UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

William Hill U.S. Holdco, Inc. and
Brandywine Bookmaking LLC

Petitioner

v.

CG Technology Development, LLC

Patent Owner

CASE: Unassigned

Patent No. 9,240,098

DECLARATION OF ANDREW WOLFE

IN SUPPORT OF

PETITION FOR *INTER PARTES* REVIEW

I, Andrew Wolfe, declare as follows:

I. BACKGROUND AND QUALIFICATIONS

1. My professional qualifications, experience, publications and presentations, and a listing of previous cases in which I have provided expert testimony are set forth in my CV, attached as Exhibit A. I am being compensated at my usual rate of $550.00 per hour for work on this case. My compensation is in no way related to the outcome of this case.

2. I am the founder and sole employee of Wolfe Consulting. Through Wolfe Consulting, I provide technical and business analysis to businesses on processor technology, computer systems, consumer electronics, software, design tools, data security, cryptography and intellectual property issues. I have more than thirty years' experience developing products, researching, consulting, and teaching in those fields. In that time, I have worked as a computer architect, computer system designer, and as an executive in the PC and electronics business. I have also taught at some of the world's leading institutions in those fields, including Stanford University, Princeton University, Carnegie Mellon University, and Santa Clara University.

3. In 1985, I earned the B.S.E.E. degree in Electrical Engineering and Computer Science from The Johns Hopkins University. In 1987, I received the M.S. degree in Electrical and Computer Engineering from Carnegie Mellon University

and in 1992, I received the Ph.D. degree in Computer Engineering from Carnegie Mellon University. My doctoral dissertation proposed a new approach for the architecture of a computer processor.

4. In 1983, I began designing touch sensors, microprocessor-based computer systems, and I/O (input/output) cards for personal computers as a senior design engineer for Touch Technology, Inc. During the course of my design projects with Touch Technology, I designed I/O cards for PC-compatible computer systems, including the IBM PC-AT, to interface with interactive touch-based computer terminals that I designed for use in public information systems and kiosks. I also developed complete kiosk systems including software and computers. I continued designing and developing related technology as a consultant to the Carroll Touch division of AMP, Inc., where in 1986 I designed one of the first custom touch-screen integrated circuits. I designed the touch/pen input system for the Linus WriteTop, which many believe to be the first commercial tablet computer.

5. From 1986 through 1987, I designed and built a high-performance computer system as a student at Carnegie Mellon University. From 1986 through early 1988, I also developed the curriculum, and supervised the teaching laboratory, for processor design courses.

6. In the latter part of 1989, I worked as a senior design engineer for ESL-TRW Advanced Technology Division. While at ESL-TRW, I designed and built a

bus interface and memory controller for a workstation-based computer system, and also worked on the design of a multiprocessor system.

7. At the end of 1989, I (along with some partners) reacquired the rights to the technology I had developed at Touch Technology and at AMP, and founded The Graphics Technology Company. Over the next seven years, as an officer and a consultant for The Graphics Technology Company, I managed the company's engineering development activities and personally developed dozens of touch screen sensors, controllers, and interactive touch-based computer systems including components for gaming machines.

8. I have consulted, formally and informally, for a number of fabless semiconductor companies. In particular, I have served on the technical advisory boards for two processor design companies: BOPS, Inc., where I chaired the board, and Siroyan Ltd., where I served in a similar role for three networking chip companies—Intellon, Inc., Comsilica, Inc., and Entridia, Inc.—and one 3D game accelerator company, Ageia, Inc.

9. I have also served as a technology advisor to Motorola and to several venture capital funds in the U.S. and Europe. Currently, I am a director of Turtle Beach Corporation, providing guidance in its development of premium audio peripheral devices for a variety of commercial electronic products.

10. From 1991 through 1997, I served on the Faculty of Princeton University as an Assistant Professor of Electrical Engineering. At Princeton, I taught undergraduate and graduate-level courses in Computer Architecture, Advanced Computer Architecture, Display Technology, and Microprocessor Systems, and conducted sponsored research in the area of computer systems and related topics. From 1999 through 2002, I taught the Computer Architecture course to both undergraduate and graduate students at Stanford University multiple times as a Consulting Professor. At Princeton, I received several teaching awards, both from students and from the School of Engineering. I have also taught advanced microprocessor architecture to industry professionals in IEEE and ACM sponsored seminars. I am currently a lecturer at Santa Clara University teaching courses on Computer Organization and Architecture and Mechatronics.

11. From 1997 through 2002, I held a variety of executive positions at a publicly held fabless semiconductor company originally called S3, Inc. and later called SonicBlue Inc. I held the positions of Chief Technology Officer, Vice President of Systems Integration Products, Senior Vice President of Business Development, and Director of Technology, among others. During my time at SonicBlue we launched more than 30 new consumer electronics products.

12. I served as a board member and technical advisor at KBGear Inc. from 1999-2001. KBGear Inc. designed and produced digital cameras and music players.

13. I have published more than fifty peer-reviewed papers in computer architecture and computer systems design. I have also chaired IEEE and ACM conferences in microarchitecture and integrated circuit design. I am a named inventor on at least fifty-six U.S. patents and thirty-one foreign patents.

14. I have been the invited keynote speaker at the ACM/IEEE International Symposium on Microarchitecture and at the International Conference on Multimedia. I have also been an invited speaker on various aspects of technology or the PC industry at numerous industry events including the Intel Developer's Forum, Microsoft Windows Hardware Engineering Conference, Microprocessor Forum, Embedded Systems Conference, Comdex, and Consumer Electronics Show as well as at the Harvard Business School and the University of Illinois Law School. I have been interviewed on subjects related to technology and the electronics industry by publications such as the Wall Street Journal, New York Times, LA Times, Time, Newsweek, Forbes, and Fortune as well as CNN, NPR, and the BBC. I have also spoken at dozens of universities including MIT, Stanford, University of Texas, Carnegie Mellon, UCLA, University of Michigan, Rice, and Duke.

15. I have reviewed United States Patent No. 9,240,098 ("the '098 patent") to Williams, *et al.* I have also reviewed the publications cited in this declaration and referenced in the *inter partes* review petition submitted herewith.

A. INFORMATION PROVIDED TO ME

16. In proceedings before the USPTO, I understand that the claims of an unexpired patent are to be given their broadest reasonable interpretation in view of the specification from the perspective of one of ordinary skill in the field. I have been information that the '098 patent has not expired. In comparing the claims of the '098 patent to the known prior art, I have carefully considered the '098 patent and the '098 patent's file history from the perspective of a person of ordinary shill in the art ("POSITA") using my experience and knowledge in the relevant field.

17. I am informed that the application for the '098 patent was filed on March 15, 2013. For purposes of this declaration only, I have assumed a priority date of March 15, 2013, in determining whether a reference constitutes prior art.

18. I understand that a claim is unpatentable if its subject matter is anticipated or obvious. I further understand that anticipation of a claim requires that every element of a claim be disclosed expressly or inherently in a single prior art referenced, as claimed.

19. I further understand that obviousness of a claim requires that the claim be obvious from the perspective of a POSITA at the time of the alleged invention. I further understand that a patent claim can be found unpatentable as obvious where 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 to a POSITA at the

time of the invention. I understand that an obviousness analysis involves a consideration of (1) the scope and content of the prior art, (2) the differences between the claimed invention and the prior art, and (3) the level of ordinary skill in the pertinent field.

20. I further understand that certain factors, referred to as secondary considerations, may support or rebut the obviousness of a claim. I understand that such secondary considerations include, among other things, commercial success of the patented invention, skepticism of those having ordinary skill in the art at the time of invention, unexpected results of the invention, any long-felt but unsolved need in the art that was satisfied by the alleged invention, the failure of others to make the alleged invention, praise of the alleged invention by those having ordinary skill in the art, and copying of the alleged invention by others in the field. I understand that there must be a nexus—a connection—between any such secondary considerations and the alleged invention. I also understand that contemporaneous and independent invention by others is a secondary consideration tending to show obviousness.

21. I further understand that a claim is obvious if it unites old elements with no change to their respective functions, or alters prior art by mere substitution of one element for another known in the field and that combination yields predictable results. While it may be helpful to identify a reason for this combination, common sense should guide and no rigid requirement of find a teaching, suggestion or

motivation to combine is required. When a device or product is available, design incentives and other market forces can prompt variations of it, either in the same field or different one. If a person having ordinary skill in the relevant art can implement and predictable variation, obviousness likely bars its patentability. For the same reason, if a technique has been used to improve one device and a person having ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious. I understand that a claim may be obvious if common sense directs one to combine multiple prior art references or add missing features to reproduce the alleged invention recited in the claims. I understand that a POSITA is a person of ordinary creativity, not an automation.

22. I have been asked to consider U.S. Patent No. 6,612,928 to Bradford ("Bradford"), and in particular whether Bradford, either alone or in view of other prior art, discloses each limitation of independent claims 2 and 15 and dependent claims 4-6, 8-14, 17-19, and 21-23 (the "Challenged Claims") of the '098 patent. My conclusion is that all the Challenged Claims of the '098 patent, except dependent claim 11, are unpatentable as anticipated by Bradford, and alternatively, that those Challenged Claims are unpatentable as obvious over Bradford in view of the knowledge of a POSITA and/or U.S. Patent App. No. 2005/0054417 ("Parrott"). My conclusion, with respect to dependent claim 11, is that claim is unpatentable as obvious over Bradford in view of the knowledge of a POSITA and/or Parrott.

II. THE '098 PATENT (EX. 1002)

23. The '098 patent is very simple and generally relates to casino gaming device kiosks that includes well-known features such as an identification scanner and a biological sensor to verify a player. The abstract of the '098 patent reads:

> A kiosk for gaming by patrons. An identification scanner may scan an identification document into digital form. A biological sensor such as a camera may obtain biological data describing a human patron. Input-output device(s) mounted in the kiosk may present information and accept registration/login information and gaming commands from a human patron. A currency acceptor and dispenser may accept money. The kiosk may ask a patron to insert an identification document into the identification scanner, and scan the document. The kiosk may obtain biological data describing the patron. The kiosk may verify the identity of the patron and acceptability of the patron for gaming based at least in part on the digital form of the patron's identification and the biological data. The kiosk may accept currency for deposit into a wagering account. Once the patron is verified and the account is funded, the kiosk may offer gaming activities to the verified patron out of the wagering account, and pay out gaming winnings at the currency dispenser.

24. In summary, the '098 patent describes a very common gaming kiosk that employs an identification scanner and biological scanner to verify the identification of a player, features that were already well known in the art. The

gaming kiosk can also include other well-known features, such as a credit card reader and currency acceptor and dispenser.

III. THE LEVEL OF ORDINARY SKILL IN THE ART

25. I have been advised that there are multiple factors relevant to determining the level of ordinary skill in the pertinent art, including the educational level of active workers in the field at the time of the invention, the sophistication of the technology, the type of problems encountered in the art, and the prior art solutions to those problems. I have been informed that the level of skill in the art is evidenced in the part by the prior art references. The prior art discussed herein demonstrates that a POSITA in the 2012-2013 timeframe would have had at least a bachelor's degree in computer or electrical engineering, or related field of study, and at least two years of professional computer system design experience or equivalent.

26. The POSITA would have understood basic design methodology as applied to processors, sensors, scanners, and other hardware components in a wide range of applications and would be familiar with adapting these methodologies in kiosk design. The POSITA would also be familiar with the general operation of a gaming machine.

