

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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

v.

CG Technology Development, LLC  
Patent Owner

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CASE: Unassigned

Patent No. 9,240,098

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**PETITION FOR *INTER PARTES* REVIEW**  
**UNDER 37 C.F.R. § 42.100**

**PETITION FOR *INTER PARTES* REVIEW**  
**U.S. Patent No. 9,240,098**

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**I. INTRODUCTION**

Simply stated, the challenged claims of U.S. Patent No. 9,240,098 (“the ’098 patent”) (Ex. 1002) read directly on prior art and cover common and well-known features of casino gaming devices. The ’098 patent is directed to a gaming kiosk that employs an identification scanner and a biological sensor to verify the identity of a patron. Once the patron’s identity is verified using the patron’s identification document and the patron’s biological data, the kiosk offers gaming activities to the patron. This two-tiered verification process and other claimed features of gaming devices in the ’098 patent for gaming kiosks were well-known years before the filing date of the ’098 patent.

For example, U.S. Patent No. 6,612,928 to Bradford (“Bradford”) (Ex. 1003) discloses a method of authentication and an apparatus to verify a gaming patron using the patron’s identification, such as a driver’s license, and the patron’s biometric information, such as facial features. Because Bradford was issued in 2003—almost 10 years before the ’098 patent application was filed—it renders every challenged independent claim, and all but one challenged dependent claim, of the ’098 patent unpatentable as anticipated. The one dependent claim that is not anticipated by Bradford simply requires that the claimed kiosk comprise a currency acceptor and dispenser. Currency acceptors and dispensers are old and well-known features of casino gaming devices at the time of the invention and therefore, obvious

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to a person of ordinary skill in the art (“POSITA”).<sup>1</sup> For the reasons below, the Board should institute IPR of the ’098 patent and cancel the Challenged Claims.

**II. GROUNDS FOR STANDING PURSUANT TO 37 C.F.R. § 42.104(A)**

Petitioner certifies that the ’098 patent is available for IPR and that Petitioner is not barred or estopped from requesting IPR. Patent Owner filed a complaint asserting the ’098 patent against Petitioner in the District of Delaware on April 10, 2018. *CG Technology Development, LLC v. William Hill U.S. Holdco, Inc., et al.*, C.A. No. 18-533-RGA. Petitioner was served with the complaint on April 11, 2018. Accordingly, April 11, 2018 is the date of service for determination of the one-year bar under 35 U.S.C. § 315(b). *See Brinkmann Corp. v. A&J Mfg., LLC*, IPR2015-00056, Paper 10 at 6-7 (PTAB March 23, 2015); Fed. R. Civ. P. 4(d)(4).

**III. ’098 PATENT OVERVIEW**

The ’098 patent is titled “Kiosk for Gaming” and contains 26 claims. Three of the claims, claims 1, 2, and 15, are independent claims. Independent claims 1 and 2 are apparatus claims directed to a kiosk for gaming, while independent claim

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<sup>1</sup> Petitioner also raises two alternative grounds of unpatentability in this Petition out of an abundance of caution to address certain limitations that may be argued as not being taught by Bradford.

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15 is a method claim directed to a method of verifying the identity of a patron while at a kiosk for gaming.

The '098 patent is directed to a kiosk for gaming that employs an identification scanner and a biological sensor to verify the identification of a patron. Ex. 1002, Abstract. In one embodiment, the identification to be used with the identification scanner is a government-issued identification document, such as a driver's license. *Id.* The biological sensor can be a camera. *Id.* Once the patron is verified "based at least in part on" the patron's identification and biological data, gaming activities are offered to the patron. *Id.*

**IV. IDENTIFICATION OF CHALLENGE PURSUANT TO 37 C.F.R. § 42.104(B)**

**A. 37 C.F.R. § 42.104(b)(1): Claims for Which IPR Is Requested**

IPR is requested for claims 2, 4-6, 8-15, 17-19, and 21-23.

**B. 37 C.F.R. § 42.104(b)(2): The Prior Art and Specific Grounds on Which the Challenge to the Claims is Based**

The USPTO is authorized to charge the petition fee of \$32,300.00 required by 37 C.F.R. § 42.15(a) to Deposit Account No. 50-0573, as well as any additional fees that might be for this Petition.

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**C. 37 C.F.R. § 42.104(b)(2): The Prior Art and Specific Grounds on Which the Challenge to the Claims is Based**

The references below are prior art to the '098 patent under pre-AIA 35 U.S.C. §§ 102, 103. The one-year time bar under § 102(b) is measured from the '098 patent's effective U.S. filing date, which is March 15, 2013.

IPR is requested in view of:

- U.S. Patent No. 6,612,928 to Bradford ("Bradford") (Ex. 1003). Bradford issued on September 2, 2003, and is prior art under 35 U.S.C. § 102(b).
- U.S. Patent App. No. 2005/0054417 to Parrott ("Parrott") (Ex. 1004). Parrott was published on March 10, 2005, and is prior art under 35 U.S.C. § 102(b).
- Knowledge and skill of a person of ordinary skill in the art ("POSITA").

Petitioner asks that the Board find claims 2, 4-6, 8-15, 17-19, and 21-23 of the '098 patent unpatentable under 35 U.S.C. §§ 102 and 103 based on the following grounds:

	<b><i>References</i></b>	<b><i>Claims</i></b>	<b><i>Statutory Basis</i></b>
<b>1</b>	Bradford	2, 4-6, 8-10, 12-15, 17-19, and 21-23	35 U.S.C. § 102
<b>2</b>	Bradford	2, 4-6, 8-10, 12-15, 17-19, and 21-23	35 U.S.C. § 103
<b>3</b>	Bradford and Parrott	2, 4-6, 8-15, 17-19, and 21-23	35 U.S.C. § 103

The Bradford reference used in this Petition was not considered during prosecution of the application that led to the '098 patent. Parrott is cited on the face



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of the '098 patent, but was not relied upon by the Office in any rejection during prosecution.

**D. 37 C.F.R. § 42.104(b)(3): Claim Construction**

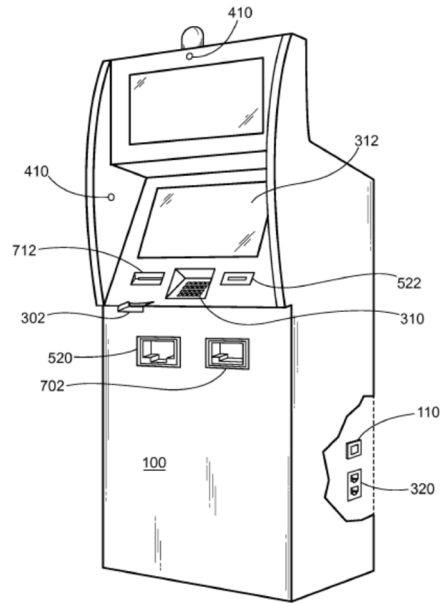
Claims are to be given their “broadest reasonable construction in light of the specification.” 37 C.F.R. § 42.100(b). The construction proposed herein is intended to aid in this proceeding and should not be understood as waiving any arguments for litigation. Because the standard in an IPR is different from that used in District Court, *Cuozzo Speed Tech., LLC v. Lee*, 136 S. Ct. 2131, 2142 (2016); MPEP § 2111, Petitioner expressly reserves the right to argue different constructions there. With these caveats, Petitioner proposes the following construction:

**1. “Kiosk for Gaming by Patrons”**

This claim term appears in every claim of the '098 patent. In the challenged claims, this term appears in both the preamble and body of the claims.

Fig. 1 is the sole drawing of the gaming kiosk:

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**Fig. 1**

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.” Ex. 1002 at 1:12-15. Accordingly, under the broadest reasonable interpretation, “kiosk for gaming by patrons” means “a cabinet or structure for gaming interaction with human patrons.” Ex. 1001 at 57.

## **2. Plain and Ordinary Meaning**

Petitioner proposes that all other terms of the Challenged Claims be construed in accordance with their plain and ordinary meanings.

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**E. 37 C.F.R. § 42.104(b)(4): How the Construed Claims Are Unpatentable**

An explanation of how claims 2, 4-6, 8-15, 17-19, and 21-23 are unpatentable, including identification of how and where each claim feature is found in the prior art, is set forth below in Section V.

**F. 37 C.F.R. § 42.104(b)(5): Supporting Evidence**

Petitioner's Exhibit List supporting this Petition is attached. Exhibit 1001 is a Declaration of Andrew Wolfe, Ph.D. ("Wolfe Decl.") under 37 C.F.R. § 1.68 setting forth his qualifications in ¶¶ 1-15. The evidence's relevance to the Challenged Claims, including an identification of the specific portions of the evidence supporting the challenge, is included in Section V.

**V. DETAILED GROUNDS FOR UNPATENTABILITY**

A claim is unpatentable as being anticipated when every element of the claim is disclosed expressly or inherently in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987).

A claim is unpatentable as obvious when "the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." 35 U.S.C. § 103(a); *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007).

