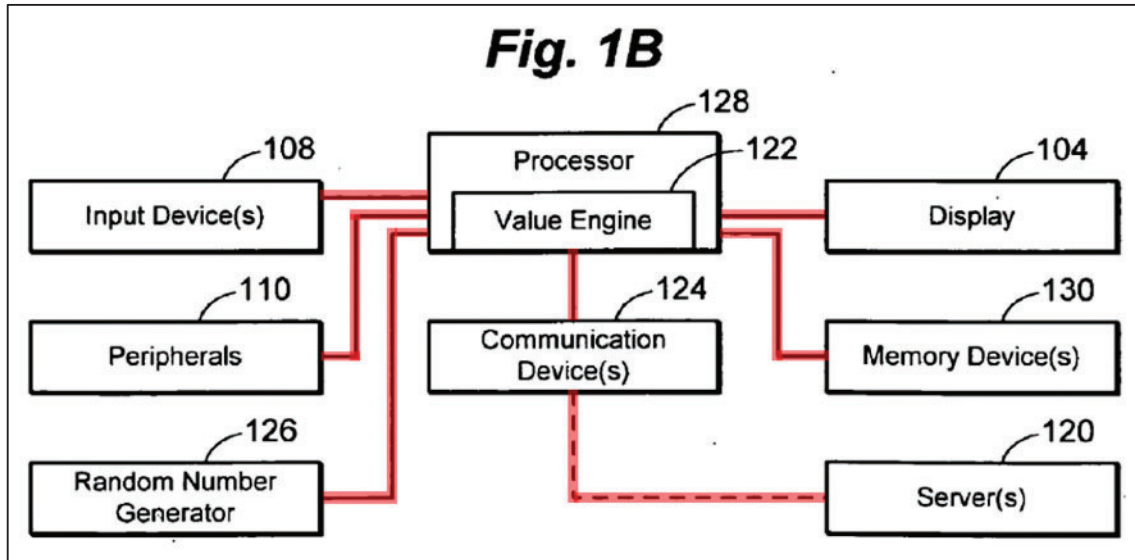
152. Finally, Scott also discloses that the presenting of the current cash value award also is "*such that the user interface displays one or more of...a value of the at least the portion of the award,*" in that the player's current credits displayed on the screen will reflect "the amount of the current cash value" that was credited as a result of accepting the option. ¶[0063] ("For example, FIG. 3A illustrates an "accept value" button 108D which, when engaged, would award the player the current cash value, such as by **crediting the current cash value to the player's credits** or by otherwise paying out the current cash value. In the example of FIG. 3A, **this would be the amount of the current cash value of 30 credits.**"); ¶[0062] ("As can also be seen, the **display 104 also presents the number of credits a player has...**"). Therefore, because the player's credits are displayed on the user interface touch screen of the display and the system credits the player's credit store by the amount of the current cash value option that was accepted, a POSITA would have understood that the presentation of the award is such that the value of the at least the portion of the award that was credited is displayed on the screen to reflect the player's current credits after accepting the award.

153. Therefore, a POSITA would have understood that Scott discloses this element.

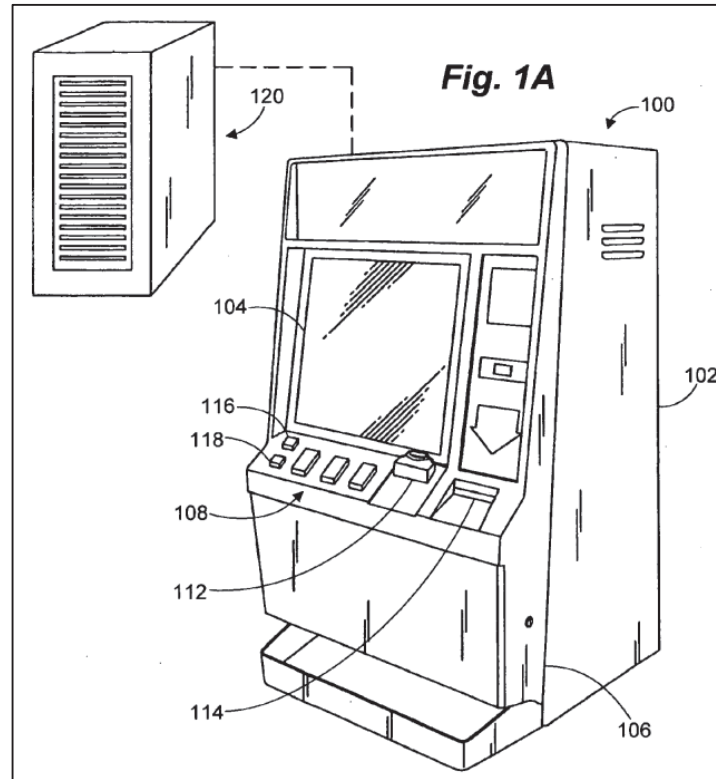
154. Therefore, because Scott discloses and/or renders obvious each and every element of claim 1, it is my opinion that Scott anticipates and/or renders obvious claim 1.

B. Claim 2: “The system of claim 1, wherein the communications interface comprises one or more of: the Internet, an intranet, an extranet, a cellular network, a wired or wireless network, a networked communication system, a cloud-based system, an autonomic system, a client-server based system, a grid based system, a mainframe based system, a utility based system, a peer-to-peer based system, a cloud gaming based system, and a computer network.”

155. In my opinion, a POSITA would have understood that Scott discloses claim 2. For example, Scott discloses claim 2 because Scott’s “*communications interface*,” as described above with respect to limitation [1c], the analysis of which is herein incorporated by reference, is disclosed as comprising connections for enabling electronic communication between the connected computer components, thus forming a “*wired or wireless network*” of such components. Scott’s wired or wireless network communications interface is identified in the annotated FIG. 1B below.



156. In addition, Scott discloses that the connections for enabling electronic communication between the system components, such as between the gaming machine and “one or more external devices” such as a “gaming servers 120,” may be **“through network or other communications.”** ¶[0055]. A POSITA would understand that such a **“network”** is a *“client-server based system”* because Scott discloses that **“the gaming machine 100 may be configured as a client-type device and obtain...information from a remote server 120 through network or other communications.”** *Id.* ¶[0055]. Such a client-server based system is illustrated in FIG. 1, below.