27. As such, a POSITA would understand, among other things, that a gaming kiosk at the time could generally accept pre-payment for gaming via a bill acceptor, coin acceptor, credit card, debit card, stored value card, or ATM card. A

POSITA would also understand, among other things, that a gaming kiosk at the time could generally return currency via a coin dispenser or bill dispenser. These are ordinary and common components that were also used in vending machines, ticket machines, change machines, ATMs, and other common devices that use currency. A POSITA would also understand that it was common in an electronic gaming machine to perform various authentications (of a person or funds, for example) prior to game play and upon verification allow a game to be played.

IV. THE PRIOR ART

A. Bradford (Ex. 1003)

28. Bradford is a U.S. Patent that issued on September 2, 2003, almost ten years prior to the filing date of the '098 patent.

29. Bradford relates to a method and apparatus to verify the identification of a gaming patron, and whether the patron is acceptable to play a game, using two authenticators. [Col. 2, Line 64 – Col. 4, Line 10]. For example, it allows casinos and other establishments having age restrictions to confirm that a person is eligible to make use of the gaming device. The Abstract of Bradford describes the disclosed gaming method and system as follows:

> A system and method for using two authenticators to identify a player in a gaming environment is disclosed, where the second authenticator is based on biometric data. The two authenticators allow a two-level authorization process, where the second authenticator, being based on

> biometric data, allow a player to quickly and easily authenticate documents while remaining at game machines, authenticate electronically based transfers into and out of accounts at game machines, and further allow casinos and other establishments having age requirements and operating in an open environment to confirm that an underage person is not enabling the game play button (making use of the game machine thereby).

30. In the example illustrated in Figure 2 of Bradford, reproduced below, the gaming device is within a cabinet and includes a first authenticator reader 204 and a second authenticator reader 210. [Col. 8, Lines 33-40, Fig. 2]. The second authenticator is a biometric reader. [Col. 3, Lines 22-23; Col. 3, Lines 63-65; Col. 8, Lines 33-40; Fig. 2].

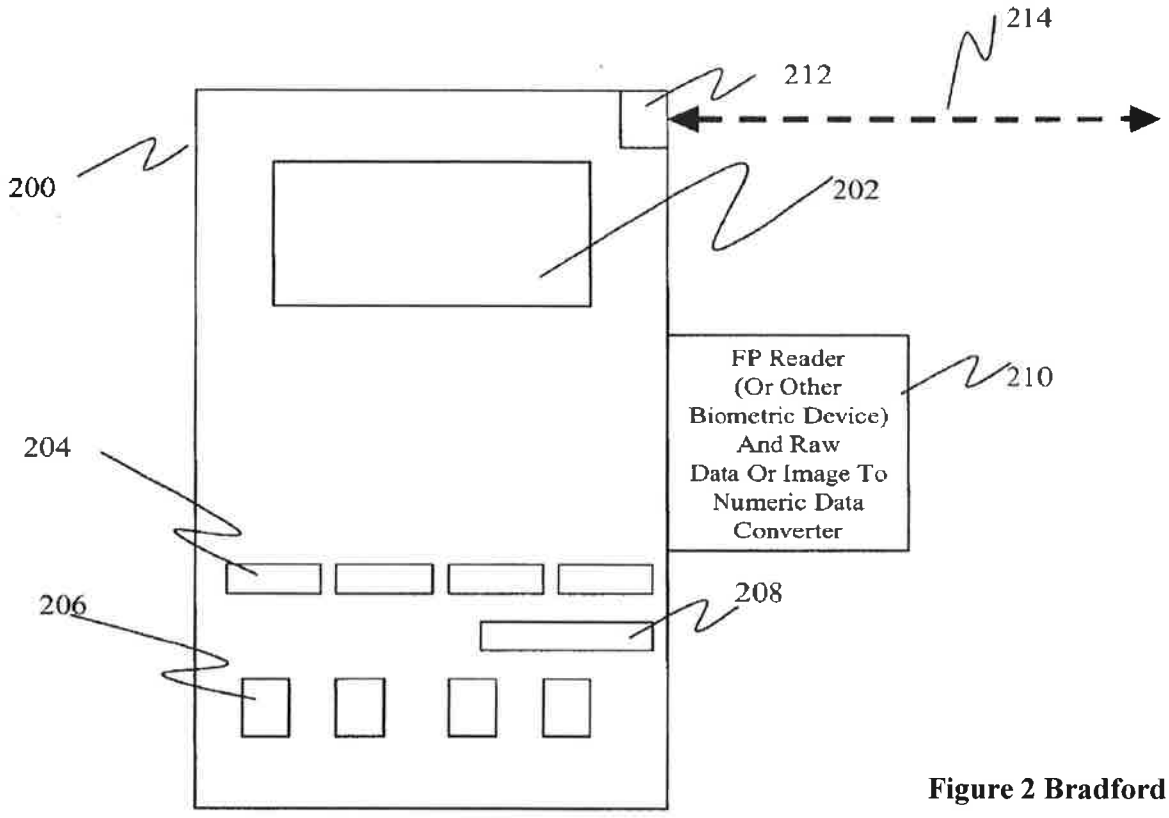

Figure 2 Bradford

31. The first authenticator of Bradford is whatever a player first presents to the system to identify himself or herself, such as a physical card that contains data capable of being read from it. [Col. 5, Lines 36-54]. The first authenticator can be of many types. [Col. 3, Lines 6-22; Col. 5, Lines 36-54]. For example, it can be a magnetic strip, or a unique alphanumeric sequence, such as a PIN or any sequence of numbers that may be usable to identify a player. [Col. 3, Lines 6-22; Col. 5, Lines 36-54; Col. 6, Lines 10-13].

32. Accordingly, data from the first authenticator can be the data that is read from a physical item or in the case of an alpha-numeric sequence, is the data itself. [Col. 3, Lines 6-22].

33. Government-issued identification documents, such as driver's licenses, can be the first authenticator of the gaming device in Bradford. [Col. 5, Lines 56-63].

34. The second authenticator of the gaming device is based on a biometric reading. [Col. 3, Lines 22-23; Col. 3, Lines 63-65; Col. 6, Lines 49-53]. One disclosed biometric reader is a facial geometry reader, including a camera placed in the cabinet, the camera providing an image of the patron from which facial geometry and other facial features may be characterized. [Col. 6, Lines 53-56; Col. 16, Lines 55-63].

35. In one example of Bradford, an entry for a patron must first be created in a player identification database, which associates a first authenticator and second authenticator with the player. [Col. 3, Lines 51-53; Claim 65]. This allows the patron to be later verified when at the gaming device. *Id.*

36. When the player goes to the gaming device, the player will take an action that will require verification of the player's identity and acceptability for the action, such as a game play, electronic fund transfer, or to authorize a form. [Col. 3, Lines 54-60; Col 5, Lines 21-25; Col. 6, Lines 3-4; Claim 65].

37. The player is instructed to present his or her first authenticator to the reader in order to be verified. [Col. 3, Lines 53-62; Col. 5, Lines 21-25; Claims 4 and 65]. The reader then obtains the data that can be read from the first authenticator. [Col. 3, Lines 9-22; Col. 6, Lines 3-4]. The data that is obtained by the reader is used to find matching first authenticator data in the player identification database. [Col. 6, Lines 4-6; Claim 65]. The matching first authenticator data is then associated with the player's second authenticator data stored in the database. [Col. 3, Lines 28-34; Claim 65].

38. To authorize the action, the player then presents his or her second authenticator. [Col. 3, Lines 58-62; Claim 65]. The second authenticator is checked, and if the second authenticator data from the gaming device matches the second authenticator data stored in the database for that player, the action, e.g., game play, is allowed. [Col. 3, Line 66 – Col. 4, Line 2].

39. A method of using the game device is also described. [Col. 3, Line 50 – Col. 4, Line 2; Col. 31, Line 66 – Col. 32, Line 49, Claims 4 and 65].

40. To verify a patron, an entry for that patron must first be created in a player identification database, which associates a first authenticator and second authenticator with the player. [Col. 3, Lines 51-53; Col. 32, Lines 8-2, Claim 65]. When the player goes to the gaming device, the player will take an action that will require verification of the player's identity and acceptability for the action, such as

a game play, electronic fund transfer, or to authorize a form. [Col. 3, Lines 54-60; Col. 5, Lines 21-25; Col. 6, Lines 3-4; Col. 32, Lines 36-40; Claim 65].

41. To be verified, the player is instructed to present his or her first authenticator to the reader, to which the player complies. [Col. 3, Lines 53-62; Col. 5, Lines 21-25; Col. 32, Lines 36-40, Claim 65]. The reader then obtains the data that can be read from the first authenticator. [Col. 3, Lines 9-22; Col. 6, Lines 3-4, Claim 65].

42. The data that is obtained by the reader is used to find matching first authenticator data in the player identification database. [Col. 6, Lines 4-6, Claim 65]. The matching first authenticator data is associated with the player's second authenticator data stored in a database. [Col. 3, Lines 28-34, Claim 65].

43. To authorize the action, the player then presents his or her second authenticator. [Col. 3, Lines 58-62; Col. 32, Lines 40-43, Claim 65]. The second authenticator is checked, and if the second authenticator data from the gaming device matches the second authenticator data stored in the database for that player, the action, *e.g.,* game play, is allowed. [Col. 3, Line 66 – Col. 4, Line 2; Col. 32, Lines 33-49; Claim 65].

B. Parrott (Ex. 1004)

44. Parrott is a U.S. Patent Application that published in March 2005 and is prior art to the '098 patent.

45. Parrott discloses gaming machines with scanning capability.

46. In Parrott, the scanner may transmit data representing a digital representation or scan of virtually any object, such as credit cards, driver's licenses, bet slips, player tracking cards, and the like. [Para. 0098].