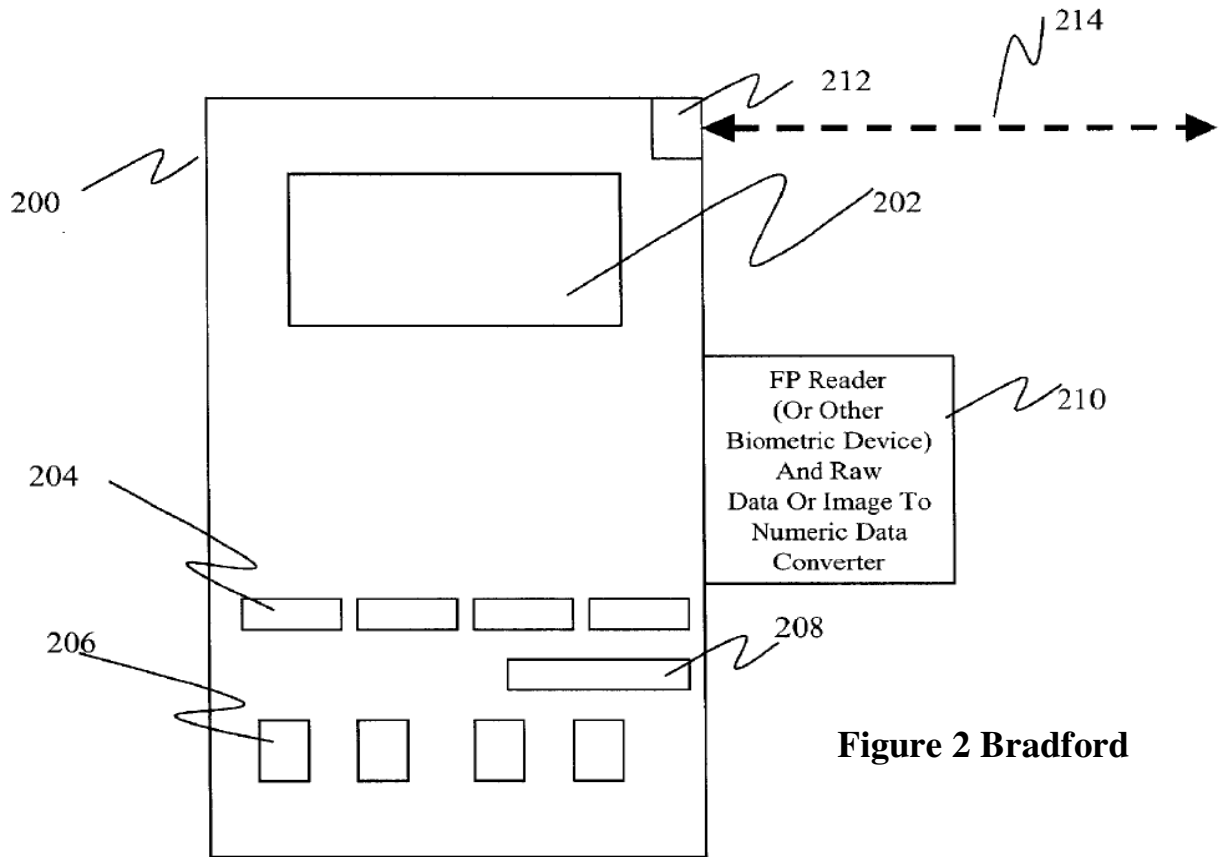
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**A. Prior Art**

**1. U.S. Patent No. 6,612,928 (“Bradford”)**

Bradford is an issued patent from 2003—long before the earliest possible filing date of the '098 patent. Bradford relates to a method and apparatus to verify that a gaming patron is who he or she claims to be, and whether the patron is acceptable to play a game, wherein the apparatus and method uses two authenticators. Ex. 1003 at 2:64-4:10; Ex. 1001 at ¶ 29. According to an example shown at Figure 2, the gaming device 200 includes a cabinet that contains a first authenticator reader 204 and a second authenticator reader 210, the latter being a biometric reader. *See id.* at 8:33-40, Fig. 2; Ex. 1001 at ¶ 30.

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**Figure 2 Bradford**

Ex. 1003, Fig. 2.

The first authenticator is described as whatever a player first presents to the system to identify himself or herself. *See id.* at 3:6-22, 5:36-54, 6:10-13; Ex. 1001 at ¶ 31. It is specifically disclosed in Bradford that government-issued identification documents, such as driver's licenses, can be the first authenticator of the gaming device. *See id.* at 5:58-63; Ex. 1001 at ¶ 33.

The second authenticator of the gaming device is based on a biometric reading. *See id.* at 6:49-53; Ex. 1001 at ¶ 34. One disclosed biometric reader is a facial geometry reader, that includes a camera placed in the cabinet. *See id.* at 6:53-

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56, 16:55-63; Ex. 1001 at ¶ 34. A method of using the game device is also described. *See id.* at 3:50 – 4:2; 31:66 – 32:49, Claims 4 and 65.

**2. U.S. Patent App. No. 2005/0054417 (“Parrott”)**

Parrot is a U.S. Patent Application that published in March 2005. Parrott discloses gaming machines with scanning capability. Ex. 1005; Ex. 1001 at ¶ 45. In Parrott, the scanner may transmit data representing a digital representation or scan of virtually any object, including driver’s licenses. Ex. 1005, para. [0098]; Ex. 1001 at ¶ 46.

Figure 16a reproduced below is a gaming unit with a scanner, 650.

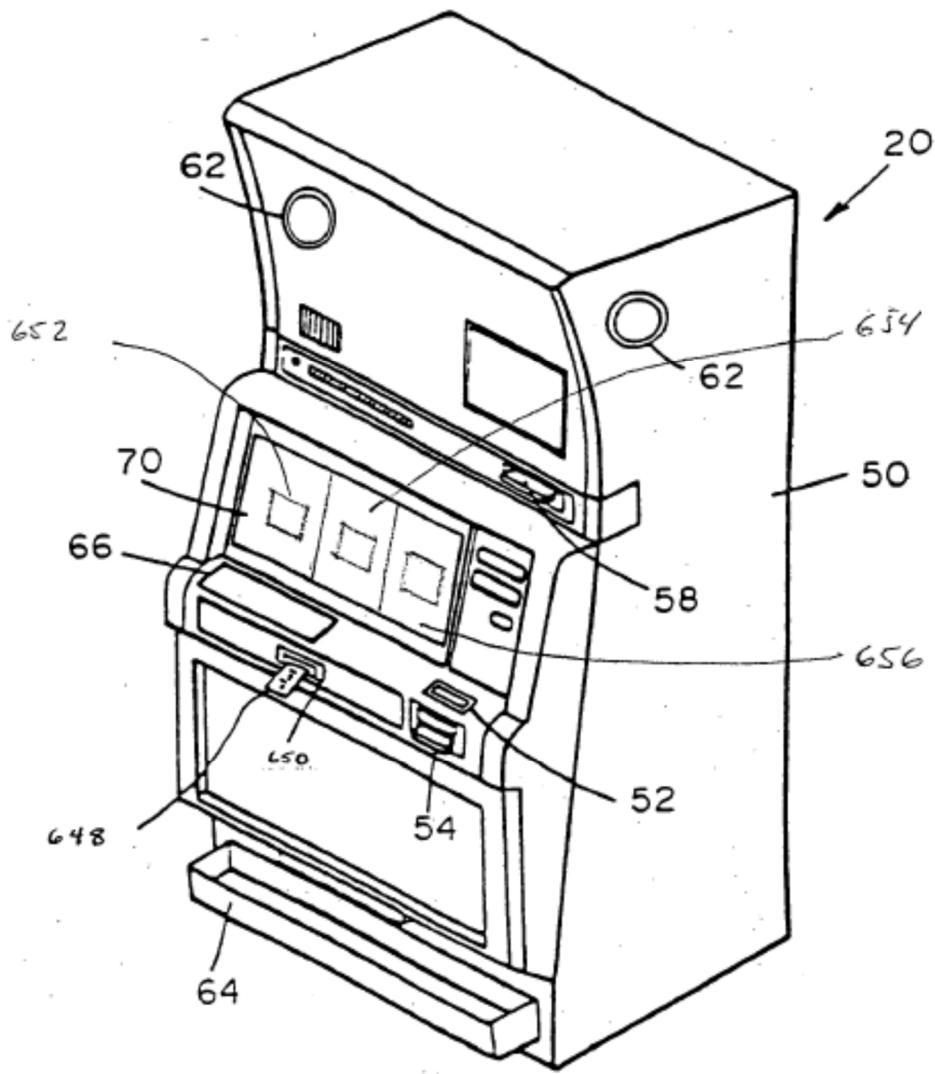


FIG. 16a

Ex. 1005, Fig. 16a. The disclosed gaming units in Parrott also contain a coin slot or acceptor, a paper currency acceptor, and payout tray. *See id.* at para. [0038], [0042], Fig. 2; Ex. 1001 at ¶ 51.