157. Therefore, it is my opinion that Scott anticipates and/or renders obvious claim 2.

C. **Claim 3: “The system of claim 1, wherein the wagering event comprises one or more of an entire event, a partial event, a divisible component of an event, multiple independent events occurring sequentially or concurrently, and a compilation of related events, including one or more probabilistic events, sporting events, eSports, e-sports, competitive gaming, electronic sports, fantasy events, real games, virtual games, fantasy games, slot machines, keno, poker, video games, racing, lotteries, live events, pre-recorded events, online events, broadcast events, card games, politics, sales, stocks, celebrity gossip, movies, reality TV, football (“soccer”), American football, Australian rules football, baseball, cricket, basketball, golf, hockey, auto racing, legends, rugby, wrestling, surfing, mixed and martial arts.”**

158. In my opinion, a POSITA would have understood that Scott discloses claim 3. For example, Scott discloses that the wagered upon events may be “various

games, such as poker games, card games, or slot games.” Scott at ¶[0010]; *see also id.* ¶[0035] (“It is contemplated that the value engine may be used with any wagering game where game symbols or indicia (e.g., **playing card symbols, slot machine symbols, keno numbers, bingo numbers**, etc...) are revealed in subsequent stages or steps of a game.”), ¶[0044] (“These may include games in Class III, such as video **poker games, keno, slot-type games**, and blackjack or other card, dice or various other games now known or later developed, as well as games in Class II, including central determinant games such as video lottery, bingo and bingo-based games, and other games now known or later developed.”). A POSITA would have understood that a “poker game,” for example, is “*an entire event*” because it refers to the whole poker game or playing the full hand of cards. In addition, a POSITA would have understood that a “poker game” is “*a compilation of related events*” in that each card drawn or dealt during the game is a related but separate event that occurs during the overall poker game. Furthermore, Scott discloses that such an “*entire event*” and “*compilation of related events*” “*include[e] one or more...slot machines, keno, poker*” because Scott expressly discloses that the wagered upon events may be “**video poker games, keno, [or] slot-type games.**” *Id.* at ¶[0044].

159. Therefore, it is my opinion that Scott anticipates and/or renders obvious claim 3.

D. Claim 5: “The system of claim 1, wherein the wager comprises one or more of an accumulator, parlay, fixed odds single or fixed

odds multiple wager comprising one or more combinations, wherein the one or more combinations are selectable by at least one of a participant, a third party, and the system controller, and wherein at any time before completion of the wagering event, at least one further offer is initiated to any number of the one or more participants remaining eligible to win the at least one award.”

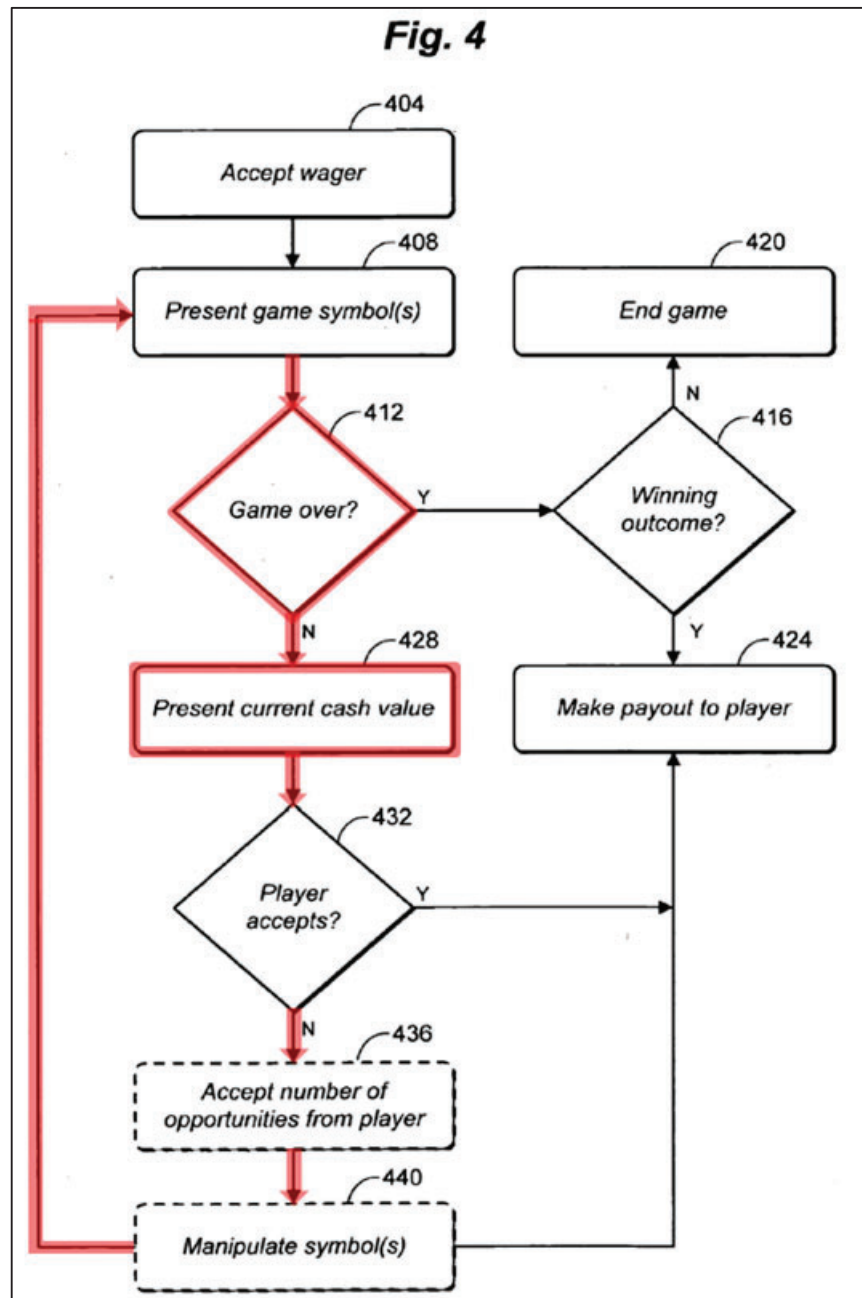
160. In my opinion, a POSITA would have understood that Scott discloses claim 5. For example, corresponding to “*wherein the wager comprises one or more of...fixed odds single*,” Scott discloses that the wager may be on a bingo game. Scott at ¶[0044] (“These may include games in Class III, such as video poker games, keno, slot-type games, and blackjack or other card, dice or various other games now known or later developed, as well as games in Class II, including central determinant games such as video lottery, **bingo** and bingo-based games, and other games now known or later developed.”). A POSITA would know that all bingo cards have the same odds of winning no matter what numbers are on them at the initiation of the game, and therefore the wager on a bingo game would be a “*fixed odds single*” wager when placed because the odds of winning are fixed, and the wager is on a single outcome—obtaining “BINGO.” Therefore, Scott’s disclosure of wagering on a bingo game discloses the wager comprising a “*fixed odds single*” wager. Similarly, a POSITA would have understood that various other examples of the games in Scott may have fixed odds, such as certain video poker games. In fact, Scott discloses in such games that specific actions are taken “**so as to preserve the odds of the game.**” *Id.* at