47. Figure 16a of Parrott, reproduced below, illustrates a gaming unit with a scanner, 650.

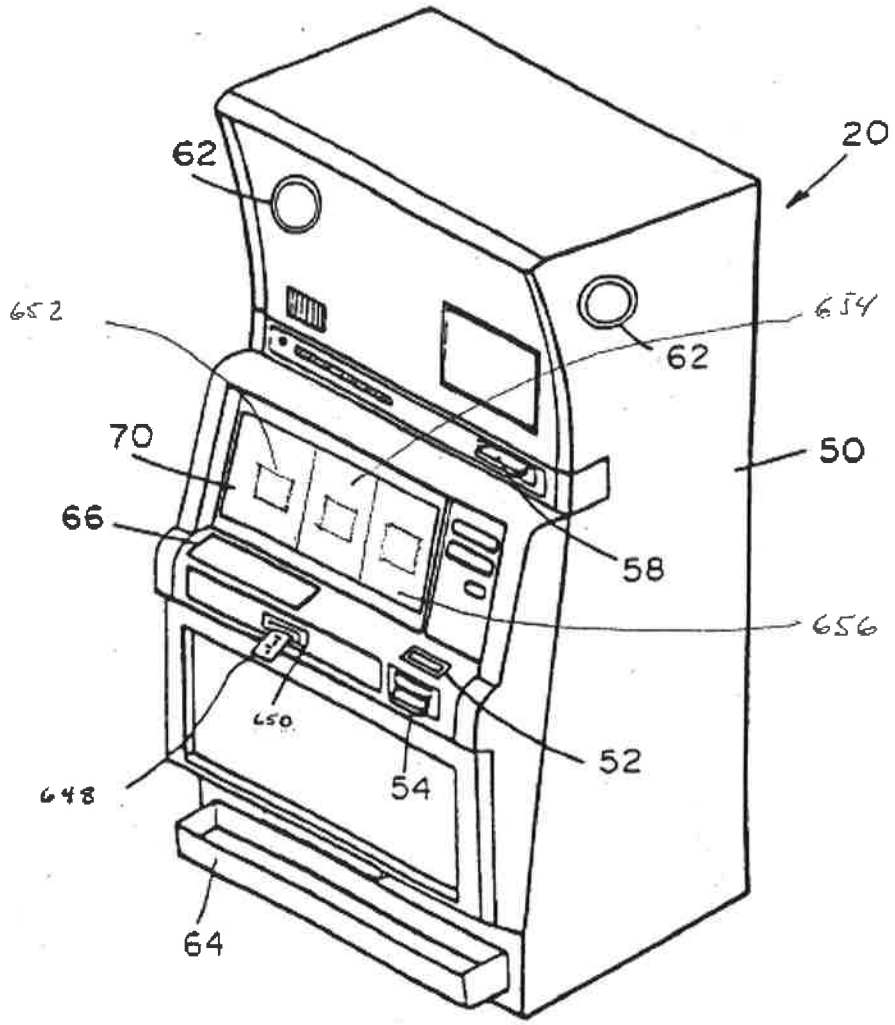

FIG. 16a

[Parrott, Figure 16a].

48. In one example, a gaming unit is disclosed where a driver's license is scanned to enable the system to gather sufficient data to automatically have the user apply for a player tracking card and use the data from the scanned license to research databases to fill in further information on the application. [Para. 0105].

49. The system disclosed in Parrott may then match scanned data from the driver's license in the database. [Para. 0106].

50. Another example in Parrott provides that, if a user inserts a driver's license, the scanned in name and license number may be checked against databases to determine whether the license is accurate and should be authorized. [Para. 0102].

51. The disclosed gaming units in Parrott also contain one or more value input devices that include any device that can accept value from a customer. Such input devices include a coin slot or acceptor, a paper currency acceptor, and a card reader and/writer. [Para. 0038, Fig. 2].

V. BRADFORD ANTICIPATES OR RENDERS OBVIOUS EACH CHALLENGED CLAIM OF THE '098 PATENT

A. Independent Claims 2 and 15

1. Independent Claim 2

52. Claim 2 is an independent apparatus claim and reads:

A kiosk for gaming by patrons, comprising:

a kiosk housing designed hold a processor, identification scanner, biological sensor, and to permit installation at a site for interaction with human patrons;

an identification scanner mounted in the kiosk housing and designed to accept an identification document and to scan identification information from the identification document into digital form for transmission over a network;

a biological sensor mounted in the kiosk housing and oriented to obtain biological data describing a human patron at the kiosk into digital form for transmission over a communication network;

input-output device(s) mounted in the kiosk housing and designed to accept registration/login information and gaming commands from a human patron and to present information to the human patron for interactive gaming;

one or more microprocessors mounted in the kiosk housing and programmed to:

present instructions to the human patron through the input-output device(s), including an instruction to the patron to insert a government-issued identification document into the identification scanner;

obtain a digital form of the patron's identification from the patron's government-issued identification document using the identification scanner;

obtain biological data describing a biological feature of the patron from the biological sensor,

verify the identity of the patron and acceptability of the patron for gaming based at least in part on the digital form of the patron's identification and the biological data; and

on verification, to offer gaming activities to the verified patron.

[Claim 2].

53. It is my opinion that all of the limitations of claim 2 are disclosed in Bradford, including in its description, figures, and claims (for example claims 52 and 65, and any of the claims they depend from).

a. "A kiosk for gaming by patrons, comprising"

54. The claim term "kiosk for gaming by patrons" appears in every claim of the '098 patent. In the Challenged Claims, this term appears in both the preamble and bodies of the claims.

55. Figure 1 is the sole drawing of the gaming kiosk according to the '098 patent:

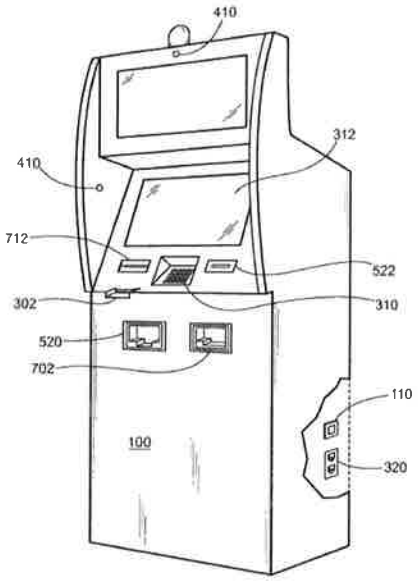

Fig. 1

56. The '098 patent describes the "kiosk" as having "a housing designed to hold a processor, identification scanner, and biological sensor, and to permit installation at a site for interaction with human patrons." [Col. 1, Lines 12-15].

57. Under the broadest reasonable interpretation, "kiosk for gaming by patrons" means "a cabinet or structure for gaming interaction with human patrons."

58. The first limitation of claim 2 reads "a kiosk for gaming by patrons." ['098 Patent, Claim 2]. As discussed above, the broadest reasonable interpretation is "a cabinet or structure for gaming interaction with human patrons."

59. Bradford discloses a gaming device that can be a conventional game of chance usable by a player in a gambling or casino environment, such as a slot machine. [Col. 3, Lines 50-51; Col. 7, Lines 35-48].

60. In particular Bradford reads:

> Most often a game device will be a gambling or betting machine as just discussed, but the concept of game device further includes and is not limited to other devices such as EFT (electronic funds transfer) stations, prize award and redemption kiosks or stations, EFA account and voucher management stations, and any other player service and player useable devices that may be found in a casino, bingo hall, or other gambling or betting establishment.

[Col. 7, Line 66 – Col. 8, Line 6].

61. Bradford discloses that the gaming device includes all the normal and well-known internal components needed in order to have a functioning game and can include a cabinet. [Col. 8, Lines 7-14; Col. 8, Lines 33-37; Col. 8, Lines 51-56; Figs. 1, 2, 3 and 4]. Figure 1 of Bradford is described as including the normal and well-known internals needed to have a functioning game, such as at least one central processor, associated memory, input/output interfaces, peripheral interfaces to the video display, control buttons and lever, monetary input devices, slot machine interface board (SMIB), together with the firmware and software needed to implement the full functionality of the game. [Col. 8, Lines 7-14, Fig. 1]. Further, Bradford Figure 2 is described as showing a game device similar to Figure 1 that includes a cabinet 200, video or reel area 202, SMIB 212, electronic connection 214,

first authenticator reader 204, voucher/card reader 208, and play button 206. [Col. 8, Lines 33-37].

62. The gaming device 300 depicted in Bradford Figure 3 also includes a cabinet. [Col. 8, Lines 51-56].

63. The gaming device 400 depicted in Bradford Figure 4 also includes a cabinet. [Col. 10, Lines 21-29].

64. Therefore, based upon the disclosure of Bradford, it is my opinion that a POSITA would understand Bradford to meet the "kiosk for gaming by patrons" limitation because Bradford discloses "a cabinet or structure for gaming interaction with human patrons.".

b. a kiosk housing designed hold a processor, identification scanner, biological sensor, and to permit installation at a site for interaction with human patrons;

65. Bradford discloses that the term "game device" as used in Bradford includes any game device usable by a player for any function in a gambling or casino environment. [Col. 3, Lines 50-151; Col. 7, Lines 35-48; Col. 8, Lines 33-37; Col. 8, Lines 51-56; Col. 33, Lines 51-65; Figs. 1, 2, 3 and 16]. In addition, the gaming device of Bradford can include a cabinet. [Col. 8, Lines 33-37]. As such, the gaming devices disclosed in Bradford permit installation of the device at a site for interaction with human patrons.

66. As mentioned above, the gaming device, which includes a cabinet, is a kiosk for gaming by patrons. In certain embodiments of Bradford, the game device is designed to hold a processor, identification reader, and biometric reader. [Col. 10, Lines 21-29; Col. 11, Lines 4-8; Col., Lines 22-43; Fig. 4]. For example, game device 400 includes reader 412 comprised of an embedded computer system having a processor, memory, and support chips to implement an embedded system with a selection of I/O ports for an Ethernet connection, at least one biometric reader and support any other first authenticator reader device. [Col. 11, Lines 22-43; Fig. 4]. Further, game device 400 can include one or more first authenticator readers 408. [Col. 10, Lines 21-29.]

67. The first authenticator readers in Bradford are the same type of device as the identification scanner in the '098 patent. For example, the ID acceptor described in the '098 patent includes a generic scanning process (*i.e.,* alphanumeric or image) to collect information from the ID card. [Col. 2, Line 66 – Col. 3, Line 5]. The first authenticator readers of Bradford are used to read the first authenticator that a player presents to the gaming device to identify him or herself. [Col. 5, Lines 36-37; Col. 6, Lines 13-27]. The first authenticator can be one of many choices, including magnetic-strip cards, smart cards, credit cards, debit cards and driver's licenses. [Col. 5, Lines 38-63]. The disclosed identification reader in Bradford is capable of scanning a barcode, magnetic stripe, text, or other machine-readable

symbols on a surface of the card as these were common on government identification at the time. [Col. 5, Lines 55-63]. Similarly, in the '098 patent the player inserts his or her identification, such as a driver's license, into the identification acceptor of the gaming device to identify/verify him or herself. [Col. 2, Line 61 – Col. 3, Line 2]. Accordingly, the first authenticator readers in Bradford and identification scanner in the '098 patent refer to the same type of device.

68. As shown Figure 4, reproduced below, game device 400 includes first authentication (identification) readers 408 and the biometric reader 412, all preferably within the cabinet. [Col. 10, Lines 21-29; Col. 10, Lines 36-40; Col. 11, Lines 4-8; Col. 11, Lines 22-31; Fig. 4] The biometric reader 412 may also include other input/output (I/O) devices such as other first authenticator readers. [Col. 11, Lines 30-36; Fig. 4.]

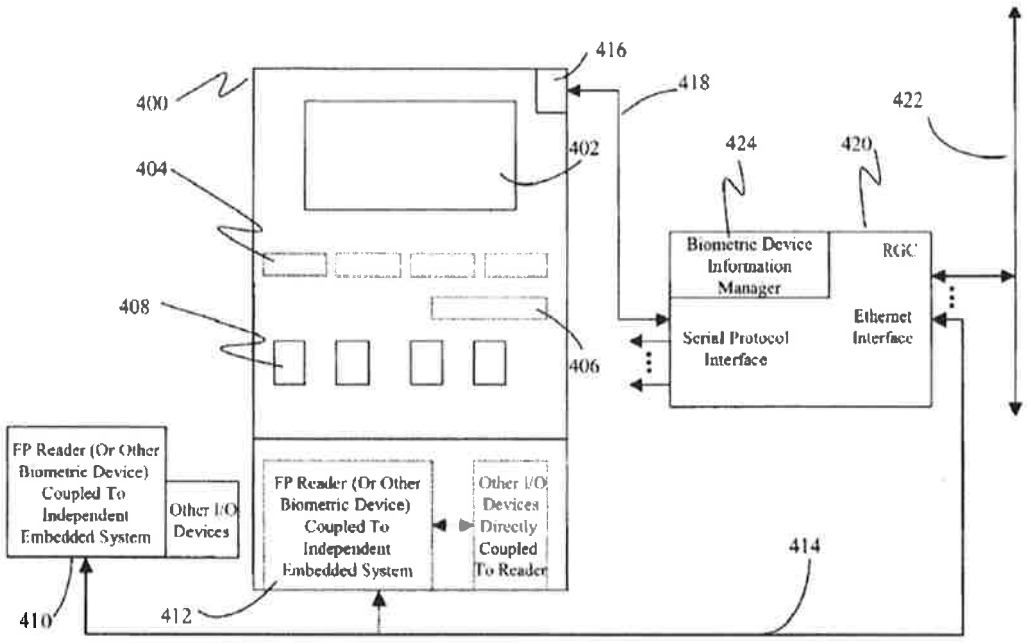

Figure 4.