### 3. Level of Skill in the Art

A POSITA, at the time of the alleged invention, would have had at least a bachelor's degree in computer or electrical engineering, or related field of study,

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and at least two years of professional computer system design experience or equivalent. Ex. 1001 at ¶ 25. 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. *Id.* The POSITA would also be familiar with the general operation of a gaming machine. Ex. 1001 at ¶ 26.

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 or coin acceptor. 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. Ex. 1001 at ¶ 27. 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. *Id.* 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. *Id.*

**B. Ground 1: Bradford Anticipates Claims 2, 4-6, 8-10, 12-15, 17-19, and 21-23**

**1. Independent Claim 2**

As discussed below, Bradford discloses each of the limitations of independent claim 2.



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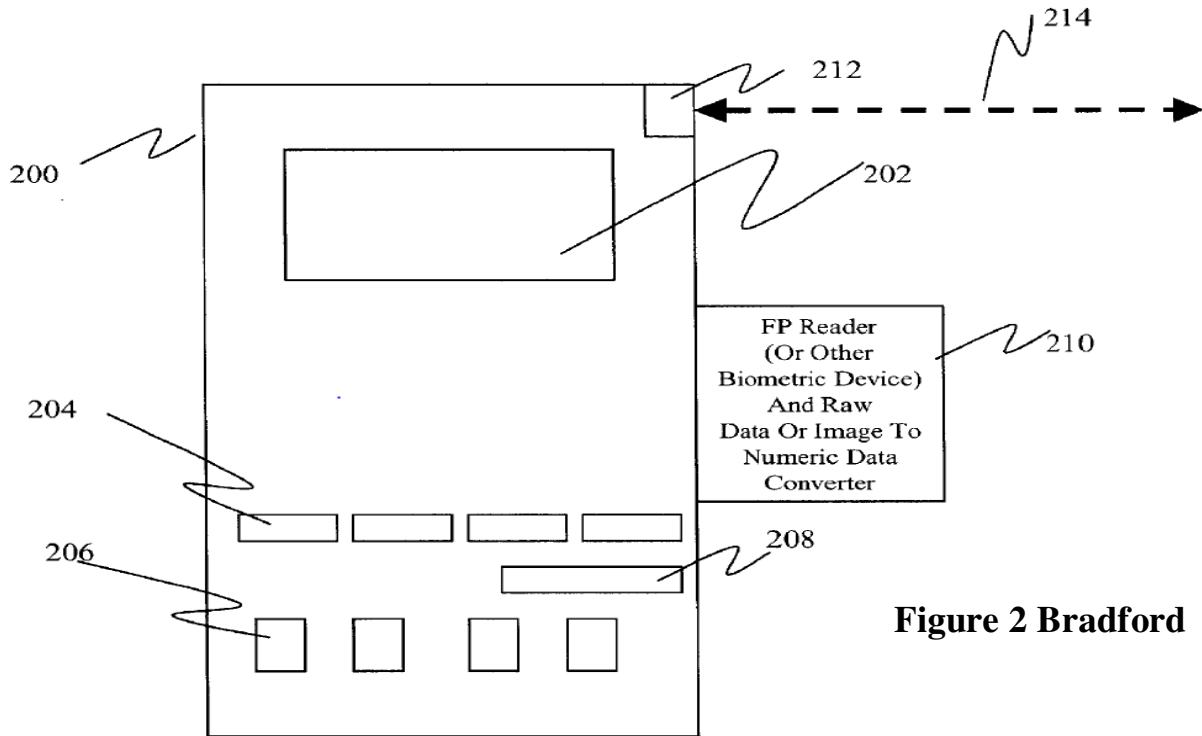
**i. Bradford Discloses a Gaming Kiosk**

The first limitation of claim 2 reads “a kiosk for gaming by patrons.” Ex. 1002 claim 2. As discussed above, the broadest reasonable interpretation is “a cabinet or structure for gaming interaction with human patrons.”

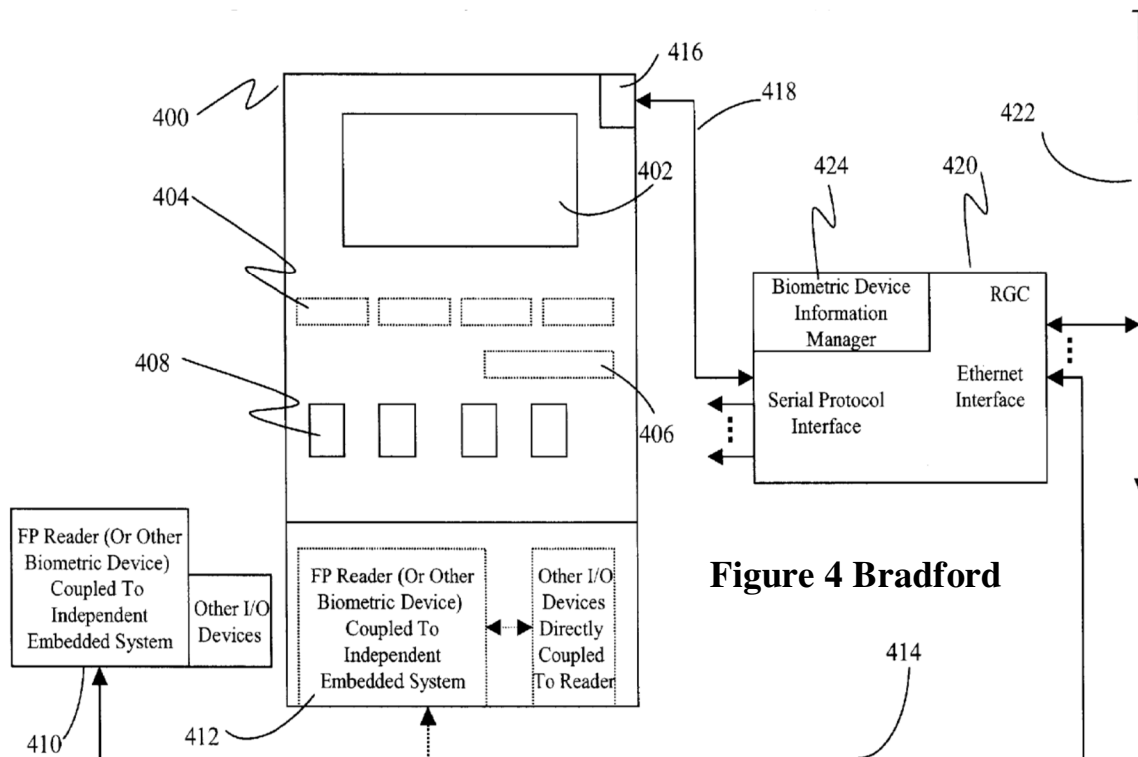
Bradford discloses a gaming device that can be a conventional game of chance usable by a player in a gambling or casino environment. Ex. 1003, 3:50-51, 7:35-48; Ex. 1001 at ¶ 59. According to Bradford, the game device will most often be a gambling or betting machine, but can further include “other devices such as EFT (electronic funds transfer) stations, prize award and redemption kiosks or stations, EFA account and voucher management stations....” *Id.* at 7:66-8:6.

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. *See id.* at 8:7-14, 8:33-37, 8:51-56, 33:51-65, Figs. 1, 2, 3, 4 and 16; Ex. 1001 at ¶ 61. Bradford Figure 2 “shows a game device that is similar to that of Figure 1, including game device (including a cabinet) 200.” *Id.* The gaming device 400 depicted in Bradford Figure 4 also includes a cabinet. *See id.* at 10:21-29; Ex. 1001 at ¶ 63. Bradford Figures 2 and 4 are reproduced below.

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**Figure 2 Bradford**



**Figure 4 Bradford**

Ex. 1003, Figs. 2, 4.

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Thus, 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.” Ex. 1001 at ¶ 64.

**ii. Bradford Discloses a Kiosk Housing**

The second limitation of claim 2 recites:

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

Ex. 1002 claim 2.