¶[0077]. The same is true with respect to slot games; a POSITA would know that slot games adhere to fixed odds, often due to applicable regulations, and that the wager is on a single outcome.

161. Scott also discloses “*at least one further offer is initiated.*” For example, Scott discloses that “**the process of presenting current cash value for a player’s game symbols may continue with newly presented game symbols** until the game is over at decision step 412 or until the player accepts a current cash value for his or her set of symbols at decision step 432.” *Id.* at ¶[0081]; *see also id.* at ¶[0035]. As an example, Scott discloses that the “**current cash value may be determined and presented....in real time** or in substantially real time” as each event occurs during the wagering game, such as “**as each individual playing card or slot symbol is revealed**” during the wagering game. *Id.* at ¶[0067]. Therefore, in a card or slot game, for example, Scott discloses that, after a first offer is made and declined by the player, “*at least one further offer is initiated*” when each additional card is dealt, or additional slot symbol is revealed.

162. Scott discloses that further offers, like the initial offer, are only initiated “*to any number of the one or more participants remaining eligible to win the at least one award at any time before completion of the wagering event*” because, as was explained above with respect to limitations [1h] and [1i], the analyses of which are herein incorporated by reference, a current cash value option is only presented if the

processor determines that the player is eligible to win an award by confirming that the game is not yet completed or ended. As Scott expressly states, the system will continue presenting the current cash value option “until the game is over at decision step 412 or until the player accepts the current cash value...at decision step 432,” which would end the game and render the player ineligible to win the award. That this process, of confirming that the game is not over and the player is eligible to win the award, occurs prior to initiating an additional current cash value option is confirmed by the loop shown in FIG. 4, as highlighted below, which shows that the system confirms eligibility and that the game is not over prior to presenting every current cash value option.



163. Therefore, it is my opinion that Scott anticipates and/or renders obvious claim 5.

E. Claim 6: “The system of claim 1, wherein the award comprises one or more of a credit, a ticket, an electronic notice that is redeemable by the participant, a funding of an account of the participant, monetary awards, a designated monetary amount, a percentage of the designated monetary amount, nonmonetary

awards, a prize, a payment, a designated currency, virtual currency, tokens, coupons, services, personal property, real property, virtual property, assets, investments, negotiable instruments, commodities, food, lodging, entertainment, alleviation of obligations, gaming opportunities and wager enhancement.”

164. In my opinion, a POSITA would have understood that Scott discloses claim 6. Specifically, Scott discloses claim 6 in numerous ways. For example, Scott discloses that “*the award comprises one or more of a credit*” or “*monetary awards, a designated monetary amount*” because it states “[a]wards may be provided for winning outcomes, such as monetary payments (or representations thereof, such as award of credits), prizes or the like.” Scott at ¶[0044]. In addition, Scott discloses that “*the award comprises one or more of...a ticket*” or “*a funding of an account of the participant*” or “*a designated currency*” because it states that “the value engine 122 may utilize a ticket printer or coin dispenser to award a current cash value to a player” and that “[t]he player might also elect to cash out by having a ticket or other media dispensed, such as via a printer, or electronically such as by transferring credits or currency to the player's bank account or player tracking account.” Scott at ¶¶[0056], [0047].

165. Therefore, it is my opinion that Scott anticipates and/or renders obvious claim 6.

F. Claim 7: “The system of claim 1, wherein the wager comprises one or more of fixed odds single wagers, multiple wagers, full cover wagers, full cover wagers with singles, ‘Any to Come’

(ATC) or ‘if cash’ wagers, specialty wagers, forecasts, fixed, variable, guaranteed, parimutuel wagering, tote wagering, fixed-odds wagering, accumulator or parlay wagering, fixed odds, a pool, progressive, fixed pool, variable pool or guaranteed pool.”

166. Claim 7 and claim 5 both recite and may be satisfied by “[t]he system of claim 1, wherein the wager comprises one or more of...fixed odds single” wager. As discussed above regarding claim 5, Scott discloses this element, and that analysis is herein incorporated by reference. Therefore, Scott discloses claim 7 for the same reasons as claim 5.

167. Therefore, it is my opinion that Scott anticipates and/or renders obvious claim 7.

G. Claim 8:

168. In my opinion, as set forth in the sections below, Scott discloses and/or renders obvious claim 8.

- 1. 8[a] – “The system of claim 1, wherein the computer readable instructions, when executed by the processor, further cause the processor to one or more of: “upon receiving the selection of the option, one or more of by the system controller:”**

169. In my opinion, a POSITA would have understood that Scott disclosed limitation 8[a]. Specifically, Scott discloses “*wherein the computer readable instructions, when executed by the processor, further cause the processor*” to perform “*one or more of*” the operations recited in limitation [8b] “*by the system controller*” “*upon receiving the selection of the option.*” For example, as discussed

below with respect to limitation [8b], the analysis of which is herein incorporated by reference, Scott discloses that the computer-readable instructions “implement and/or operate one or more wagering games” and “implement a value engine” to be utilized during those games. Scott ¶¶[0051]-[0052].

170. Scott therefore discloses that the machine-readable instructions include code for “controlling the gaming machine” by, for example, “receiving player input and sending output signals controlling the various components of the machine.” Scott at ¶[0048]. More specifically corresponding to triggering an operation recited in limitation [8b] “*upon receiving the selection of the option,*” Scott discloses that “[a]n input device may be used to receive an indication that the player is accepting the current cash value” and that “[t]he gaming machine may also” perform certain actions recited in limitation [8b] “when the input device is engaged” and the indication is received. *Id.* at ¶[0076].