69. Again referring to Figure 4, the embedded system board in biometric reader 412 has a processor, and that embedded system board and other needed parts or boards would also be installed on the inside of the cabinet. [Col. 1, Lines 22-43; Fig. 4].

70. Similarly, the description regarding the gaming device depicted in Figure 16 of Bradford specifically includes a CPU inside the cabinet. [Col. 33, Lines 54-57; Fig. 16.]

71. Claims 50, 52 and 55 of Bradford likewise discloses a game device, identification reader and biometric reader being within a single external cabinet. Claim 50 reads:

The gaming system of claim 49 further configured such that said at least one non-biometric reader, said at least one biometric reader, and said at least one game device are operably disposed within a single external cabinet.

[Claim 50].

72. Therefore, based upon the disclosure of Bradford, it is my opinion the identification reader (or non-biometric reader) recited in Claim 50 is the same as the identification scanner set forth in the '098 patent claims.

73. As mentioned above, the disclosed identification reader in Bradford is capable of scanning a barcode, magnetic stripe, text, or other machine-readable symbols on a surface of the card as these were common on government identification at the time. [Col. 5, Lines 55-63]. Thus, it is my opinion that Bradford discloses this limitation.

c. an identification scanner mounted in the kiosk housing and designed to accept an identification document and to scan identification information from the identification document into digital form for transmission over a network;

74. The first authenticator of Bradford is whatever a player first presents to the system to identify himself or herself and can be one of many types. [Col. 3, Lines 6-13; Col. 5, Lines 38-63].

75. "Presents" is defined in Bradford "to mean any action needed by user of an authenticator to have the authenticator read by a reader designed to read the authenticator." [Col. 6, Lines 13-16].

76. Given this broad teaching of authenticator and its associated input device, i.e. reader, Bradford discloses that "[e]ach authenticator and its associated input device would have a corresponding meaning of 'presents,' where in each case the net result is that the needed data on or in the authenticator to be read, is read by the reader corresponding to that type of authenticator." [Col. 6, Lines 22-27].

77. Similarly, Bradford broadly teaches that the "'first authenticator' and 'first authenticator data' refer to the same thing, that is, the information or data that is read from a physical item, where that physical item may be used to carry the data, or, in the case of an alpha-numeric sequence, is the data." [Col. 3, Lines 14-20].

78. As a result, where the authenticator is a document, card, or the like that is machine readable, the associated input device/reader would be a scanner. For example, the ID acceptor described in the '098 patent includes a generic scanning process (*i.e.,* alphanumeric or image) to collect information from the ID card. [Col. 2, Line 66 – Col. 3, Line 2]. In this regard, Bradford discloses a driver's license with machine readable symbols on the surface of the card as an example of an authenticator. [Col. 5, Lines 58-63]. Note that as understood in Bradford, many driver's license included machine readable information on the card prior to the

effective filing date of the '098 patent per the federal requirements in 6 C.F.R. § 37.19. Accordingly, the first authentication reader disclosed in Bradford is designed to accept a government-issued identity document and to scan identification information from the identification document. A driver's license is a government-issued identity document.

79. The identification information collected from the first authenticator, *i.e.* identification document in Bradford, is made into digital form for transmission over, for example, an Ethernet network connection to a BDIM 424 for association of the collected information to a database. [Col. 11, Lines 10-50, Fig. 4]. For example, where the first authenticator is an alpha-numeric sequence entered into the gaming device through a keyboard or touchscreen, that alpha-numeric sequence would need to be in digital form for transmission over a network.

80. This would be the same where the first authenticator is a document such as "driver's licenses . . . having machine readable symbols on one surface." [Col. 5, Lines 58-6].

81. A "reader" of those symbols is a scanner, and it scans the machine-readable symbols into digital form.

82. Figure 4 shows a "typical Serial-protocol-based communication means used over an electronic connection 418 to RGC 420." Ex. 1003 at Col. 10, Lines 21-24.

83. In describing the electronic connection between the reader and remote game controller (RGC), Bradford explains that in one preferred embodiment, "this will be an Ethernet connection and will interface to RGC via RGC 420's Ethernet port (be on the same Ethernet network 422 as the rest of the backend machines) rather than using the typical Serial protocol interface found on SMIBS." [Col. 10, Lines 60-66].

84. Bradford further explains that reader 412 is identical to reader 410, except for its physical location within the cabinet. [Col. 11, Lines 4-12].

85. Accordingly, in Bradford the first authentication reader scans information from the first authenticator into digital form for transmission over a network.

86. Therefore, Bradford discloses that a machine-readable, government-issued identification document (such as a driver's license) used as the first authenticator would be scanned by its corresponding reader into digital form for transmission over a network. Accordingly, it is my opinion that Bradford discloses this limitation.

d. a biological sensor mounted in the kiosk housing and oriented to obtain biological data describing a human patron at the kiosk into digital form for transmission over a communication network;

87. Bradford discloses a biological sensor, which is sometimes referred to as a second authentication reader or biometric reader. [Col. 10, Lines 21-31; Col. 11, Lines 22-43; Fig. 4].

88. The biometric reader could be a facial geometry reader, including a camera placed in the cabinet, the camera providing an image of the patron from which facial geometry and other facial features may be characterized. [Col. 6, Lines 53-56; Col. 16, Lines 55-63].

89. Many alternative biometric readers are disclosed in Bradford. [Col. 16, Lines 52-63]. Bradford also discloses that the biometric reader can be mounted in the cabinet housing. [Col. 10, Lines 21-29; Col. 11, Lines 4-12, Fig. 4].

90. The biometric reader of Bradford is the same type of device as the biometric sensor of claim 2 of the '098 patent. Each relates to sensing or reading one or more biometric attributes of the player in front of the gaming device, such as the player's facial geometry or fingerprints to verify the player. [*See e.g.* '098 patent, Col. 3, Lines 6 - 26; Bradford, Col. 6, Lines 49-64]. Indeed, both the '098 patent and Bradford describe the same device, namely a camera, as example of the respective biometric reader and biometric sensor. ['098 patent, Col. 3, Lines 6 - 12; Bradford, Col. 16, Lines 55-63].

91. As set forth above, Figure 4 shows a "typical Serial-protocol-based communication means used over an electronic connection 418 to RGC 420." [Col. 10, Lines 21-24].

92. In describing the electronic connection between the biometric reader and remote game controller (RGC), Bradford explains that in one preferred embodiment, "this will be an Ethernet connection and will interface to RGC via RGC 420's Ethernet port (be on the same Ethernet network 422 as the rest of the backend machines) rather than using the typical Serial protocol interface found on SMIBS." [Col. 10, Lines 60-66].

93. Bradford further explains that biometric reader 412 is identical to reader 410, except unlike reader 410, its physical location is within the cabinet. [Col. 11, Lines 4-12].

94. Figure 5 and its accompanying disclosure also demonstrate gaming devices being connected to a backbone network for communication with backend machines for purposes of player verification. [Col. 11, Line 58 – Col. 12, Line 21].

95. Additionally, Figure 2 notes that fingerprint (FP) reader 210 includes an "Image to Numeric Data Converter," in other words a converter for taking the raw biological data and converting it to digital form to be communicated outside the gaming device via electronic connection 214. [Col. 8, Lines 33-50; Fig. 2].

96. Claim 55 of Bradford recites a biometric reader in a single cabinet that obtains biological data describing a human patron at the gaming device where that data is converted into digital form for transmission over a communication network.

97. Similarly, the preamble of claim 65 states that

> A method for using a first authenticator and a second authenticator for age verification with a game device remotely located from a game establishment and connected to the game establishment via a network, where the second authenticator comprises biometric data, and where a player identification database is provided by the game establishment and where the player identification database comprises, for each entry, data associated with the first and second authenticator, and where the remote game device is operably connected to a biometric reader corresponding to the type of biometric data comprising the second authenticator, the method comprising:

And step (c) of the method in claim 65 requires "receiving from said remote game device biometric data."

98. Accordingly, the biometric reader disclosed in Bradford obtains biological data describing a human patron at the gaming device into digital form for transmission over a communication network. Therefore, it is my opinion that Bradford discloses this limitation.

e. input-output device(s) mounted in the kiosk housing and designed to accept registration/login information and gaming commands from a human patron and to present information to the human patron for interactive gaming

99. The game device of Bradford "includes the normal and well known internals needed in order to have a functioning game, such as at least one central processor, associated memory, input/output interfaces, peripheral interfaces to the video display, control buttons and lever, monetary input devices, slot machine interface board (SMIB), together with the firmware and software needed to implement the full functionality of the game." [Col. 8, Lines 7-21; Fig. 1].

100. The gaming device in Bradford also includes play buttons and choice buttons that are within the gaming device cabinet. [Col. 8, Lines 33-38; Col. 8, Lines 51-56; Col. 10, Lines 20-29].

101. Bradford defines the term "play button" or "game play button" broadly to mean "any implementation of a user interface which is what a player would interact with to initiate game action or game play." [Col. 32, Lines 51-54].

102. This includes any and all means that may be used to initiate play, including touchscreen, virtual buttons and the like. [Col. 32, Lines 57-59]. For example, the gaming device depicted in Figure 4 of Bradford also includes a high resolution touchscreen as the user interface. [Col. 34, Lines 5-8].

103. The gaming device depicted in Figure 16 of Bradford also includes "a display with interactive I/O capabilities usable by a player, preferably mounted in cabinet 1600 just below the traditional play buttons 1604…." [Col. 34, Lines 5-8].

104. Bradford also discloses other I/O devices, including touchscreens that make up part of the main game device video display to be used as the user interface. [Col. 11, Lines 13-20; Col. 24, Lines 58-65].

105. Among other things, I/O devices, such as touchscreens, keypads or keyboards are used to request an electronic fund transfer ("EFT") into the gaming device in order to play or cash-out, meaning transfer all current all credits to an electronic fund account. [Col. 13, Lines 19-23; Col. 24, Lines 58-65; Col. 27, Lines 20-40; Fig. 11].

106. To perform an ordinary EFT, it would be necessary to provide registration/login information through the gaming device via an input device such as a touchscreen, keypad or keyboard to be able to access the electronic fund account to carry out the EFT.

107. Bradford further discloses that the first authenticator can be an alpha numeric sequence, which includes personal identification numbers (PINs) as well as any sequence of numbers and letters that may be used to identify a player. [Col. 10, Lines 45-48].