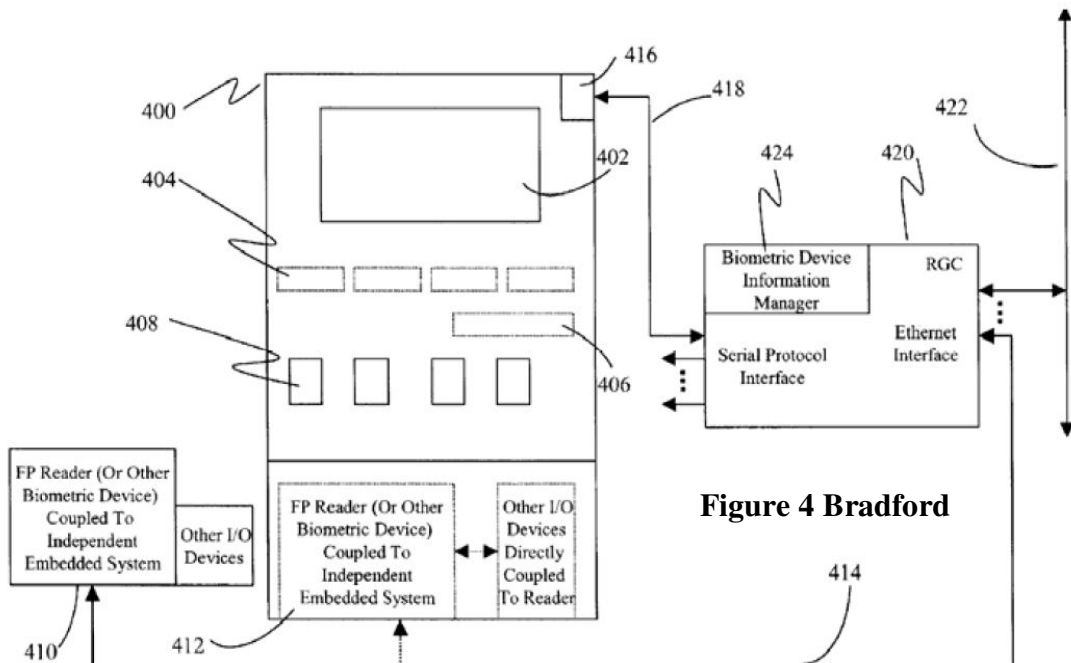
Bradford discloses that the term “game device” as used in Bradford includes any game device usable by a player for any function in a gambling or casino environment. Ex. 1003, 7:35-48; Ex. 1001 at ¶ 65. As such, it permits installation at a site for interaction with human patrons. *Id.* In addition and as set forth above, the gaming device of Bradford can include a cabinet. Ex. 1003, 8:33-37; Ex. 1001 at ¶ 65.

In certain embodiments of Bradford, the game device cabinet is designed to hold a processor, identification reader, and biometric reader. *See id.* at 8:7-14; 10:21-29, 11:4-8, 11:22-43, 33:51-65, Figs. 2, 3, 4 and 16; Ex. 1001 at ¶ 66. 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

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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. *See id.* at 11:22-43, Fig. 4; Ex. 1001 at ¶ 66. Further, game device 400 can include one or more first authenticator readers 408. *Id.* at 10:21-29; Ex. 1001 at ¶ 66. As set forth in Section V.B.1.iii below, the first authenticator readers in Bradford are the same type of device as the identification scanner in the '098 patent.

As shown in Figure 4, reproduced below, game device 400 includes first authentication (identification) readers 408 and the biometric reader 412, all preferably within the cabinet. *See id.* at 10:21-29, 10:36-40, 11:4-8, 11:22-31, Fig. 4; Ex. 1001 at ¶ 68. Biometric reader 412 may also include other I/O devices such as other first authenticator readers. *See id.* at 11:30-36, Fig. 4; Ex. 1001 at ¶ 68.



**Figure 4 Bradford**

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*Id.* at Fig. 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. *See id.* at 11:22-43, Fig. 4; Ex. 1001 at ¶ 69. Similarly, the description regarding the gaming device depicted in Figure 16 specifically includes a CPU inside the cabinet. *See id.* at 33:54-57, Fig. 16; Ex. 1001 at ¶ 70.

In addition, Claims 50, 52, and 55 discloses a game device, identification reader and biometric reader being within a single external cabinet. *See id.* at Claims 50, 52, and 55; Ex. 1001 at ¶ 71.

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.

Ex. 1003 at claim 50; *see also* claim 55 (“The gaming system of claim 49 further comprising: a cabinet, said non-biometric reader, said biometric reader, and said game device operably disposed therein . . . .”). As discussed below, a POSITA would understand the identification reader (or non-biometric reader) to be the identification scanner set forth in the ’098 patent. A POSITA would understand the disclosed identification reader to be capable of scanning a barcode, magnetic stripe, text, or other machine-readable symbols on a surface of the card. *See id.* at 5:55-63; Ex. 1001 at ¶ 72. Thus, Bradford discloses this limitation. *Id.* at ¶ 73.

**iii. Bradford Discloses an Identification Scanner**

The third limitation of claim 2 reads:

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;

Ex. 1002, claim 2.

As set forth above in Section V.A.1, Bradford discloses a first authentication reader. *See* Ex. 1003 at 10:21-29, 11:22-43, Fig. 4. As also set forth above, in Section V.A.1 and V.B.1.ii, the first authentication reader can be mounted in the gaming device cabinet. *See id.* at 10:21-29, 11:22-43, Claim 50, Claim 55, Fig. 4.

The first authenticator of Bradford is whatever a player first presents to the system to identify himself or herself and therefore can be one of many types. *See id.* at 3:6-13, 5:38-63; Ex. 1001 at ¶ 74. “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.” *See id.* at 6:13-16; Ex. 1001 at ¶ 75. 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.” *See id.* at 6:22-27; Ex. 1001 at ¶ 76.

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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.” *See id.* at 3:14-20; Ex. 1001 at 77. 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 in the same manner as in the ’098 patent. Ex. 1001 at ¶ 78. 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. *See* Ex. 1002 at 2:66-3:2; Ex. 1001 at ¶ 78. In this regard, Bradford discloses a driver’s license (a government-issued identity document) with machine readable information on the card as an example of an authenticator. *See* Ex. 1003 at 5:58-63; Ex. 1001 at ¶ 78. 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. Ex. 1001 at ¶ 78. 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. *Id.*

The identification information collected from the first authenticator, *i.e.* identification document in Bradford, is made into digital form for transmission over,

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for example, an Ethernet network connection to a BDIM 424 for association of the collected information to a database. *See, e.g.*, Ex. 1003 at 11:10-50, Fig. 4; Ex. 1001 at ¶ 79. 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 made into digital form transmission over a network to the BDIM. *Id.* This would be the same where the first authenticator is a document such as “driver’s licenses . . . having machine readable” information (Ex. 1003 at 5:58-63). *Id.* at ¶ 80. A “reader” of that information is a scanner in the same manner as the scanner used in the ’098 patent, and it scans the machine readable information into digital form. *Id.* at ¶ 81.

Figure 4 shows a “typical Serial-protocol-based communication means used over an electronic connection 418 to RGC 420.” Ex. 1003 at 10:21-24; Ex. 1001 at ¶ 82. 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.” *Id.* at 10:61-66; Ex. 1001 at ¶ 83. Bradford further explains that reader 412 is identical to reader 410, except for its physical location within the cabinet. *Id.* at 11:4-12; Ex. 1001 at ¶ 84. A POSITA would understand the foregoing disclosure to mean that a first



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authentication reader scans information from the first authenticator into digital form for transmission over a network. *See* Ex. 1001 at ¶ 85.

The claims of Bradford also confirm this understanding. Claim 65 is “[a] method for using a first authenticator and 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 . . . .” Ex. 1003, claim 65. Step (a) of the method of claim 65 requires “receiving from said remote game device first authenticator data.” *Id.* at 46:15-16.

Likewise, claim 55 recites a gaming system that includes a non-biometric reader (first authenticator reader), a biometric reader (second authenticator reader), and game device that are operably disposed in a cabinet and further configured to use the same network”:

55. The gaming system of claim 49 further comprising:

a cabinet, said non-biometric reader, said biometric reader, and said game device operably disposed therein and further configured to use the same network interface;

a first network in operable communication with said network interface;

a computer system having at least one network interface where a first network interfaced is operably connected to said first network;

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a BDIM (biometric data information manager) operably disposed within said computer system and in operable communication with said first-network interface, and where said BDIM is in operable communication with said database.

Ex. 1003, claim 55.

Therefore, based on the disclosure of Bradford, a POSITA would understand that a machine-readable identification document used as the first authenticator would be scanned by a reader into digital form for transmission over a network. Ex. 1001 at ¶ 86; *see also In re Kao*, 639 F.3d 1057, 1066 (Fed. Cir. 2011) (“To establish prior invention, the party asserting it must prove that it appreciated what it had made. The prior inventor does not need to know everything about how or why its invention worked. Nor must it conceive of its invention using the same words as the patentee would later use to claim it.”) Thus, Bradford discloses this limitation. *Id.*

**iv. Bradford Discloses a Biological Sensor**

The fourth element reads:

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

Ex. 1002 claim 2.

As set forth above in Section V.A.1., V.B.1.i., and V.B.1.ii., Bradford discloses a biological sensor, which is sometimes referred to as a second

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authentication reader or biometric reader. *See* Ex. 1003 at 10:21-31, 11:22-43, Fig. 4; Ex. 1001 at ¶ 87. 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. *See id.* at 6:53-56, 16:55-63; Ex. 1001 at Ex. 1001 at ¶ 88. Many alternative biometric readers are also disclosed. *Id.* at 16:52-63; Ex. 1001 at Ex. 1001 at ¶ 89. As set forth in Section V.A.1. and V.B.1.i., there are several further disclosures in Bradford that the biometric reader can be mounted in the cabinet housing. *See id.* at 10:21-29, 11:4-12, Fig. 4; Ex. 1001 at ¶ 89.