171. Therefore, Scott discloses limitation 8[a].

2. **8[b] – “terminate the participant’s participation in the wagering event, allow the participant to continue to participate in the wagering event with at least a portion of the wager, generate a new wager for the participant, relinquish rights of the participant in at least a portion of the wager, and one or more of transfer, sell or put out for bid or auction at least a portion of one or more of an entitlement, right, or ownership of the participant in at least**

a portion of the wager to a third party or another participant.”

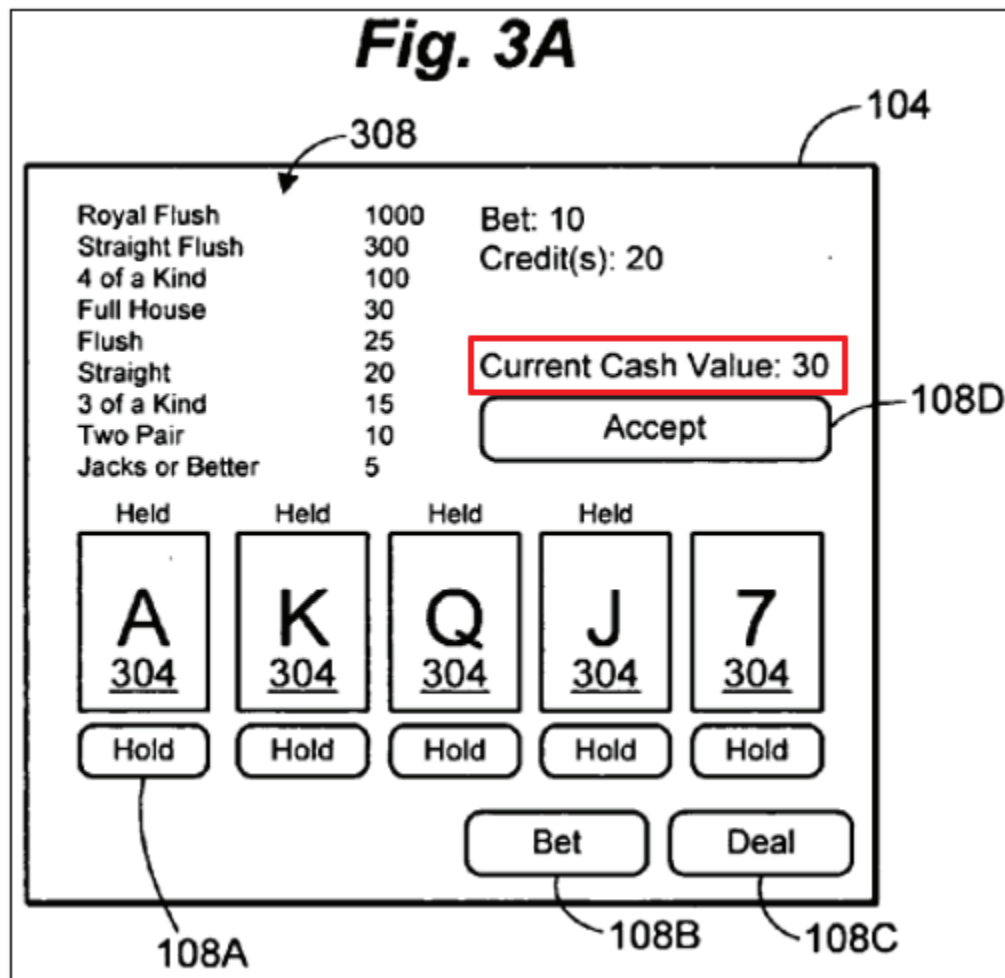
172. In my opinion, a POSITA would have understood that Scott discloses limitation 8[b]. For example, Scott discloses that the gaming machine, *i.e.*, a system controller, will “*terminate the participant’s participation in the wagering event*” upon receiving the selection of the current cash value option because Scott states that “[t]he gaming machine may be configured to end a wagering game after an indication that the player is accepting the current cash value is received.” Scott at ¶[0014]; *see also id.* at ¶[0017] (“An input device may be used to receive an indication that the player is accepting the current cash value....**The gaming machine may also end a current game being played on the gaming machine when the input device is engaged.**”); *id.* at ¶[0076] (“If the player accepts the current cash value for his or her game symbols at decision step 432, the current cash value may be paid to the player at step 424. The game may then end.”). That is, a POSITA would understand that Scott discloses terminating a player’s participation in a wagering event by ending the current game when the selection of the current cash value option is received.