108. A touchscreen or keyboard would be used to enter PIN or alpha numeric sequences and that PINs constitute registration/login information.

109. Thus, because Bradford discloses play buttons and touchscreens for accepting login information in the form of personal identification numbers, initiating of games (*i.e.,* gaming commands from patrons), and presenting information to the patron for interactive gaming, especially with regards to requests for electronic fund transfers, Bradford discloses this limitation.

f. one or more microprocessors mounted in the kiosk housing and programmed to

110. The game device of Bradford "includes the normal and well known internals needed in order to have a functioning game, such as at least one central processor . . . ." [Col. 8, Lines 7-21; Fig. 1]. Further processors are disclosed in Bradford as described above, such as within each reader. [*See e.g.* Col. 11, Lines 22-31]. For example, reader 412 "having a processor, memory, and support chips so as to implement an embedded system, including an embedded OS such as a UNIX-based system installed , with a selection of I/O ports and/or cable connections as needed for the Ethernet connection, video I/O, and as needed for each I/O device installed with the reader 412 system." [Col. 11, Lines 21-30]. At least because the reader 412 includes memory and processor to control each of the above mentioned components, including Ethernet connections, Bradford discloses that microprocessor is programmed to undertake the steps described for the reader (*i.e.*,

"present instructions," "obtain a digital form of the user's identification," "obtain biological data," "perform required verification," and "offer gaming activities"), as described in Section B.1.a.vii.-xi. herein.

111. As set forth previously, the processors can be mounted inside the cabinet.

112. The one or more processors are at least in part involved in the identification and verification process described in Bradford using biometric data before enabling game play in a gaming environment. [Abstract; Claim 65].

113. Figure 3 and Bradford's description of Figure 3 discloses that the game device that "includes the hardware and software needed to do initial processing of the image, scan, or read of the biometric data that will be the second authenticator, and will further do the actual database lookup and attempted match for the authorization." [Col. 8, Lines 51-65].

114. Thus, it is my opinion that Bradford discloses this limitation.

115. It is also my opinion that it is envisaged or would have been obvious to one of ordinary skill in the art in view of the disclosure of Bradford to perform at least some of the processing of Bradford in a gaming device, such as biometric matching [*see, e.g.,* Fig. 3], and perform at least some of the processing outside the gaming device through the data communications network of Bradford [*see, e.g.,* Fig. 5].

g. present instructions to the human patron through the input-output device(s), including an instruction to the patron to insert a government-issued identification document into the identification scanner

116. The flow diagram at Figure 11 of Bradford provides a "method of using the present invention for authenticating electronic funds transfers (ETFs)." [Col. 24, Lines 52-54]. The "present invention" in Bradford refers back to the embodiments of the gaming device. Specifically, the flow diagram at Figure 11 of Bradford shows that after an electronic fund transfer ("EFT") request occurs, the gaming device requests the player's first authenticator. [Col. 24, Lines 66-67; Fig. 11]. An EFT may occur prior to game play being enabled. [Col. 3, Line 50 – Col. 4, Line 2; Col. 27, Lines 11-38].

117. This EFT transaction may be to "use the funds in the players' EFA to get more game play credits." [Col. 13, Lines 40-41].

118. Bradford describes another EFT where the player uses a biometric reading device touchscreen or other interface that he or she wants to transfer funds in or out of the gaming device. [Col. 13, Lines 19-24].

119. "If the player has not, during this session, presented a first authenticator the player is prompted for both a first and second authenticator." [Col. 13, Lines 27-29].

120. These instructions occur through input/output devices within the game device cabinet such as via the peripheral interfaces to the video display. [Col. 8,

Lines 7-14; Col. 8, Lines 33-37]. Examples of such input-output devices in game device 400 disclosed in Bradford includes a touchscreen. [Col. 11, Lines 36-39].

121. The claims of Bradford also demonstrate that the device presents instructions to the patron. A limitation of Bradford claim 4 reads "having a player present a first authenticator to a game device in an operable manner." *Id.* at claim 4.

122. Similarly, an element of Bradford claim 25 reads "asking a player for a first authenticator." *Id.* at claim 25.

123. Bradford's disclosure that "the player is prompted for both a first and second authenticator" is a clear disclosure of presenting instructions to the patron. [Col. 13, Lines 27-29]. Moreover, Bradford discloses that "the player will be requested to input their second authenticator to uniquely identify one player." [Col. 21, Lines 11-13].

124. The microprocessor in reader 412 or elsewhere within game device 400 in Bradford is at least involved in presenting instructions to the human patron through the input-output device(s), including an instruction to the patron to insert an identification document into the identification acceptor in the same manner as described in the '098 patent. For example, the '098 indicates that kiosk 100 may request for registration or verification, submission of an identification document for scanning. [Col. 3, Lines 13-15]. Whether the microprocessor in game device 400

of Bradford performs the entire function of presenting instructions to the human patron through the input-output device(s), including an instruction to the patron to insert an identification document into the identification acceptor or is at least involved in that function, the microprocessor in game device 400 is programmed and configured to perform the function at least to the same extent such configuration to perform the function is accomplished in the '098 patent.

125. Further, game device 300 in Bradford illustrates an embodiment similar to the other embodiments in Bradford in which the systems described in the other embodiments are all performed in an embedded system within game device 300. [Col. 8, Line 51 – Col. 9, Line 4]. Based on the disclosure that all of the systems in other embodiments could be provided in a fully embedded system, one of ordinary skill in the art would have at once envisaged the same for the game device 400, where interconnection to a backend system was limited or non-existent.

126. Because Bradford discloses at least one microprocessor in a game device that is configured to at least be involved in presenting instructions to the human patron through the input-output device(s), including an instruction to the patron to insert an identification document into the identification acceptor or is at least involved in that function, a microprocessor in game device in Bradford is configured as recited in claim 2.

127. Further, according to Bradford, the first authenticator may be one among many choices, including a driver's license, a government-issued identification document. [Col. 5, Lines 36-64].

128. Accordingly, it is my opinion that Bradford discloses this element.

h. obtain a digital form of the patron's identification from the patron's government-issued identification document using the identification scanner

129. Bradford's first authenticator reader can obtain information from the first authenticator, which is then converted to digital form.

130. In the case of machine-readable documents, the first authenticator reader can be a scanner. Further, according to Bradford, the first authenticator may be one among many choices, including a driver's license, a government-issued identification document. [Col. 5, Lines 36-64].

131. The process of obtaining a digital form of the patron's driver's license would include the use of one of the processors of the gaming device.

132. The reader 412 in game device 400 includes a programmed microprocessor and memory, and thus would necessarily be involved in obtaining a digital form of the patron's driver's license in Bradford. *See* Ex. 1003 at 11:4-43

133. Accordingly, it is my opinion that Bradford discloses this element.

i. obtain biological data describing a biological feature of the patron from the biological sensor

134. In the Background of the Invention, Bradford discloses that because "the second authenticator is always biometric data, all the player has to do is use the biometric reader." [Col. 3, Lines 63-65].

135. "In the case of fingerprints, a quick touch of a fingerprint reader does the job." [Col. 3, Lines 65-66].

136. Referring to the flow chart depicted in Figure 15, the player, when making a play selection, also puts his or her fingertip on the fingertip reader. [Col. 32, Lines 42-45; Fig. 15].

137. The fingertip reader then creates a fingerprint data set and confirms a match with the fingerprint data associated with that player. [Col. 3, Line 65 – Col. 4, Line 2; Col. 32, Lines 42-45; Fig. 15].

138. Bradford also discloses that the process described using fingerprints would "work for any biometric device, which would then be substituted for the fingerprint reader. [Col. 16, Lines 52–57]. Where the biological data to be obtained relates to facial geometry, a camera would be placed in the game cabinet, "the camera providing an image from which facial geometry and other facial features may be characterized." [Col. 16, Lines 58–63].

139. A limitation of Bradford claim 4 reads "indicating to said player that the player is now to present a second authenticator, if said second authenticator

requires the player to actively present a part of themselves to a reading device." *Id.* at claim 4.

140. In Bradford, the process of obtaining biological data describing a biological feature of the patron from a biological sensor is performed through use of a programmed processor of the gaming device.

141. The reader 412 in game device 400 includes a microprocessor and memory, and thus would necessarily be involved in obtaining biological data describing a biological feature of the patron from the biological sensor in Bradford. [Col. 11, Lines 4-43].

142. Accordingly, it is my opinion that Bradford discloses this limitation.

j. verify the identity of the patron and acceptability of the patron for gaming based at least in part on the digital form of the patron's identification and the biological data

143. In describing the invention, Bradford states that the invention uses at least two authenticators to verify a gaming patron, a first authenticator, which is what a player first presents to the system to identify themselves, and a second authenticator based on a biometric reading. [Col. 3, Lines 63-65].

144. In explaining the two-authentication verification system, Bradford further states:

> The present invention provides new methods an apparatus having superior authentication of players….It does this by combining at least

two authentications per play in an easy-to-use and manage system. A player first presents some sort of initial identification to the gaming device, then (not always right away) provides a second means of authentication based on a biometric measure such as a fingerprint (defined below).

[Col. 5, Lines 16-24].

145. The verification process described in Bradford would be performed through use of a processor in the gaming device.

146. Bradford claim 4 describes a method for using at least two authenticators for identification of a player, where one of the authenticators relates to the players identification and the second authenticator relates to players biometric data. Claim 4 recites as follows:

4. A method for using at least two authenticators for identification of a player, where one of the at least two authenticators is identified as a first authenticator, and where at least one of the remaining authenticators is identified as a second authenticator, and further where any authenticator that is not a first authenticator comprises data derived from a biometric measurement, usable at a game device having associated biometric reader, the method comprising:

(a) having a player present a first authenticator associated to a game device in an operable manner;

(b) finding at least one second authenticator associated with a player identification entry in a player identification database where said entry is associated with said first authenticator;

(c) indicating to said player that the player is not to present a second authenticator, if said second authenticator requires that player to actively present a part of themselves to a reading device;

(d) reading biometric data from said player using a biometric reader;

(e) checking data derived from said biometric reading against said at least one second authenticator, and

(f) indicating to said player the results of the authorization.

147. Similarly, Bradford claim 65 relates to identifying the player and confirming the player is of sufficient age to play the gaming device. In the method set forth in Bradford claim 65, first authenticator data is required to match an entry in the player identification database and then comparing the biometric data of the player with the second authenticator data associated with that player in the player identification database. [Claim 65].

148. The programmed microprocessor in reader 412 or elsewhere within game device 400 in Bradford is at least involved in verifying the identity of the patron and acceptability of the patron for gaming based at least in part on the digital form of the patron's identification and the biological data in the same manner as described in the '098 patent. This is confirmed by dependent claim 6, which must

fall within the scope of claim 2 based on dependency, which requires the one or more microprocessors to verify the identity of the patron based at least in part on a verification received from an off-site verification office. [Col. 7, Lines 59-64].

149. In the event the microprocessor in computer device is relying on input and verification steps by a remote server, the microprocessor in computing device would still be involved in verifying the identity of the patron and acceptability of the patron for gaming based at least in part on the digital form of the patron's identification and the biological data. Accordingly, whether the microprocessor in game device 400 of Bradford performs the entire function of verifying the identity of the patron and acceptability of the patron for gaming based at least in part on the digital form of the patron's identification and the biological data or is at least involved in that function, the microprocessor in game device 400 is configured to perform the function at least to the same extent such configuration to perform the function is accomplished in the '098 patent.