The biometric reader of Bradford is the same type of device as the biometric sensor of claim 2 of the '098 patent. Ex. 1001 at ¶ 90. 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. *Id.* Indeed, both the '098 patent and Bradford describe the same device, namely a camera, as example of the respective biometric reader and biometric sensor. *Id.*

As set forth in Section V.B.1.ii., Figure 4 shows a "typical Serial-protocol-based communication means used over an electronic connection 418 to RGC 420." *Id.* at 10:21-24; Ex. 1001 at ¶ 91. 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

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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.” *Id.* at 10:60-11:1; Ex. 1001 at ¶ 92. Bradford further explains that biometric reader 412 is identical to reader 410, except unlike reader 410, its physical location is within the cabinet. *Id.* at 11:4-12; Ex. 1001 at ¶ 93. 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. *Id.* at 11:58-12; Ex. 1001 at ¶ 94.

The identification information collected from the biometric reader 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. *See, e.g.*, Ex. 1003 at 11:10-50, Fig. 4; Ex. 1001 at Ex. 1001 at ¶ 79, 98. Additionally, Figure 2, which is similar to readers 410 and 412 illustrated in Figure 4, 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. *Id.* at 8:33-50, Fig. 2; Ex. 1001 at ¶ 95.

The claims in Bradford confirm this understanding. 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

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for transmission over a communication network. *See* Ex. 1003, claim 55; Ex. 1001 at ¶ 96. Similarly, claim 65 reads describes a method where a game establishment receives biometric data via a network from a remote game device. *See* Ex. 1003, claim 65; Ex. 1001 at ¶ 97.

Accordingly, Bradford discloses this limitation. Ex. 1001 at ¶ 98.

**v.     **Bradford Discloses Input-Output Devices****

The fifth element of claim 2 requires certain input-output devices and reads as follows:

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.

Ex. 1002 claim 2.

Although lacking antecedent basis, the claimed “input-output device(s)” can be construed herein to mean any input-output device. 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.” Ex. 1003 at 8:7-21, Fig. 1; Ex. 1001 at ¶ 99. For example, game device

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400 in Bradford includes play buttons 406 within the gaming device cabinet. *See id.* at 10:20-29; Ex. 1001 at ¶ 100. 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.” *Id.* at 32:51-54; Ex 1001 at ¶ 101. This includes any and all means that may be used to initiate play, including touchscreen, virtual buttons and the like. *Id.* at 32:57-59; Ex. 1001 at ¶ 102. For example, the gaming device depicted in Figure 4 of Bradford also includes a high resolution touchscreen as the user interface. *Id.* at 34:5-8; Ex. 1001 at ¶ 103. 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. *See id.* at 11:13-20, 24:58-65; Ex. 1001 at ¶ 104. 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. *See id.* at 13:19-23, 24:58-65, 27:20-40, Fig. 11; Ex. 1001 at ¶ 105. 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. Ex. 1001 at ¶ 106.

Bradford further discloses that the first authenticator can be an alpha numeric sequence, which includes personal identification numbers (PINs) as well as any

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sequence of numbers and letters that may be used to identify a player. *See id.* at 10:45-48; Ex. 1001 at ¶ 107. A touchscreen or keyboard would be used to enter PIN or alpha numeric sequence and that PINs constitute registration/login information. Ex. 1001 at ¶ 108.

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. *Id.* at ¶ 109.

**vi. Bradford Discloses Microprocessors**

The sixth limitation of claim 2 to requires “one or more microprocessors mounted in the kiosk housing and programmed to: . . . .” Ex. 1002, claim 2. Bradford discloses this element. 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 . . . .” Ex. 1003 at 8:7-21, Fig. 1; Ex. 1001 at ¶ 110. Further processors are disclosed in Bradford as described above, such as within each reader. Ex. 1003 at 11:22-31; Ex. 1001 at ¶ 110. 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

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connection, video I/O, and as needed for each I/O device installed with the reader 412 system.” *Id.* 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.vii.-xi. herein. Ex. 1001 at ¶ 110. As set forth above in Section V.A.1 and V.B.1.ii, the processors can be mounted inside the cabinet. *Id.* at ¶ 111. Thus, Bradford discloses this element. *Id.* at ¶ 112-14.

**vii. Bradford Presents Instructions**

The seventh limitation of claim 2 is as follows:

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

Ex. 1002, claim 2.

The flow diagram at Figure 11 of Bradford provides a “method of using the present invention for authenticating electronic funds transfers (ETFs).” Ex. 1003 at 24:52-54; Ex. 1001 at ¶ 116. The “present invention” in Bradford refers back to the embodiments of the gaming device. Ex. 1001 at ¶ 116. Specifically, Figure 11



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shows that after an EFT request occurs, the gaming device requests the player's first authenticator. *See* Ex. 1003 at 24:66-67, Fig. 11; Ex. 1001 at ¶ 116. An EFT may occur prior to game play being enabled. *See* Ex. 1003 at 3:50-4:2, 27:11-38; Ex. 1001 at ¶ 116. This EFT transaction may be to "use the funds in the players' EFA to get more game play credits." Ex. 1003 at 13:40-41; Ex. 1001 at ¶ 117. 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. *See id.* at 13:19-24; Ex. 1001 at ¶ 118. "If the player has not, during this session, presented a first authenticator the player is prompted for both a first and second authenticator." *Id.* at 13:27-29; Ex. 1001 at ¶ 119. These instructions occur through input/output devices within the game device cabinet such as via the peripheral interfaces to the video display. *Id.* at 8:7-14, 8:33-37; Ex. 1001 at ¶ 120. Examples of such input-output devices in game device 400 disclosed in Bradford includes a touchscreen. *Id.* at 11:36-39; Ex. 1001 at ¶ 120.

The claims of Bradford also demonstrate that the device presents instructions to the patron. Ex. 1001 at ¶ 121. A limitation of claim 4 reads "having a player present a first authenticator to a game device in an operable manner." *Id.* at claim 4; Ex. 1001 at ¶ 121. Similarly, an element of claim 25 reads "asking a player for a first authenticator." *Id.* at claim 25; Ex. 1001 at ¶ 122. And Bradford's disclosure that "the player *is prompted* for both a first and second authenticator" is a clear

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disclosure of presenting instructions to the patron. *Id.* at 13:27-29 (emphasis added); Ex. 1001 at ¶ 123. Moreover, Bradford discloses that “the player will be requested to input their second authenticator to uniquely identify one player.” *Id.* at 21:11-13; Ex. 1001 at ¶ 123.

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. Ex. 1001 at ¶ 124. For example, the ‘098 indicates that kiosk 100 may request for registration or verification, submission of an identification document for scanning. *See* Ex. 1002 at 3:13-15; Ex. 1001 at ¶ 124. 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. Ex. 1001 at ¶ 124.

Further, game device 300 in Bradford illustrates an embodiment similar to the other embodiments in Bradford in which the systems described in the other

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embodiments are all performed in an embedded system within game device 300. *See* Ex. 1003 at 8:51-9:4; Ex. 1001 at ¶ 125. 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. Ex. 1001 at ¶ 125.

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. *Id.* at ¶ 126. Further, according to Bradford, the first authenticator may be one among many choices, including a driver's license, a government-issued identification document. *See* 1003 at 5:36-64; Ex. 1001 at ¶ 127. Accordingly, Bradford discloses this limitation. Ex. 1001 at ¶ 128.

**viii. Bradford Obtains a Digital Form of the Patron's Identification**

The eighth limitation of claim 2 is as follows:

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

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Ex. 1002 claim 2.

As set for in Section V.B.1.iii., Bradford's first authenticator reader can obtain information from the first authenticator, which is then converted to digital form. Ex. 1001 at ¶ 129. In the case of machine readable documents, the first authenticator reader can be a scanner. *Id.* at ¶ 130. Further, according to Bradford, the first authenticator may be one among many choices, one of which is driver's licenses, a government-issued identification document. *See* Ex. 1003 at 5:36-64; Ex. 1001 at ¶ 130. 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; Ex. 1001 at ¶ 132. Accordingly, Bradford discloses this element. Ex. 1001 at ¶ 133.

**ix. Microprocessor of Bradford Obtains Biological Data Describing a Feature of a Patron**

The ninth limitation of claim 2 is "obtain biological data describing a biological feature of the patron from the biological sensor." Ex. 1002, claim 2.

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." Ex. 1003 at 3:63-65; Ex. 1001 at ¶ 134. "In the case of fingerprints, a quick touch of a fingerprint reader does the job." *Id.* at 3:65-66; Ex. 1001 at ¶ 135. 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. *See*

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Ex. 1003 at 32:42-45, Fig. 15; Ex. 1001 at ¶ 136. The fingertip reader then creates a fingerprint data set and confirms a match with the fingerprint data associated with that player. *See id.* at 3:65-4:2, 32:42-45, Fig. 15 ; Ex. 1001 at ¶ 137-38. 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.” *See id.* at 16:58 – 63. Ex. 1001 at ¶ 138.