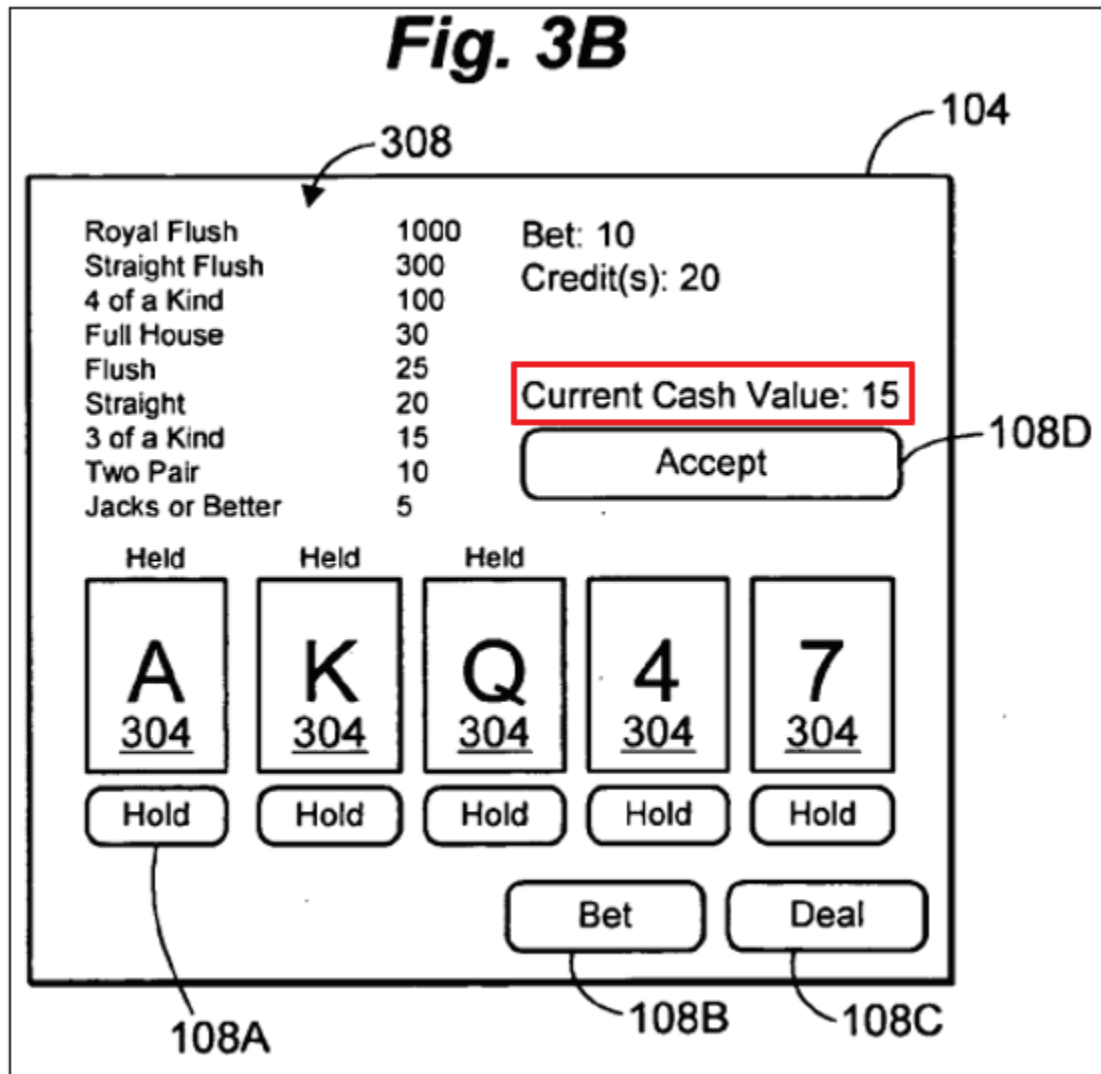
173. Therefore, it is my opinion that Scott anticipates and/or renders obvious claim 8.

H. Claim 9: “The system of claim 1, wherein an amount of the award is variable and based on one or more of a calculated probability,

an originator of the wager, a negotiation, a bidding process, an auction, the one or more participants, and a third party.”

174. In my opinion, Scott discloses claim 9. For example, Scott discloses “wherein an amount of the award is variable and based on one or more of a calculated probability.” For example, Scott discloses that “FIGS. 3A-3B illustrate that **the current cash value is dynamic,**” *i.e.*, variable, because it is “**based on the current situation of the game being played.**” Scott at ¶[0065]. As shown below, FIGS. 3A-3B demonstrate that the current cash value varies in the same poker game depending on the current situation of the game.





175. With respect to these figures illustrating that the current cash value is variable and dynamic, Scott states that “in FIG. 3A the player has four cards to a royal flush and thus is close to achieving the royal flush. As such, the value engine has determined a current cash value for this set of cards 304 as 30 credits. In FIG. 3B, the player requires two cards to achieve a royal flush. Because of the lower odds that a winning outcome will be achieved, the value engine has determined a lower current cash value of 15 credits for this set of cards 304.” ¶¶[0065]-[0066].

176. These disclosures also confirm that Scott discloses that the “*amount of the award is ... based on one or more of a calculated probability.*” For example, with respect to FIG. 3B, Scott states that “[b]ecause of the lower odds,” *i.e.*, lower probability, “that a winning outcome will be achieved” from the then-current set of game symbols, **“the value engine has determined a lower current cash value of 15 credits for this set of cards”** than the cash value amount shown in FIG. 3A because the player having “four cards to a royal flush” has a greater probability of obtaining the royal flush than the player having three cards to a royal flush. Scott ¶¶[0065]-[0066]. Also demonstrating that Scott discloses this limitation, Scott also states that **“the value engine 122 will provide a current cash value based on the likelihood that a player will win an award** and/or the amount of that award. For example, as will be described further below, a player of a poker game may be given a current cash value for his or her partial hand **based on the likelihood (i.e., odds) that the partial (or non-final) hand will become one or more particular winning hands** as the poker game progresses.” Scott ¶[0059].

177. Therefore, it is my opinion that Scott anticipates and/or renders obvious claim 9.

- I. **Claim 10: “The system of claim 1, wherein the one or more input devices comprise one or more of: a wagering station, a wagering terminal, a hand held device, a mobile device, a wireless device, a computing system, a smart phone, a telephone, a tablet or desktop computer, a PDA, an interactive television, an internet connected device, and a cashier system.”**

178. In my opinion, a POSITA would have understood that Scott discloses claim 10. For example, Scott discloses “*wherein the one or more input devices comprise one or more of: a wagering station, wagering terminal.*” A POSITA would have understood that Scott’s “gaming machine” is an “*input device*” that is a “*wagering station*” and “*wagering terminal*” because Scott states that “the gaming machine 100 is a wager-based gaming machine configured to present one or more games to a player, which games offer the possibility of an award of winnings,” and that “[t]he gaming machine may include one or more additional input devices configured to accept input from the player to allow the player to play the game.” Scott at ¶¶[0018], ¶¶[0040]. That is, the “gaming machine” is an “*input device*” because it is configured to accept input from the player, it is a “*station*” and a “*terminal*” because it is utilized by the player to play the game, and it is a “*wagering*” station and terminal because it is used for “wager-based gaming.”

179. Further, the ’779 Patent reflects and confirms that a POSITA would have understood that the gaming machines are input devices because it states that “the concepts herein may also be applied to gaming machines, so gaming machine 26 is depicted as being an additional input device.” ’779 Patent at 5:20-23.

J. Claim 16:

180. In my opinion, Scott discloses and/or renders claim 16 obvious for the same reasons explained above regarding claim 1 because the claim limitations of

these claims are nearly the same as one another, and I hereby incorporate by reference my analysis of claim 1 as applicable to the like elements of claim 16. In fact, Patent Owner's supplemental infringement contentions do not provide any additional analysis of claim 16. Rather, Patent Owner appears to recognize that the limitations of claim 16 are satisfied in the same ways as the limitations of claim 1 in that Patent Owner's infringement contentions for claim 16 consist solely of cross references to the limitations of claim 1.