150. Further, game device 300 in Bradford illustrates an embodiment similar to the other embodiments in Bradford in which the systems described in the other embodiments are all performed in an embedded system within game device 300. [Col. 8, Line 51 - Col. 9, Line 4]. Based on the disclosure that all of the systems in other embodiments could be provided in a fully embedded system, one of ordinary

skill in the art would have at once envisaged the same for the game device 400, where interconnection to a backend system was limited or non-existent.

151. Figure 3 illustrates a game device that includes "the hardware and software needed to do initial processing of the image, scan, or read of the biometric data that will be the second authenticator, and will further do the actual database lookup and attempted match for the authorization. In this case, the internals of reader 310 would include a processor, memory, and software dedicated to reader 310 that are sufficient to provide the compute resources needed for a database and the software used to match the reader data and the entries in the database." [Col. 8, Lines 56-65] Reader 410 is similarly disclosed. [Col 10, Lines 42-55].

152. Figure 16 of Bradford illustrates a biometric Input Processor 1626 as one of the processors within a gaming device. "When used by the player, the authorization will either be carried out locally on the dedicated board or the fingerprint data will be checked on a backend computer system (if RGCs are still in use, it may be done by the BDIM on the RGC); the same communications path used by the game device will be used, typically by providing an additional socket (connection) on the SMIB for use by the play/ authorize button interface board. Another implementation of play/authorize button 1626 makes use of the game processor for fingerprint data matching, downloading the required software into the

processors memory; because of the regulatory control of the game devices this may not be desirable in all cases." [Col. 35, Lines 48-65].

153. Because Bradford discloses at least one microprocessor in a game device that is configured to at least be involved in verifying the identity of the patron and acceptability of the patron for gaming based at least in part on the digital form of the patron's identification and the biological data, a microprocessor in game device in Bradford is configured as recited in claim 2. Accordingly, Bradford discloses this limitation.

k. on verification, to offer gaming activities to the verified patron

154. Bradford discloses that gaming activities are offered to the patron upon verification.

155. In the description of the invention, Bradford states "[t]he second authenticator is checked, and if the fingerprint data just read matches the fingerprint data in the second authenticator, then the action is carried out." [Col. 3, Line 66 – Col. 4, Line 2].

156. In the description of Figure 15, Bradford recites that "[a]s soon as confirmation is made (the data presented and the data associated with the player ID match), the play button is enabled." [Col. 32, Lines 46-48].

157. Bradford also notes that box 1506 in Figure 15 "corresponds to normal game play." [Col. 32, Lines 66-67].

158. The microprocessor in reader 412 or elsewhere within game device 400 in Bradford is at least involved in offering gaming activities to the patron upon verification in the same manner as described in the '098 patent. For example, the '098 indicates that once the verification is complete, patron may set up a wagering account and/or begin playing on the kiosk. [Col. 3, Line 63 – Col. 4, Line 21]. Accordingly, whether the programmed microprocessor in game device 400 of Bradford performs the entire function of offering gaming activities to the patron upon verification or is at least involved in that function, the microprocessor in game device 400 is configured to perform the function at least to the same extent such configuration to perform the function is accomplished in the '098 patent.

159. A POSITA would understand that in this context, allowing gaming activities to occur is the same as offering gaming activities.

160. Further, game device 300 in Bradford illustrates an embodiment similar to the other embodiments in Bradford in which the systems described in the other embodiments are all performed in an embedded system within game device 300. [Col. 8, Line 51 – Col. 9, Line 4]. Based on the disclosure that all of the systems in other embodiments could be provided in a fully embedded system, one of ordinary skill in the art would have at once envisaged the same for the game device 400, where interconnection to a backend system was limited or non-existent.

161. Because Bradford discloses at least one microprocessor in a game device that is configured to at least be involved in offering gaming activities to the patron upon verification, a microprocessor in game device in Bradford is configured as recited in claim 2. Accordingly, Bradford discloses this, and all other, limitations of claim 2.

2. Independent Claim 15

162. Claim 15 is a method claim that is similar to and includes several of the same elements of claim 2.

a. "at a Kiosk for Gaming..."

163. The first limitation of claim 15 reads as follows:

> at a kiosk for gaming by patrons, under control of one or more microprocessors mounted in the kiosk, presenting instructions to a human patron through input-output device(s), including an instruction to the patron to insert a government-issued identification document into an identification scanner, the kiosk having input-output device(s) mounted in the kiosk housing and designed to accept registration/login information and gaming commands from a human patron and to present information to the human patron for interactive gaming;

164. As explained above, Bradford discloses a kiosk for gaming by patrons, such as a gambling or betting machine included in a cabinet. [Col. 3, Lines 50-51; Col. 7, Line 66 – Col. 8, Line 6; Col. 8, Lines 33-37, Fig. 2]. The gaming device of Bradford "includes the normal and well known internals needed in order to have a

functioning game, such as at least one central processor . . . ." [Col. 8, Lines 7-21, Fig. 1].

165. As further explained, when the player goes to the gaming device, the player will take an action that will require verification of the player's identity and acceptability for the action, such as a game play, electronic fund transfer, or to authorize a form. [Col. 3, Lines 54-60; Col. 5, Lines 21-25; Col. 6, Lines 3-4; Claim 65].

166. For example, the flow diagram at Figure 11 of Bradford shows that after an electronic fund transfer ("EFT") request occurs, the gaming device requests the player's first authenticator. [Col. 24, Lines 66-67, Fig. 11]. An EFT may occur prior to game play being enabled. [Col. 3, Line 50 – Col. 4, Line 2; Col. 27, Lines 11-38]. Bradford describes another EFT where the player uses a biometric reading device touchscreen or other interface that he or she wants to transfer funds in or out of the gaming device. [Col. 13, Lines 19-24]. "If the player has not, during this session, presented a first authenticator the player is prompted for both a first and second authenticator." [Col. 13, Lines 27-29]... A POSITA would understand these instructions would occur through input/output devices within the game device cabinet such as via the peripheral interfaces to the video display. [Col. 8, Lines 7-14 and 33-37].

167. The first authenticator in Bradford can be a government-issued identification document. [Col. 5, Lines 55-56]. Specifically, according to Bradford, the first authenticator may be one among many choices, one of which is driver's licenses, a government-issued identification document. [Col. 5, Lines 36-64].

168. The gaming device in Bradford also has input-output device(s) mounted in the kiosk housing and designed to accept registration/login information and gaming commands from a human patron and to present information to the human patron for interactive gaming. For example, Bradford includes "a display with interactive I/O capabilities usable by a player, preferably mounted in cabinet 1600 just below the traditional play buttons 1604…." [Col. 34, Lines 5-8, Fig. 16]. Bradford also discloses other I/O devices, including touchscreens that make up part of the main game device video display to be used as the user interface. [Col. 11, Lines 13-20; Col. 24, Lines 58-65]. Among other things, I/O devices, such as touchscreens, keypads or keyboards are used to request an electronic fund transfer ("EFT") into the gaming device in order to play or cash-out, meaning transfer all current all credits to an electronic fund account. [Col. 13, Lines 19-23; Col. 24, Lines 58-65; Col. 27, Lines 20-40, Fig. 11]. A POSITA would understand that to perform an ordinary EFT, it would be necessary to provide registration/login information through the gaming device via an input device such as a touchscreen,

keypad or keyboard to be able to access the electronic fund account to carry out the EFT.

169. Accordingly, Bradford discloses all of elements of this method step of claim 15.

b. Scanning Into the Kiosk a Digital Form of the Patron's Identification

170. The second step of claim 15 reads as follows:

> scanning into the kiosk a digital form of the patron's identification from the patron's government-issued identification document using the identification scanner mounted in the kiosk and designed to accept an identification document and to scan identification information from the identification document into digital form for transmission over a network;

171. As explained above with regard to claim 2, Bradford discloses scanning into a kiosk or cabinet containing a gaming device a digital form of the patron's identification from the patron's government-issued identification document using an identification reader mounted in the cabinet using a reader in the cabinet that accepts and reads information from the document into digital form for transmission over a network. For example, Bradford discloses that "[e]ach authenticator and its associated input device would have a corresponding meaning of 'presents,' where in each case the net result is that the needed data on or in the authenticator to be read,

is read by the reader corresponding to that type of authenticator." [Col. 6, Lines 22-27].

172. Similarly, Bradford broadly teaches that the "'first authenticator' and 'first authenticator data' refer to the same thing, that is, the information or data that is read from a physical item, where that physical item may be used to carry the data, or, in the case of an alpha-numeric sequence, is the data." [Col. 3, Lines 14-20]. As a result, where the authenticator is a document, card, or the like that is machine readable, the associated input device/reader would be a scanner.

173. In this regard, Bradford discloses a driver's license with machine readable symbols on the surface of the card as an example of an authenticator. [Col. 5, Lines 58-63]. A "reader" of those symbols is a scanner, and it scans the machine readable symbols into digital form.

174. An example of such a reader is reader 412 located within the cabinet 400. [Col. 11, Lines 4-12]. The information scanned by reader 412 is transmitted over a network via an Ethernet connection to a remote game controller (RGC). [Col. 10, Lines 60-66; Col. 11, Lines 4-12].

175. Accordingly, Bradford discloses all of the elements of this method step of claim 15.

c. Obtaining Biological Data Limitation

176. The third step of claim 15 relates to obtaining biological data from the player and reads as follows:

> obtaining biological data describing a biological feature of the patron from the biological sensor mounted in the kiosk housing and oriented to obtain biological data describing a human patron at the kiosk into digital form for transmission over a communication network

177. As explained above with regard to claim 2, Bradford discloses obtaining biological data, such as an image of a patron, from a biological sensor, which is sometimes referred to as a biometric reader and can include a camera, mounted in the cabinet, converting it to digital form for transmission over a communication network. For example, Bradford discloses that the biometric reader could be a facial geometry reader, including a camera placed in the cabinet, the camera providing an image of the patron from which facial geometry and other facial features may be characterized. [Col. 6, Lines 53-56; Col. 16, Lines 55-63].

178. An example of a biometric reader is reader 412 located within the cabinet 400. [Col. 11, Lines 4-12]. The information scanned by reader 412 is transmitted over a network via an Ethernet connection to a remote game controller (RGC). [Col. 10, Lines 60-66; Col. 11, Lines 4-12]. A POSITA would understand the foregoing disclosure to mean that a biometric reader obtains biological data

describing a human patron at the gaming device into digital form for transmission over a communication network.

179. Accordingly, Bradford discloses all of the elements of this method step of claim 15.

d. Verification

180. The fourth step of claim 15 reads as follows:

> verifying the identity of the patron and acceptability of the patron for gaming based at least in part on the digital form of the patron's identification and the biological data

181. As explained above with regard to claim 2, Bradford discloses verifying the identity of the patron and acceptability of the patron for gaming based at least in part on the digital form of the patron's identification and the biological data.

182. In describing the invention, Bradford states that the invention uses at least two authenticators to verify a gaming patron, a first authenticator, which is what a player first presents to the system to identify themselves, and a second authenticator based on a biometric reading. [Col. 3, Lines 63-65].