The claims of Bradford also demonstrate the disclosure of this element. A limitation of 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; Ex. 1001 at ¶ 139. Again, 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. Ex. 1001 at ¶ 140. 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. *See* Ex. 1003 at 11:4-43; Ex. 1001 at ¶ 141. Accordingly, Bradford discloses this limitation. Ex. 1001 at ¶ 142.

**x. Bradford Performs the Required Verification**

The tenth limitation of claim 2 relates to the verification of the patron:

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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

Ex. 1002 claim 2.

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. *See* Ex. 1003 at 3:63-65, 5:16-24; Ex. 1001 at ¶ 143. The verification process described in Bradford would be performed through use of a processor in the gaming device. Ex. 1001 at ¶ 145.

Examples of the two authentication verification system are also described in the claims of Bradford. *See e.g.* Ex. 1003 at Claims 4 and 65; Ex. 1001 at ¶ 146. Bradford claim 65 relates to a method of identifying the player and confirming the player is of sufficient age to play the gaming device. Ex. 1001 at ¶ 147. In 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. *See* Ex. 1003 at Claim 65; *Id.*

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

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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. Ex. 1001 at ¶ 148. 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. Ex. 1002 at 7:59-64; *Id.* 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. Ex. 1001 at ¶ 149. 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. *Id.*

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. *See*

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Ex. 1003 at 8:51-9:4; Ex. 1001 at ¶ 150. 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. Ex. 1001 at ¶ 150.

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. Ex. 1001 at ¶ 151-53. Accordingly, Bradford discloses this limitation. *Id.* at ¶ 153.

**xi. Bradford Offers Gaming Activities**

The final limitation of claim 2 reads “on verification, to offer gaming activities to the verified patron.” Ex. 1002, claim 2. 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.” *See* Ex. 1003 at 3:66-4:2; Ex. 1001 at ¶ 155. 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.” *See id.* at 32:46-48; Ex. 1001 at ¶ 156. Bradford also notes that



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box 1506 in Figure 15 “corresponds to normal game play.” *See id.* at 32:66-67; Ex. 1001 at ¶ 157.

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. Ex. 1002 at 3:63-4:21; Ex. 1001 at ¶ 158. 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. Ex. 1001 at ¶ 158-59.

The claims of Bradford also make clear that gaming activities are offered upon verification. Claim 54 includes a limitation that reads “that upon receiving confirmation of a match between data from said biometric reader and data comprising said second authenticator, game play is initiated.” Ex. 1003 claim 54. Likewise, claim 65 reads “...allowing game play if said biometric data and said second authenticator data are comparable.” Ex. 1003 claim 65.

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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. *See* Ex. 1003 at 8:51-9:4; Ex. 1001 at ¶ 160. 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. Ex. 1001 at ¶ 160.

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. *Id.* at ¶ 161. Accordingly, Bradford discloses this, and all other, limitations of claim 2. *Id.*

**2. Independent Claim 15**

Claim 15 is a method claim that is similar to and includes several of the same elements of claim 2. *Id.* Bradford discloses all the elements of each step of claim 15.

**a. Bradford Discloses “at a Kiosk for Gaming...”  
Limitation**

The first limitation of claim 15 reads:

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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;

Ex. 1002, claim 2.

As explained in Section V.B.1.i-ii., Bradford discloses a kiosk for gaming by patrons, such as a gambling machine included in a cabinet. *See, e.g.*, Ex. 1003 at 3:50-51, 7:66-8:6, 8:33-37, Fig. 2; Ex. 1001 at ¶ 164. As explained in Section V.B.1.v-vi., 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 . . . .” Ex. 1003 at 8:7-21, Fig. 1; Ex. 1001 at ¶ 164. As explained in Section V.B.1.viii-xi., 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. *See also* Ex. 1003 at 3:54-60, 5:21-25, 6:3-4, Claim 65; Ex. 1001 at 165. 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. *See* Ex. 1003 at 24:66-67, Fig. 11; Ex. 1001 at ¶ 166. An EFT may

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occur prior to game play being enabled. See Ex. 1003 at 3:50-4:2, 27:11-38; *Id.* 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. See *id.* at 13:19-24; *Id.* “If the player has not, during this session, presented a first authenticator the player is prompted for both a first and second authenticator.” *Id.* at 13:27-29; *Id.* 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. *Id.* at 8:7-14, 8:33-37; *Id.* As explained in Section V.B.1.vii., this occurs at the kiosk while the kiosk is under control of one or more processors mounted in the kiosk.

As explained in Section V.B.1.iii, viii., the first authenticator in Bradford can be a government-issued identification document, such as a driver’s license. See Ex. 1003 at 5:36-64; Ex. 1001 at ¶ 167. As explained in Section V.B.1.v., 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....” *Id.* at 34:5-8, Fig. 16; Ex. 1001 at ¶ 168. Bradford also discloses other I/O devices, including touchscreens that make up part of the main game device

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video display to be used as the user interface. *See id.* at 11:13-20, 24:58-65; *Id.* 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. *See id.* at 13:19-23, 24:58-65, 27:20-40, Fig. 11; *Id.* 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. *Id.*

Accordingly, Bradford discloses all of the elements of this step. *Id.* at ¶ 169.

**b. Bradford Discloses Scanning a Patron’s Identification**

The second limitation of claim 15 recites:

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;

Ex. 1001 claim 15.

As explained in Sections V.B.1.iii. and V.B.1.viii., Bradford discloses scanning into a kiosk or cabinet containing a gaming device a digital form of the

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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. Ex. 1001 at ¶ 171. 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." *See id.* at 6:22-27; Ex. 1001 at ¶ 171. 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." *See id.* at 3:14-20; Ex. 1001 at ¶ 172. 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. *Id.* 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. *See* Ex. 1003 at 5:58-63; Ex. 1001 at ¶ 173. A "reader" of those symbols is a scanner, and it scans the machine readable symbols into digital form. *Id.*

An example of such a reader is reader 412 located within the cabinet 400. *See id.* at 11:4-12; Ex. 1001 at ¶ 174. The information scanned by reader 412 is

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transmitted over a network via an Ethernet connection to a remote game controller (RGC). *Id.* at 10:60-27, 11:4-12; *Id.*

Accordingly, Bradford discloses all of the elements of this step. Ex. 1001 at ¶ 175.

**c. Bradford Discloses Obtaining Biological Data**

The third step of claim 15 reads:

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

Ex. 100,1 claim 15.

As explained in Sections V.B.1.iv. and V.B.1.i.x., 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. Ex 1001 at ¶ 177. 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. *See id.* at 6:53-56, 16:55-63; *Id.* An example of a biometric reader is reader 412 located within the cabinet 400. *See id.* at 11:4-12; Ex. 1001 at ¶ 178. The information scanned by reader 412 is transmitted

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over a network via an Ethernet connection to a remote game controller (RGC). *Id.* at 10:60-27, 11:4-12; *Id.* 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. *Id.*

Accordingly, Bradford discloses all of the elements of this step. *Id.* at ¶ 179.

**d. Bradford Discloses the Verification Limitation**

The fourth step of claim 15 recites:

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

As explained in Sections V.B.1.x., 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. Ex 1001 at ¶ 181. 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. *See* Ex. 1003 at 3:63-65; Ex. 1001 at ¶ 182. 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. Ex. 1001 at ¶ 183.



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Similarly, claim 65 of Bradford relates to identifying the player and confirming the player is of sufficient age to play the gaming device. *Id.* 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. *Id.*

Accordingly, Bradford discloses all of the elements of this step. *Id.* at ¶ 184.

**e. Bradford Discloses Offering of Gaming Activities**

The last step of claim 15 requires that “on verification, offering gaming activities to the verified patron at the kiosk.” Ex. 1001 claim 15. As explained in Section V.B.xi., 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.” *See* Ex. 1003 at 3:66-4:2; Ex. 1001 at ¶ 186. 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.” *See id.* at 32:46-48; Ex. 1001 at ¶ 187. 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.” Ex. 1003 claim 54; *Id.*

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Accordingly, Bradford discloses this step and all the other steps of claim 15.

*Id.* at ¶ 188.

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

**a. Claims 4 and 17**

Claim 4 depends from claim 2 and claim 17 depends from claim 15 and each recite:

the biological sensor is a camera and the biological data is a digital image of a face of the patron captured by the camera.

Ex. 1002, claims 4 and 17. As discussed, Bradford discloses the limitations of claims 2 and 15.

Bradford further discloses that the biometric authentication means may include facial features scans and that the biometric device can be facial geometry readers “including a camera that would be placed in the game cabinet, the camera providing an image from which facial geometry and other facial features may be characterized . . . .” *See* Ex. 1003 at 6:52-56, 16:57-63; Ex 1001 at ¶ 192. Thus, Bradford discloses all the limitations of claims 4 and 17. Ex 1001 at ¶ 193.