181. Claims 1 and 16 have largely overlapping limitations. The primary difference appears to be that the limitations of claim 16 sometimes, but not always, replace where claim 1 recites "one or more" with a "plurality," such as receiving a plurality of wagers or a plurality of players participating in a wagering event. As an initial matter, such replacements appear to conflict with the preamble of claim 16, which serves as the antecedent basis for the "wagering event" and the "participants" recited in the body but recites that the system is for "one or more participants." Therefore, the preamble states that the claim can be for just one participant, yet the body of the claim may suggest otherwise unless the applicant intended to use "plurality" and "one or more" interchangeably.

182. Nonetheless, in my opinion, a POSITA would not consider the change from one or more to a plurality in the body of the claim to be a major difference with respect to the substance and subject of the claimed inventions. This change simply

amounts to saying take the system that is recited in claim 1 and use it for more participants. In my opinion, the fact that claim 16 replaces the “one or more” with a “plurality” does not materially change the analysis from that which was provided above for claim 1 and its dependent claims. My analysis for claim 1 above with respect to the system’s operation for one player satisfies claim 16 except for the “plurality” elements. Scott also discloses that the system of claim 1 can be utilized by “a number of players,” including at least “a player” and “another player,” such that they are “electronically connected” to the system via their respective wagering machines. Scott at ¶[0096]. Therefore, when there are at least two players their respective wagering machines in the system, Scott discloses each of the “plurality” elements in claim 16 for the same reasons provided above regarding claim 1.

183. In addition, in my opinion, it is an obvious matter of common sense to take a system that can be for use by one player and put it to use for multiple players. It is merely a matter of common sense to add multiple players to a wagering system. That is, to take what is recited in claim 1, which may be satisfied by “one” player, and say repeat everything for another player so that there are now a “plurality” of players, is nothing more than saying repeat what is performed for one player for multiple players, or simply do it again or reproduce it multiple times.

184. To the extent Patent Owner takes the position that claim 16 requires a multiplayer system and that Scott does not expressly disclose such a multiplayer

system, adding another player and respective wagering machine to Scott's system such that there are multiple players participating in a wagering event would have been obvious as a matter of common sense. For example, if one player is able to utilize Scott's system described above in accordance claim 1, but multiple players wanted to play, common sense dictates that such systems should be reproduced for multiple players.

185. Nonetheless, for the sake of clarity and completeness, I have addressed and analyzed certain textual differences between the limitations of claims 1 and 16.

1. 16[a] – “A system for conducting a wagering event among one or more participants in real time, the system comprising:”

186. In my opinion, a POSITA would have understood that Scott discloses limitation 16[a]. For example, Scott discloses “*a system*” for the same reasons previously explained with respect to limitation 1[a], which are herein incorporated by reference.

187. In addition, Scott discloses that the system is “*for conducting a wagering event among one or more participants.*” For example, Scott discloses that “a gaming machine configured to present one or more wagering games” and may “present various games, such as poker games, card games, or slot games.” Scott at ¶¶[0009], [0010]. Further, Scott discloses that a processor executes “machine readable code to **implement and/or operate one or more wagering events**” and to

“provide the value engine 122, its features, or its functionalities disclosed herein.”

Id. at ¶¶[0051]-[0052]. A POSITA would have understood that presenting, implementing, and/or operating wagering games among one or more participants is the same thing as conducting a wagering event among one or more participants.

188. Scott also discloses that the system conducts the wagering event “*in real time*.” For example, Scott discloses a “value engine for determining and presenting current cash value of a player’s cards, symbols, or other game indicia” and presenting a player with “an option to take the current cash value or to continue play[ing] to achieve a winning outcome” before the wagering game is completed. ¶[0008]. Scott discloses that the “current cash value may be determined and presented....**in real time** or in substantially real time” as each event occurs during the wagering game, such as “as each individual playing card or slot symbol is revealed” during the wagering game. ¶[0067]. A POSITA would understand Scott’s disclosure of a real-time process in conducting a wagering event to indicate that Scott’s system conducts wagering events in real time.

2. 16[b] – “a system controller comprising a trading engine module;”

189. In my opinion, a POSITA would have understood that Scott discloses “*a system controller comprising a trading engine module*” recited in limitation [16b] for the same reasons that Scott discloses “*a trading engine module of a system*

controller” recited in limitation [1c], and that analysis is herein incorporated by reference.

3. 16[c] – “a database;”

190. In my opinion, a POSITA would have understood that Scott discloses and/or renders obvious “*a database*” as recited in limitation 16[c] for the same reasons Scott discloses and/or renders of the “*database*” recited in limitation 1[d], and that analysis is herein incorporated by reference.

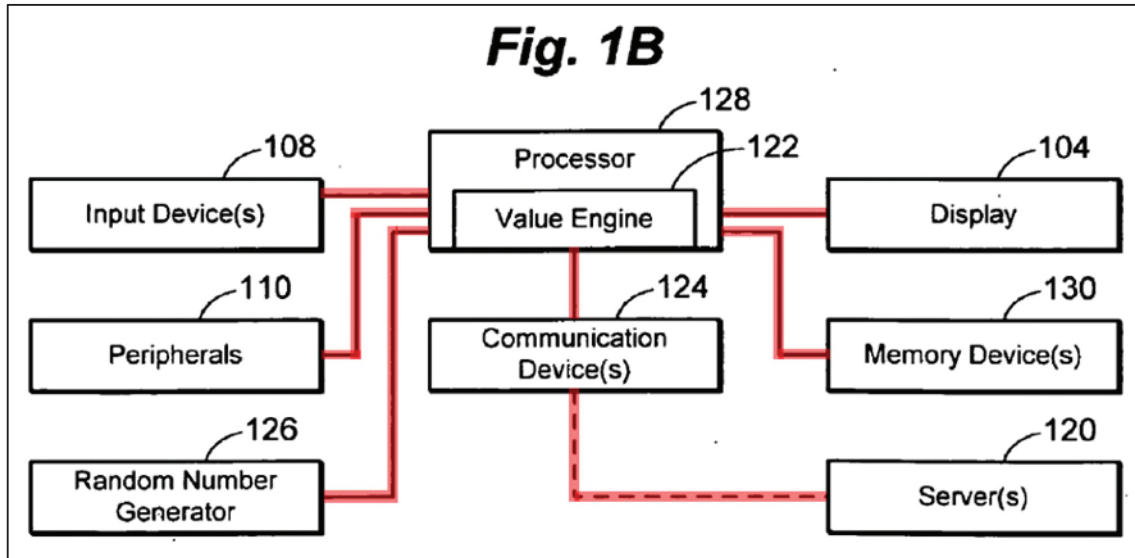
4. 16[d] – “a plurality of input devices each having a user interface; and”