183. Claim 4 of Bradford describes a method for using at least two authenticators for identification of a player, where one of the authenticators relates to the players identification and the second authenticator relates to players biometric data. Similarly, claim 65 of Bradford relates to identifying the player and confirming

the player is of sufficient age to play the gaming device. A POSITA would understand the foregoing disclosure to mean that Bradford discloses verifying the identity and acceptability (*i.e.*, age) of the patron for gaming based at least in part on the digital form of the patron's identification and the biological data.

184. Accordingly, Bradford discloses all of the elements of this method step of claim 15.

e. Gaming Activities are Offered Upon Verification

185. The last step of claim 15 requires that "on verification, offering gaming activities to the verified patron at the kiosk."

186. As explained above with regard to claim 2, Bradford states "[t]he second authenticator is checked, and if the fingerprint data just read matches the fingerprint data in the second authenticator, then the action is carried out." [Col. 3, Line 66 – Col. 4, Line 2].

187. One example is in the description of Figure 15, which recites that "[a]s soon as confirmation is made (the data presented and the data associated with the player ID match), the play button is enabled." [Col. 32, Lines 46-48]. Similarly, claim 54 of Bradford includes a limitation reads "that upon receiving confirmation of a match between data from said biometric reader and data comprising said second authenticator, game play is initiated." [Claim 54].

188. Accordingly, Bradford discloses this step and all the other steps of claim 15 and claim 15 is anticipated by Bradford.

3. Dependent Challenged Claims 4-6, 8-10, 12-14, 17-19, and 21-23

a. Claims 4 and 17

189. Claim 4 depends from claim 2 and further recites "the biological sensor is a camera and the biological data is a digital image of a face of the patron captured by the camera."

190. Similarly, claim 17 depends from claim 15 and further recites "the biological sensor is a camera and the biological data is a digital image of a face of the patron captured by the camera."

191. As discussed, Bradford discloses the limitations of claims 2 and 15.

192. Bradford further discloses that the biometric authentication means may include facial features scans and that the biometric device can be facial geometry readers that "include a camera that would be placed the game cabinet, the camera providing an image from which facial geometry and other facial features may be characterized . . . ." [Col. 6, Lines 52-56; Col. 16, Lines 57-63].

193. Thus, it is my opinion that Bradford discloses all the limitations of claims 4 and 17 and that claims 4 and 17 are unpatentable as anticipated by Bradford.

b. Claims 5 and 18

194. Claim 5 depends from claim 4 and further recites "the one or more microprocessors are further programmed to verify the identity of the patron based at least in part on face recognition and comparison of the digital image against a reference photograph."

195. Similarly, claim 18 depends from claim 17 and further recites the step of "verifying the identity of the patron based at least in part on face recognition and comparison of the digital image against a reference photograph."

196. As discussed, Bradford discloses the limitations of claims 4 and 17.

197. As set forth above, Bradford further discloses that the biometric authentication means may include facial feature scans and that the biometric device can be facial geometry readers that "include a camera that would be placed the game cabinet, the camera providing an image from which facial geometry and other facial features may be characterized . . . ." [Col. 6, Lines 52-56; Col. 16, Lines 57-63].

198. Verification in Bradford occurs by matching the biometric data with the data associated with the player in the player identification database. [Col. 3, Line 66 – Col. 4, Line 2; Col. 8, Lines 51-66; Col. 32, Lines 46-48; Claim 65].

199. A POSITA would understand that where the biometric data is facial geometry, the comparison would be with a reference photograph, either directly or through derived data.

200. Bradford discloses that a programmed microprocessor performs each of the verification steps, including this step. Thus, it is my opinion that Bradford discloses all the limitations of claims 5 and 18 and that claims 5 and 18 are unpatentable as anticipated by Bradford.

c. Claims 6 and 19

201. Claim 6 depends from claim 4 and further recites:

> the one or more microprocessors are further programmed to verify the identity of the patron based at least in part on a verification received from an off-site verification office in response to the digital image of the patron's face and at least part of the digital identification data.

202. Similarly, claim 19 depends from claim 17 and further recites the step of:

> verifying the identity of the patron based at least in part on a verification received from an off-site verification office in response to the digital image of the patron's face and at least part of the digital identification data.

203. As discussed, Bradford discloses the limitations of claim 4 and 17.

204. Specifically, as set forth above, Bradford discloses verifying the identity of the patron and acceptability of the patron for gaming based at least in part on the digital form of the patron's identification and the biological data. Bradford

also discloses that the biometric data can be that of a person's face geometry and other facial features. [Col. 5, Lines 44-45; Col. 6, Lines 52-56; Col. 6, Lines 49-64; Col. 16, Lines 57-63]. And Bradford discloses one or more microprocessors mounted in the kiosk housing.

205. A POSITA would understand that an identification document used as the first authenticator, such as a driver's license, would be scanned by a reader into digital form for transmission over a network. [Col. 5, Lines 55-63].

206. The gaming device described in Figure 1 has, among other things, at least one processor and a biometric reader.

207. The biometric reader would have an interface (port) to a slot machine interface board, sending and data and receiving data via an electronic connection. [Col. 5, Lines 51-66]. As shown in Figure 1, "[t]he fingerprint reader sends raw biometric data out, unprocessed." [Col. 5, Lines 56-65].

208. Similarly, the gaming device depicted in Figure 2 also sends biometric data outside the gaming device. [Col. 5, Lines 57-58].

209. Verification at the gaming device in these instances occurs as a result of the verification received from an off-site verification office in response to the digital biometric data and at least part of the digital identification data. [Fig. 5; Compare Col. 8, Lines 40-44 to Col. 8, Lines 51-65].

210. Claim 65 of Bradford discloses a two-authentication system using a first authenticator and second authenticator where the game device is remotely located from a game establishment and connected to the game establishment via a network. [Claim 65].

211. Claim 65 further discloses that the player identification database used for comparison of the provided by the game establishment.

212. Accordingly, when a patron is verified by the game device it is based on verification it received from the remotely located game establishment.

213. Bradford discloses that a programmed microprocessor performs each of the verification steps, including this step. Thus, it is my opinion Bradford discloses all the limitations of claims 6 and 19 and that claims 6 and 19 are unpatentable as anticipated by Bradford.

d. Claim 8

214. Claim 8 depends from claim 2 and further recites:

> the one or more microprocessors are further programmed to verify the identity of the patron based at least in part on information regarding a financial account of the patron.

215. As discussed, Bradford discloses the limitations of claim 2.

216. Bradford further discloses that the first authenticator used to verify the identity of a patron can be a credit card, check card, debit card, and the like. [Col.

5, Lines 57-58]. Clearly this would involve a credit card account number and/or a banking account number, either of which is "information regarding a financial account of the patron." Bradford further discloses verifying the identity of the patron during an EFT transaction prior to enabling game play. *See* e.g. [Col 22, lines 25-56]

217. Bradford discloses that a programmed microprocessor performs each of the verification steps, including this step. Accordingly, it is my opinion that Bradford discloses all the limitations of claim 8 and that claim 8 is unpatentable as anticipated by Bradford.

e. Claim 9

218. Claim 9 depends from claim 2 and further recites:

> the one or more microprocessors are further programmed to verify the identity of the patron based at least in part on analysis of the biological data against a reference in a microprocessor mounted in the kiosk.

219. As discussed, Bradford discloses the limitations of claim 2.

220. Game device 300 in Bradford illustrates an embodiment similar to the other embodiments in Bradford in which the systems described in the other embodiments are all performed in an embedded system within game device 300. [Col. 8, Line 51 – Col. 9, Line 4]. Based on the disclosure that all of the systems in other embodiments could be provided in a fully embedded system, one of ordinary

skill in the art would have at once envisaged the same for the game device 400, where interconnection to a backend system was limited or non-existent.

221. For example, the gaming device disclosed in Figure 3 includes a cabinet and the internal components to not only scan and read the biometric data, but also to do the actual database lookup and attempted match for the authorization. [Col. 5, Lines 51-66].

222. As explained in the case of the device disclosed in Figure 3:

> [T]he reader 310 includes the hardware and software needed to do initial processing of the image, scan, or read of the biometric data that will be the second authenticator, and will further do the actual database lookup and attempted match for the authorization. In this case, the internals would include a processor, memory, and software dedicated to reader 310 that are sufficient to provide the compute resources needed for a database and the software used to match the reader data and the entries in the database.

[Col. 5, Lines 56-65].

223. Bradford discloses that a programmed microprocessor performs each of the verification steps, including this step. Accordingly, it is my opinion that Bradford discloses all the limitations of claim 9 and that claim 9 is unpatentable as anticipated by Bradford.

f. Claims 10 and 21

224. Claim 10 depends from claim 2 and further recites:

the one or more microprocessors are further programmed to verify the identity of the patron based at least in part transmitting the biological data to an off-site verification office.

225. Similarly, claim 21 depends from claim 15 and further recites:

the one or more microprocessors are further programmed to verify the identity of the patron based at least in part transmitting the biological data to an off-site verification office.

226. As discussed, Bradford discloses the limitations of claims 2 and 15.

227. The gaming device described in Figure 1 has, among other things, at least one processor and a fingerprint reader or other biometric reader.

228. The biometric reader would have an interface (port) to a slot machine interface board, sending and data and receiving data via an electronic connection. [Col. 5, Lines 51-66]. As shown in Figure 1, "[t]he fingerprint reader sends raw biometric data out, unprocessed." [Col. 5, Lines 56-65].

229. Similarly, the gaming device depicted in Figure 2 also sends biometric data outside the gaming device. [Col. 5, Lines 57-58].

230. Further claim 65 of Bradford discloses two authentication system using a first authenticator and second authenticator where the game device is remotely located from a game establishment and connected to the game establishment via a network. [Claim 65].

231. In accordance with Claim 65, biometric data is received from the remote game device where that data is used for comparison with the second authenticator data from the player identification database provided by the game establishment.

232. Accordingly, when a patron is verified by the remote game device it is based on biometric data it transmitted to the game establishment.

233. Bradford discloses that a programmed microprocessor performs each of the verification steps, including this step. Thus, it is my opinion that Bradford discloses all the limitations of claims 10 and 21 and that claims 10 and 21 are unpatentable as anticipated by Bradford.

g. Claim 12

234. Claim 12 depends from claim 2 and further recites "a credit card acceptor."

235. As discussed, Bradford discloses all the limitations of claim 2.

236. Bradford further discloses that the gaming device include one or more first authentication readers. [Col. 5, Lines 22-28; Col. 5, Lines 33-37; Col. 5, Lines 51-56; Col. 10, Lines 21-29].

237. The first authenticator may be one of many choices and allow "the player to use a credit card, check card, debit card, and the like." [Col. 5, Lines 57-58].

238. Thus, it is my opinion that Bradford discloses all the limitations of claim 12 that claim 8 is unpatentable as anticipated by Bradford.

h. Claims 13 and 22

239. Claim 13 depends from claim 2 and further recites "the government-issued identification document is a government-issued drivers license or identification card."

240. Claim 22 depends from claim 15 and further recites "the government-issued identification document is a government-issued drivers license or identification card."

241. As discussed, Bradford discloses the limitations of claims 2 and 15.

242. As also discussed above, Bradford further discloses that a government-issued identification document is a government-issued driver's license.

243. Therefore, it is my opinion that Bradford discloses all the limitations of claims 13 and 22 and that claims 13 and 22 are unpatentable as anticipated by Bradford.

i. Claims 14 and 23

244. Claim 14 depends from claim 2 and further recites:

> the one or more microprocessors are further programmed to conduct gaming activities against a patron wagering account held in a remote computer.