**b. Claims 5 and 18**

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

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comparison of the digital image against a reference photograph.

Ex. 1002, claim 5. 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.

*Id.*, claim 18. As discussed, Bradford discloses the limitations of claims 4 and 17.

As set forth above, 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 . . . .” *See* Ex. 1003 at 6:52-56, 16:57-63; Ex 1001 at ¶ 197. Verification in Bradford occurs by matching the biometric data with the data associated with the player in the player identification database. *See* Exhibit 1003 at 3:66-4:2, 8:51-66, 32:46-48, claim 65; Ex 1001 at ¶ 198. 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. Ex 1001 at ¶ 199. As discussed in Section V.B.1.vi., Bradford discloses that a programmed microprocessor performs each of the steps of the

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reader, including this step. *Id.* at ¶ 200. Thus, Bradford discloses all the limitations of claims 5 and 18. *Id.*

**c.      Claims 6 and 19**

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.

Ex. 1002, claim 6.

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.

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

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. *See* Section V.B.1.x. Bradford also discloses that the biometric data can be that of a person's face geometry and other facial features. *See* Sections V.A.1. and V.B.1.iv, ix. As set forth above, one or more microprocessors are mounted in the kiosk housing. *See*

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Section V.B.1.i-ii, vi. Further, 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 as set forth in Section V.B.1.iii. Ex. 1001 at ¶ 204-205.

The gaming device described in Figure 1 has, among other things, at least one processor and a biometric reader. The biometric reader would have an interface (port) to a slot machine interface board, sending data and receiving data via an electronic connection. Ex. 1003 at 5:51-66; Ex 1001 at ¶ 206-207. As shown in Figure 1, “[t]he fingerprint reader sends raw biometric data out, unprocessed.” Ex. 1003 at 5:56-65. Similarly, the gaming device depicted in Figure 2 also sends biometric data outside the gaming device. Ex. 1003 at 5:57-58; Ex 1001 at ¶ 208. Verification at the gaming device in these instances would occur 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. Ex 1001 at ¶ 209.

Claim 65 of Bradford confirms this result. Claim 65 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. *See* Ex. 1003 Claim 65; Ex 1001 at ¶ 210. Claim 65 further discloses that the player identification database used for comparison of the provided by the game establishment. *Id.*; *Id.* at ¶ 211.

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Accordingly, when a patron is verified by the game device it is based on verification it received from the remotely located game establishment. *Id.*; *Id.* at ¶ 212. As discussed in Section V.B.1.vi., Bradford discloses that a programmed microprocessor performs each of the steps of the reader, including this step. *Id.* at ¶ 213. Thus, Bradford discloses all the limitations of claims 6 and 19. *Id.*

**d. Claim 8**

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.

Ex. 1002, claim 8. As discussed, Bradford discloses the limitations of claim 2.

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. *See* Ex. 1003 at 5:57-58; Ex 1001 at ¶ 216. 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.” Ex. 1001 at ¶ 216. Bradford further discloses verifying the identity of the patron during an EFT transaction prior to enabling game play. *See, e.g.*, Ex. 1003 at 22:25-56; Ex 1001 at ¶ 216. As discussed in Section V.B.1.vi., Bradford discloses that a programmed microprocessor performs each of the steps of the reader, including this step. Ex. 1001 at ¶ 217. Accordingly, Bradford discloses all the limitations of claim 8. *Id.*

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**e. Claim 9**

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.

Ex. 1002, claim 6. As discussed, Bradford discloses the limitations of claim 2.

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. *See* Ex. 1003 at 8:51-9:4; Ex. 1001 at ¶ 220. 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. Ex. 1001 at ¶ 220. 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. Ex. 1003 at 5:51-66; Ex 1001 at ¶ 221. 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

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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.

Ex. 1003 at 5:56-65. As discussed in Section V.B.1.vi., Bradford discloses that a programmed microprocessor performs each of the steps of the reader, including this step. Ex. 1001 at ¶ 222-223. Accordingly, Bradford discloses all the limitations of claim 8. *Id.*

**f. Claims 10 and 21**

Claim 10 depends from claim 2 and claim 21 depends from claim 15 and each further recite:

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.

Ex. 1002, claims 10 and 21. As discussed, Bradford discloses the limitations of claims 2 and 15.

The gaming device described in Figure 1 has, among other things, at least one processor and a fingerprint reader or other biometric reader. The biometric reader would have an interface (port) to a slot machine interface board, sending and data



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and receiving data via an electronic connection. Ex. 1003 at 5:51-66; Ex 1001 at ¶ 227-28. As shown in Figure 1, “[t]he fingerprint reader sends raw biometric data out, unprocessed.” Ex. 1003 at 5:56-65. Similarly, the gaming device depicted in Figure 4 also sends biometric data outside the gaming device. Ex. 1003 at 5:57-58; Ex 1001 at ¶ 229.

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. *See* Ex. 1003, claim 65; Ex 1001 at ¶ 230. 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. *Id.*; Ex 1001 at ¶ 231. Accordingly, when a patron is verified by the remote game device it is based on biometric data it transmitted to the game establishment. *Id.*; Ex 1001 at ¶ 232. As discussed in Section V.B.1.vi., Bradford discloses that a programmed microprocessor performs each of the steps of the reader, including this step. Ex 1001 at ¶ 233. Thus, Bradford discloses all the limitations of claims 10 and 21. *Id.*

**g. Claim 12**

Claim 12 depends from claim 2 and further recites “a credit card acceptor.” Ex. 1002, claim 12. As discussed, Bradford discloses all the limitations of claim 2.

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Bradford further discloses that the first authenticator may allow “the player to use a credit card, check card, debit card, and the like.” *Id.* at 5:41-58; Ex 1001 at ¶ 236-37. Thus, Bradford discloses all the limitations of claim 12. *Id.* at ¶ 238.

**h. Claims 13 and 22**

Claim 13 depends from claim 2 and claim 22 depends from claim 15 and each further recite:

the government-issued identification document is a government-issued drivers license or identification card.

Ex. 1002, claims 13 and 22.

As discussed, Bradford discloses the limitations of claims 2 and 15. As further discussed in Section V.B.1.viii *supra*, Bradford discloses that government-issued identification document is a government-issued driver’s license. *See* Ex. 1003 at 5:36-64; Ex. 1001 at ¶ 242. Therefore, Bradford discloses all the limitations of claims 13 and 22. Ex. 1001 at ¶ 243.

**i. Claims 14 and 23**

Claim 14 depends from claim 2 and claim 23 depends from claim 15 and each further recites:

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

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Ex. 1002, claims 14 and 23. As discussed, Bradford discloses the limitations of claims 2 and 15.

Bradford further states that “[t]he present invention enables a new and exciting way of allowing players to make use of electronic funds accounts.” *See* Ex. 1003 at 5:36-64; Ex. 1001 at ¶ 247. 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. *See* Ex. 1003 at 13:39-43, 22:63-65; Ex. 1001 at ¶ 248. Bradford further discloses EFT (electronic fund transfer) transactions to “use the funds in the players’ EFA to get more game play credits.” Ex. 1003 at 13:40-41; Ex. 1001 at ¶ 249. 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. *See* Ex. 1003 at 13:19-24; Ex. 1001 at ¶ 249. A POSITA would understand the disclosure of Bradford to disclose the account being held in a computer remote from the gaming device. Ex. 1001 at ¶ 249. Therefore, Bradford discloses all the limitations of claims 13 and 22. *Id.* at ¶ 250.

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**C. Ground 2: Claims 2, 4-6, 8-10, 12-15, 18-19, and 21-23 are Unpatentable as Obvious Over Bradford in View of the Knowledge of a POSITA.**

As discussed in Section V.B. *supra*, Bradford discloses every limitation of claims 2 and 15. However, 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 recited in claim 2, it would have been obvious. Ex. 1001 at ¶ 251. 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.” Ex. 1003 at 8:56-60. The embodiment illustrated in Figure 3 of Bradford is essentially a standalone machine (Ex. 1003 at 9:10-12), and thus the entirety of every function of the machine is performed by one or more microprocessors within the gaming machine itself. Ex. 1001 at ¶ 252.

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)

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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.” Ex. 1003 at 9:57-10:20; Ex. 1001 at ¶ 253.

Further, to the extent 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. Ex. 1001 at ¶ 254; *see In re Applied Materials, Inc.*, 692 F.3d 1289, 1298 (Fed. Cir. 2012) (“A reference must be considered for everything that it teaches, not simply the described invention or a preferred embodiment.”) (citing *EWP Corp. v. Reliance Universal Inc.*, 755 F.2d 898, 907 (Fed. Cir. 1985)). Indeed, “[o]n the issue of obviousness, the combined teachings of the prior art as a whole must be considered.” *EWP*, 755 F.2d at 907.