191. In my opinion, a POSITA would have understood that Scott discloses and/or renders obvious “*a plurality of input devices each having a user interface*” as recited in limitation 16[d] for at least the same reasons Scott discloses “*one or more input devices*” and “*a user interface of the one or more input devices*” as recited in limitation 1[c], and that analysis is herein incorporated by reference. In addition, as discussed above, Scott discloses that there may be “a number of players electrically connected” in the system. Scott at ¶[0096]. A POSITA would have understood that each such player’s wagering machine includes “*one or more input devices*” and “*a user interface of the one or more input devices*” for the reasons explained above for limitation 1[c], such that the system comprises “*a plurality of user input devices each having a user interface*” to correspond to the “number of players” connected to the system.

5. 16[e] – “a communications interface for facilitating communications between the system controller and the plurality of input devices;”

192. In my opinion, a POSITA would have understood that Scott discloses limitation [16e] for the same reasons explained previously with respect to the communications interface recited in limitation [1c], the analysis of which is herein incorporated by reference.

193. In addition, a POSITA would have understood that Scott’s communication interface was “*for facilitating communications between the system controller and the plurality of input devices*” because Scott discloses that “[t]he processor 128 may communicate with input devices 108, peripherals 110, and one or more displays 104 (or other output devices) to allow a player to interact with and play a wagering game at the gaming machine 100.” Scott at ¶[0050]. The communications interfaces that facilitate such communication between those computer components are illustrated by the lines in FIG. 1B connecting the various components of the system to the processor and value engine therein and the server(s), as annotated below. A POSITA would have understood that such lines, as was well known in the art, represent wired or wireless electronic circuitry for enabling the communication between the connected computer components.



194. In addition, a POSITA would have understood that such communication interfaces may include a network for communicating with other wagering machines via the server. Specifically, Scott discloses that the connections for enabling electronic communication between the system components, such as between the gaming machines and “one or more external devices” like “gaming servers 120,” may be “through network or other communications.” *Id.* at ¶[0055]. Scott also discloses that the system and communication interfaces therein are configured to enable “a player having a particular set of symbols” to “sell[] the hand to another player” on the system. *Id.* at ¶[0096]. Thus, to facilitate the communications between different wagering machines, and their respective input devices, disclosed in Scott, a POSITA would understand that the communications interface for connecting to the “one or more external devices” would be utilized.

195. Therefore, in my opinion, a POSITA would have understood that Scott discloses limitation 16[e].

6. 16[f] – “the system controller configured to:”

196. As described in the sections that follow, a POSITA would have understood that Scott discloses that gaming machines, value engine, and the gaming servers, which individually and collectively correspond to the “*system controller*” for the reasons explained above regarding limitation [16b], incorporated herein by reference, are configured to perform the operations recited in limitations [16g] through [16p].

7. 16[g] – “receive, by the trading engine module, a plurality of wagers on the wagering event from the plurality of input devices via the communications interface, the plurality of wagers input by a plurality of participants via the user interfaces of respective input devices from the plurality of input devices,”

197. In my opinion, although this claim limitation is very similar but not strictly identical to limitation [1c], Scott discloses limitation [16g] for the same reasons explained above regarding similar limitation [1c], which are herein incorporated by reference. Indeed, a POSITA would have understood that, in the multiplayer embodiment of Scott, each of the trading engine modules would operate as described above regarding limitation [1c], such that the “*the plurality of wagers*” are “*input by a plurality of participants via the user interfaces of their respective input devices from the plurality of input devices*” and the one or more trading engine modules collectively “*receive....a plurality of wagers on the wagering event from the plurality of input devices.*”

8. 16[h] – “store the plurality of wagers in a record within the database, the record comprising wager information for the plurality of wagers associated with the plurality of participants,”

198. In my opinion, Scott discloses limitation [16h] for the same reasons explained above regarding limitation [1d], which are herein incorporated by reference. Indeed, in the multiplayer embodiment, a POSITA would have understood that the cumulative or repeated operations described above with respect to limitation [1d] by multiple players would involve storing the plurality of wagers in the manner recited in limitation [16h]. For example, a POSITA would understand that, where there are at least two players utilizing the system, there would be at least two records, one for each of the players, stored in the database in the manner described above regarding limitation [1d].

9. 16[i] – “continuously retrieve data in real time related to a progress of the wagering event”

199. Limitation [16i] overlaps entirely with identical portions of limitation [1e]. Therefore, Scott discloses limitation [16i] for the same reasons explained above regarding limitation [1e], which are herein incorporated by reference.

10. 16[j] – “recalculate the wager information in real time based on the continuously retrieved data,”

200. Limitation [16j] overlaps entirely with identical portions of limitation [1f]. Therefore, Scott discloses limitation [16j] for the same reasons explained above regarding limitation [1f], which are herein incorporated by reference.

11. 16[k] – “continuously evaluate the recalculated wager information,”

201. Limitation [16k] overlaps entirely with identical portions of limitation [1g]. Therefore, Scott discloses limitation [16k] for the same reasons explained above regarding limitation [1g], which are herein incorporated by reference.

12. 16[l] – “determine that one or more participants of the plurality of participants is eligible to win an award based on their respective one or more wagers and a potential outcome of the wagering event,”

202. Limitation [16l] is substantively the same as limitation [1h] despite minor textual differences because both limitations require only a single participant and a single wager. Therefore, Scott discloses limitation [16l] for the same reasons explained above regarding limitation [1h], which are herein incorporated by reference.