245. Similarly, claim 23 depends from claim 15 and similarly recites:

> the one or more microprocessors are further programmed to conduct gaming activities against a patron wagering account held in a remote computer.

246. As discussed, Bradford discloses the limitations of claims 2 and 15.

247. Bradford further states that "[t]he present invention enables a new and exciting way of allowing players to make use of electronic funds accounts." [Col. 5, Lines 36-64].

248. The electronic funds account ("EFA") would allow a player to make deposits into the account, such as an account held by the casino, and then use the deposited funds to enable game credits as the player plays various games on the casino floor. [Col. 13, Lines 39-43; Col. 22, Lines 63-65].

249. Bradford further discloses EFT (electronic fund transfer) transactions to "use the funds in the players' EFA to get more game play credits." [Col. 13, Lines 40-41]. Bradford describes another EFT where the player uses a biometric reading device touchscreen or other interface that he or she wants to transfer funds in or out of the gaming device. [Col. 13, Lines 19-24]. A POSITA would understand the disclosure of Bradford to disclose the account being held in a computer remote from the gaming device.

250. Therefore, it is my opinion that Bradford discloses all the limitations of claims 13 and 22, and that claims 13 and 22 are unpatentable as anticipated by Bradford.

VI. BRADFORD ALONE RENDERS OBVIOUS THE CHALLENGED CLAIMS OF THE '098 PATENT

251. To the extent it is found that one of ordinary skill in the art would not have at once envisaged combining all of the features of the embodiment of Figure 4 in Bradford in a fully embedded standalone system that includes at least one microprocessor configured to perform the entirety of each of the functions rected in claim 2, it would have been obvious.

252. The embodiment illustrated in Figure 3 of Bradford discloses that the game device "includes the hardware and software needed to do initial processing of the image, scan, or read of the biometric data that will be the second authenticator, and will further do the actual database lookup and attempted match for the authorization." [Col. 8, Lines 56-60]. The embodiment illustrated in Figure 3 of Bradford is essentially a standalone machine [Col. 9, Lines 10-12], and thus the entirety of every function of the machine is performed by one or more microprocessors within the gaming machine itself.

253. It would have been obvious to one of ordinary skill in the art to incorporate the features of the embodiment illustrated in Figure 4 of Bradford into a standalone machine like the one illustrated in Figure 3 of Bradford, "in order to

provide better (faster) service to players . . . [by] allowing for the local caching of (for example) the database entries or records corresponding to the last 10 players to use the game device" or for "a very small casino or gambling room where each machine is a standalone machine, the fingerprint reader and fingerprint comparator . . . may readily be configured to contain enough memory to store fingerprint data." [Col. 9, Line 57 - Col. 10, Line 20].

254. To the extent that certain disclosures in Bradford are deemed to be made in different embodiments and, as a result, it is determined that Bradford does not anticipate any of the foregoing claims, a POSITA would have the knowledge and skill to predictably combine those disclosures to arrive at the invention as described in the '098 claims since they all generally relate to the method and system of two tier authentication.

VII. BRADFORD IN VIEW OF PARROTT RENDERS OBVIOUS THE CHALLENGED CLAIMS OF THE '098 PATENT

A. Independent Claim 2: Parrott Discloses the Identification Scanner limitation of Claim 2

255. With respect to the identification scanner element of claim 2, that limitation is found in Bradford as discussed above.

256. Parrott, however, provides evidence of the obviousness of claim 2, establishing that scanners were included in a gaming kiosk that were designed to

accept identification documentation, such as a driver's license, and scan information from such documentation into to digital form for transmission over a network.

257. Similar to Bradford, Parrott relates to any type of casino gaming systems. [Para. 0037]. Also similar to Bradford, Parrott includes a system to read data from cards identifying the user. [Para. 0040]. Parrott discloses a scanner 650 mounted in a gaming machine and designed to accept an identification document or card. [Para. 0096]. After an object is scanned by scanner 650 the scan is subjected to an optical character recognition routine. [Para. 0102]. An example of an object that can be scanned and characters read through optical character recognition is a driver's license. [Para. 0102].

258. A gaming unit is disclosed where a driver's license is scanned to enable the system to gather sufficient data to automatically have the user apply for a player tracking card and use the data from the scanned license to research databases to fill in further information on the application. [Para. 0105].

259. The system may match scanned data from the driver's license in the database. [Para. 0106].

260. One example provides that, if a user inserts a driver's license, the scanned in name and license number may be checked against databases to determine whether the license is accurate and should be authorized. [Para. 0102].

261. Therefore, based on the disclosure of Parrott, a POSITA would understand that Parrott discloses an identification scanner mounted in the kiosk housing and designed to accept an identification document and to scan identification information from the identification document into digital form for transmission over a network.

262. As mentioned above, Bradford discloses, at least generally, a card reader for reading machine readable identification cards, such as driver's licenses. Parrott provides a specific description of scanning identification information from a government-issued identity document, such as a driver's license, into digital form for transmission over a network. Because Bradford and Parrott are both disclosing a similar system for the same purpose, *i.e.*, obtaining digital information from a physical driver's license, within casino gaming machines, it would have been obvious to one of ordinary skill in the art to use the specific routines disclosed in Parrott to perform the reading of driver's license disclosed in Bradford.

263. Thus, Parrott discloses this limitation and it is my opinion that if Bradford is found not to disclose the identification scanner imitation of claim 2, claim 2 would have been obvious based on Bradford in view of Parrott, and all the dependent claims dependent upon claim 2 would also have been obvious.

1. Dependent Claim 11: Parrott Discloses Both a Currency Acceptor and Dispenser

264. Claim 11 depends from claim 2 and further recites:

> The kiosk of claim 2, further comprising: a currency acceptor and dispenser.
>
> [Claim 11].

265. As discussed, Bradford discloses the limitations of claim 2, or claim 2 is obvious.

266. Bradford discloses that other input/output devices of the gaming device may include, but are not limited to, a combination bill and voucher reader and monetary input devices. [Col. 8, Lines 7-14; Col. 11, Lines 31-36].

267. Accordingly, Bradford explicitly discloses a currency acceptor.

268. Bradford also discloses setting up an electronic funds account (EFA), and discloses that there is a mechanism to have cash accepted for addition to the EFA. [Col. 22, Lines 25-26; Col. 24, Lines 41-51]. This mechanism can be via an attendant for a self-serve player EFA station. [Col. 24, Lines 41-51]. Bradford fails to explicitly disclose whether the self-serve player EFA station can be implemented within the game device.

269. Similarly, as shown below, Parrott discloses both a currency acceptor, as well as a currency dispenser within the casino gaming device.

270. The casino gaming device shown in Figure 2 of Parrott discloses a casino gaming unit 20 that may include a housing or cabinet and one or more input devices, such as a coin slot or acceptor 52, a paper currency acceptor 54, and card reader and/or writer 58, which may be used to input value to the gaming unit. [Para. 0038, Fig. 2].

271. The value input device of Parrott "may include any device that can accept value from a customer." *See id.* at ¶ [0038]. And value is defined in Parrott to "encompass gaming tokens, coins, paper currency, ticket vouchers, credit or debit cards, smart cards, and any other object representative of value." *See id.* at ¶ [0038].

272. The casino gaming machine shown at Figure 2 of Parrott also includes a "Cash Out" button 174 that may be used by the player when play is terminated. [Para. 0042, Fig. 2]. When the "Cash Out" button is activated, the gaming unit "may return value to the player such as by returning a number of coins to the player via the payout tray 64." [Para. 0042, Fig. 2].

273. Accordingly, Parrott discloses the "currency acceptor and dispenser" limitation of dependent claim 11.

274. Both Bradford and Parrott disclose casino game machines that require a mechanism for accepting and dispensing funds. Bradford uses an electronic fund account that can have deposits or withdrawals performed by an attendant or self-

service EFA station. Parrott uses direct acceptance and dispensing of currency by the game machine itself.

275. It would have been obvious to one of ordinary skill in the art that the mechanism disclosed in Parrott performs the requirement of accepting and dispensing funds desired by Bradford without the need for an additional self-service EFA station.

276. Accordingly, it would have been obvious to one having ordinary skill in the art to add a currency acceptor and dispenser as described in Parrott to the game machine of Bradford, in order to provide a mechanism for accepting and dispensing funds without the need for an additional device.

277. Therefore, it is my opinion that claim 11 is obvious over Bradford in view of Parrott and is unpatentable.

2. Dependent Claim 12: Parrott Discloses a Credit Card Acceptor

278. Claim 12 depends from claim 2 and reads as follows: "the kiosk of claim 2, further comprising: a credit card acceptor."

279. As discussed, Bradford discloses the limitations of claim 2, or claim 2 is obvious.

280. The value input device of Parrott "may include any device that can accept value from a customer." [Para. 0038]. And value is defined in Parrott to

"encompass gaming tokens, coins, paper currency, ticket vouchers, credit or debit cards, smart cards, and any other object representative of value." [Para. 0038].

281. This includes a credit card acceptor.

282. The casino gaming device shown in Figure 2 of Parrott discloses a casino gaming unit that includes a credit card reader.

283. In explaining Figure 2, Parrott states that gaming unit 20 may include a housing or cabinet and one or more input devices, such as a coin slot or acceptor 52, a paper currency acceptor 54, a ticket printer/reader 56 and card reader and/or writer 58, which may be used to input value to the gaming unit. *See* Ex. 1004 at ¶ [0038], Fig. 2.

284. Accordingly, Parrott discloses the additional "credit card acceptor and dispenser" limitation of dependent claim 12.

285. Both Bradford and Parrott disclose casino game machines that require a mechanism for accepting funds. Bradford uses an electronic fund account that can have deposits or withdrawals performed by an attendant or self-service EFA station. Parrott uses direct acceptance and dispensing of currency by a card reader 58 in the game machine itself. It would have been obvious to one of ordinary skill in the art that the mechanism disclosed in Parrott performs the requirement of accepting and dispensing funds desired by Bradford without the need for an additional self-service EFA station. Accordingly, it would have been obvious to

one having ordinary skill in the art to add a credit card reader/acceptor as described in Parrott to the game machine of Bradford, in order to provide a mechanism for accepting and dispensing funds without the need for an additional device.

286. Therefore, it is my opinion that claim 12 is obvious over Bradford in view of Parrott and is unpatentable.

2. Combining Bradford With Parrott

287. Currency acceptors and dispensers, credit card acceptors and scanners are well-known and old features of many electronic devices, including casino gaming devices.

288. The use of these features disclosed in the gaming device of Parrott in the gaming device of Bradford is simply the combination of known elements in a known manner, yielding very predictable results.

289. In addition, both Bradford and Parrott go to the same field of invention, namely casino gaming systems. In addition, the gaming devices of both Bradford and Parrott can use identification documents, such as driver's licenses for identification purposes.

290. Finally, like Bradford, the gaming devices of Parrott can transmit digital data from a player's identification document player to a location outside the gaming device.

291. Accordingly, a POSITA would have been motivated to combine the disclosures of Bradford and Parrott, rendering claims 2, 11 and 12 obvious.

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 and that such willful false statements may jeopardize the results of these proceedings.

Dated: 11/15, 2018

Andrew Wolfe, Ph.D.