13. 16[m] – “generate one or more options in real time for the one or more participants to cash out prior to a conclusion of the wagering event for at least a portion of the award,”

203. Limitation [16m] is substantively the same as limitation [1i] despite minor textual differences because both limitations require only a single participant and a single option to be generated for that participant. Therefore, Scott discloses limitation [16m] for the same reasons explained above regarding limitation [1i], which are herein incorporated by reference.

14. 16[n] – “cause the one or more options to be presented to the one or more participants via the user interfaces of the respective one or more input devices,”

204. Limitation [16n] is substantively the same as limitation [1j] despite minor textual differences because both limitations require only presenting a single option to a single participant. Therefore, Scott discloses limitation [16n] for the same reasons explained above regarding limitation [1j], which are herein incorporated by reference.

15. 16[o] – “receive a selection of an option from the one or more options for a participant from at least one input device from the one or more input devices prior to conclusion of the wagering event, and”

205. Limitation [16o] is substantively the same as limitation [1k] despite minor textual differences because both limitations require only receiving a single selection of a single option from a single participant from a single input device. Therefore, Scott discloses limitation [16o] for the same reasons explained above regarding limitation [1k], which are herein incorporated by reference.

16. 16[p] – “cause the at least the portion of the award to be presented to the a least one participant, such that the user interface displays one or more of a confirmation that the option has been selected and a value of the at least the portion of the award.”

206. Limitation [16p] is substantively the same as limitation [11] despite minor textual differences because both limitations require only causing the presentation to a single participant. Therefore, Scott discloses limitation [16p] for

the same reasons explained above regarding limitation [11], which are herein incorporated by reference.

- K. Claim 17: “The system of claim 16, wherein the communications interface comprises one or more of: the Internet, an intranet, an extranet, a cellular network, a wired or wireless network, a networked communication system, a cloud-based system, an autonomic system, a client-server based system, a grid based system, a mainframe based system, a utility based system, a peer-to-peer based system, a cloud gaming based system, and a computer network.”**

207. With the exception of the preamble, claim 17 is identical to claim 2.

Therefore, Scott discloses claim 17 for the same reasons explained above regarding claim 2, which are herein incorporated by reference.

- L. Claim 18: “The system of claim 16, wherein the wagering event comprises one or more of an entire event, a partial event, a divisible component of an event, multiple independent events occurring sequentially or concurrently, and a compilation of related events, including one or more probabilistic events, sporting events, eSports, e-sports, competitive gaming, electronic sports, fantasy events, real games, virtual games, fantasy games, slot machines, keno, poker, video games, racing, lotteries, live events, pre-recorded events, online events, broadcast events, card games, politics, sales, stocks, celebrity gossip, movies, reality TV, football (“soccer”), American football, Australian rules football, baseball, cricket, basketball, golf, hockey, auto racing, legends, rugby, wrestling, surfing, mixed and martial arts.”**

208. With the exception of the preamble, claim 18 is identical to claim 3.

Therefore, Scott discloses claim 18 for the same reasons explained above regarding claim 3, which are herein incorporated by reference.

- M. Claim 21: “The system of claim 16, wherein an amount of the award is variable and based on one or more of a calculated probability, an originator of the wager, a negotiation, a bidding process, an auction, the plurality of participants, and a third party.”**

209. With the exception of the preamble, claim 21 is identical to claim 9.

Therefore, Scott discloses claim 21 for the same reasons explained above regarding claim 9, which are herein incorporated by reference.

- N. Claim 22: “The system of claim 16, wherein the award comprises one or more of a credit, a ticket, an electronic notice that is redeemable by the participant, a funding of an account of the participant, monetary awards, a designated monetary amount, a percentage of the designated monetary amount, nonmonetary awards, a prize, a payment, a designated currency, virtual currency, tokens, coupons, services, personal property, real property, virtual property, assets, investments, negotiable instruments, commodities, food, lodging, entertainment, alleviation of obligations, gaming opportunities, and wager enhancement.”**

210. With the exception of the preamble, claim 22 is identical to claim 6.

Therefore, Scott discloses claim 22 for the same reasons explained above regarding claim 6, which are herein incorporated by reference.

- O. Claim 23: “The system of claim 16, wherein the plurality of wagers comprise one or more of fixed odds single wagers, multiple wagers, full cover wagers, full cover wagers with singles, ‘Any to Come’ (ATC) or ‘if cash’ wagers, specialty wagers, forecasts, fixed, variable, guaranteed, parimutuel wagering, tote wagering, fixed-odds wagering, accumulator or parlay wagering, fixed odds, a pool, progressive, fixed pool, variable pool or guaranteed pool.”**

211. With the exception of the preamble, claim 23 is identical to claim 7.

Therefore, Scott discloses claim 23 for the same reasons explained above regarding claim 7, which are herein incorporated by reference.

P. Claim 24: “The system of claim 16, wherein the system controller is further configured to: upon receiving the selection of the option, one or more of terminate the participant's participation in the wagering event, allow the participant to continue to participate in the wagering event with at least a portion of the wager, generate a new wager for the participant, relinquish rights of the participant in at least a portion of the wager, and one or more of transfer, sell, or put out for bid or auction at least a portion of one or more of an entitlement, right, or ownership of the participant in at least a portion of the wager to a third party or another participant.”

212. With the exception of the preamble, claim 24 overlaps entirely with identical portions of claim 8. Therefore, Scott discloses claim 24 for the same reasons explained above regarding claim 8, which are herein incorporated by reference.

Q. Claim 25: “The system of claim 16, wherein the plurality of input devices comprise one or more of: a wagering station, a wagering terminal, a hand held device, a mobile device, a wireless device, a computing system, a smart phone, a telephone, a tablet or desktop computer, a PDA, an interactive television, an internet connected device, and a cashier system.”

213. With the exception of the preamble, claim 25 is identical to claim 10. Therefore, Scott discloses claim 25 for the same reasons explained above regarding claim 10, which are herein incorporated by reference.

X. Conclusion

214. In signing this declaration, I recognize that the declaration will be filed as evidence in a contested case before the Patent Trial and Appeal Board of the United States Patent and Trademark Office. I also recognize that I may be subject to cross-examination in the case and that cross-examination will take place within the United States. If cross-examination is required of me, I will appear for cross-examination within the United States during the time allotted for cross-examination.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Executed this 6th day of February 2023, in WALLACE ARBOR MO 65770

Respectfully submitted,



Dwight Crevelt