**D. Ground 3: Claims 2, 4-6, 8-15, 17-19, and 21-23 are Obvious Over Bradford in View of Parrot and the Knowledge of a POSITA**

As discussed in Sections V.B. and V.C., Bradford explicitly discloses or renders obvious every limitation of the Challenged Claims, except claim 11. This ground establishes the obviousness of all the Challenged Claims based on Bradford in view of Parrott.

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**1. Identification Scanner**

With respect to the third limitation of claim 2 and the first limitation of claim 15 related to the identification scanner, that limitation is found in Bradford as set forth in Section V.B.1.iii above.

The instant ground, however, provides evidence of the obviousness of claims 2 and 15 in the form of additional prior art establishing that scanners were included in a gaming device 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. Ex. 1001 at ¶ 256.

Similar to Bradford, Parrott relates to any type of casino gaming systems includes a system to read data from cards identifying the user. Ex. 1004 at ¶ [0037], ¶ [0040]; Ex. 1001 at ¶ 257. Parrott discloses a scanner 650 mounted in a gaming machine and designed to accept an identification document or card. Ex. 1004 at ¶ [0096]; *Id.* After an object, such as a driver's license, is scanned by scanner 650 the scan is subjected to an optical character recognition routine. Ex. 1004 at ¶ [0102]; *Id.* 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. *See* Ex. 1004 at ¶ [0105]; Ex. 1001 at ¶ 258. The system may match scanned data from the driver's license in the database

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to determine whether the license is accurate and should be authorized. *See id.* at ¶ [0106], ¶ [0102]; Ex. 1001 at ¶ 259.

Therefore, based on the above, Parrott discloses an identification scanner mounted in a gaming machine and designed to accept an identification document and to scan identification information from the identification document into digital form for transmission over a network and satisfies this limitation. Ex. 1001 at ¶ 261.

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. *Id.* at ¶ 262. 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. *Id.*

Thus, if Bradford is found not to disclose the identification scanner imitation of claims 2 and 15, and the Challenged Claims dependent on those claims (*i.e.*, 4-6, 8-14, 17-19, and 21-23), they would have been obvious based on Bradford in view of Parrott Ex. 1001 at ¶ 263.

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**2. Claim 11**

Claim 11 depends from claim 2 and recites that the further limitation of a currency acceptor and dispenser. As discussed, Bradford discloses the limitations of claim 2, or claim 2 is obvious. 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. *See* Ex. 1003 at 8:7-14; 11:31-36; Ex. 1001 at ¶ 266-67. Bradford also discloses there is a mechanism to have cash accepted for addition to the EFA. Ex. 1003 at 22:25-26 and 24:41-51; Ex. 1001 at ¶ 268.

Similarly, Parrott discloses a currency acceptor and currency dispenser within the casino gaming device. Specifically, 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. *See* Ex. 1004 at ¶ [0038], Fig. 2; Ex. 1001 at ¶ 269-70.

The value input device of Parrott includes any device that can accept gaming tokens, coins, paper currency, ticket vouchers, credit or debit cards, smart cards, and any other object representative of value from a customer.” *See id.* at ¶ [0038]; Ex. 1001 at ¶ 271. The casino gaming machine shown at Figure 2 of Parrott also includes a “Cash Out” button 174 that, when activated, will return value to the



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player such as by returning a number of coins to the player via the payout tray 64. *See id.* at ¶ [0042], Fig. 2; Ex. 1001 at ¶ 272. Accordingly, Parrott discloses the additional “currency acceptor and dispenser” limitation of dependent claim 11. Ex. 1001 at ¶ 273.

Both Bradford and Parrott disclose casino game machines that require a mechanism for accepting and dispensing funds. Ex. 1001 at ¶ 274. Bradford uses an electronic fund account that can have deposits or withdrawals performed by an attendant or self-service EFA station. Ex. 1001 at ¶ 274. Parrott uses direct acceptance and dispensing of currency by the game machine itself. Ex. 1001 at ¶ 274. 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. Ex. 1001 at ¶ 275. 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. Ex. 1001 at ¶ 276-77.

**3. Dependent Claim 12: Parrott Discloses a Credit Card Acceptor**

Claim 12 depends from claim 2 and recites that the further limitation of a credit card acceptor. As discussed, Bradford discloses the limitations of claim 2, or

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claim 2 is obvious. The value input device of Parrott may include any device that can accept value from a customer, including a credit card. *See id.* at ¶ [0038]; Ex. 1001 at ¶ 280-81. Parrott explains that gaming unit 20 depicted in Figure 2 may include a housing or cabinet a card reader and/or writer 58, which may be used to input value to the gaming unit. *See* Ex. 1004 at ¶ [0038], Fig. 2; Ex. 1001 at ¶ 282-83. Accordingly, Parrott discloses the limitation of claim 12. Ex. 1001 at ¶ 284.

Both Bradford and Parrott disclose casino game machines that require a mechanism for accepting funds. Ex. 1001 at ¶ 285. Bradford uses an electronic fund account that can have deposits or withdrawals performed by an attendant or self-service EFA station. Ex. 1001 at ¶ 285. Parrott uses direct acceptance and dispensing of currency by a card reader 58 in the game machine itself. Ex. 1001 at ¶ 285. 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. Ex. 1001 at ¶ 285. Accordingly, it would have been obvious to a POSITA 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. Ex. 1001 at ¶ 285-86.

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**4. It Would Have Been Obvious to Combine the Disclosures of Bradford With Parrott.**

Currency acceptors and dispensers, credit card acceptors and scanners are well-known and old features of many electronic devices, including casino gaming devices. Ex. 1001 at ¶ 287. 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. Ex. 1001 at ¶ 288. In addition, both Bradford and Parrott go to the same field of invention, namely casino gaming systems and both can use identification documents, such as driver's licenses for identification purposes. Ex. 1001 at ¶ 289-90. Accordingly, a POSITA would have been motivated to combine the disclosures of Bradford and Parrott, rendering all the Challenged Claims, claims 2, 4-6, 8-15, 17-19, and 21-2, obvious. Ex. 1001 at ¶ 291; *see KSR*, 550 U.S. at 415-16.

**VI. 37 C.F.R. § 42.8(b)(1): REAL PARTY-IN-INTEREST**

William Hill U.S. Holdco, Inc. and Brandywine Bookmaking LLC are the real parties-in-interest for Petitioner. In addition, out of an abundance of caution, Petitioner brings to the Board's attention William Hill PLC, who is an affiliated company of Petitioner, and was originally Petitioner's co-defendant in the pending litigation with Patent Owner until being dismissed. William Hill PLC is not a real party-in-interest to this proceeding and did not finance or control this petition (nor

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had the opportunity to exercise control over this petition) or otherwise meet the requirements of 35 U.S.C. § 312(a)(2).

**VII. 37 C.F.R. § 42.8(b)(2): RELATED MATTERS**

The '098 patent is currently the subject of a patent infringement lawsuit listed below in the District of Delaware:

- *CG Technology Development, LLC v. William Hill U.S. Holdco, Inc., et al.*,  
Civ. No. 18-533-RGA

Petitioner is concurrently filing petitions for *inter partes* review of claims of related U.S. Patent No. 9,269,224 and No. 10,096,207 also owned by CG Technology Development, LLC and asserted in the above-listed litigation.

**VIII. 37 C.F.R. §§ 42.8(b)(3) AND (4): LEAD AND BACK-UP COUNSEL AND SERVICE INFORMATION**

Petitioner provides the following designation of counsel.

<b>Lead Counsel</b>	<b>Back-up Counsel</b>	<b>Back-up Counsel</b>
Francis DiGiovanni Reg. No. 37,310 DRINKER BIDDLE & REATH LLP 222 Delaware Avenue Suite 1410 Wilmington, DE 19801 francis.digiovanni@dbr.com	Keith A. Walter Reg. No. 55,710 DRINKER BIDDLE & REATH LLP 222 Delaware Avenue Suite 1410 Wilmington, DE 19801 keith.walter@dbr.com	Thatcher A. Rahmeier Reg. No. 65,734 DRINKER BIDDLE & REATH LLP 222 Delaware Avenue Suite 1410 Wilmington, DE 19801 thatcher.rahmeier@dbr.com

Pursuant to 37 C.F.R. § 42.10(b), a Power of Attorney accompanies this Petition. Please address all correspondence to lead and back-up counsel at the

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addresses above. Petitioner also consents to electronic service by email at the email addresses listed above.

**IX. CONCLUSION**

Petitioner has established a reasonable likelihood of prevailing with respect to claims 2, 4-6, 8-15, 17-19, and 21-23 on all grounds. Petitioner therefore requests that the Patent Office order an IPR trial and then cancel claims 2, 4-6, 8-15, 17-19, and 21-23.

Respectfully submitted,

Date: November 12, 2018

By: /Francis DiGiovanni/

Registration No. 37,310

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**PETITIONER’S EXHIBIT LIST**

EXHIBIT NO.	TITLE
1001	Declaration of Andrew Wolfe, Ph.D.
1002	U.S. Patent No. 9,240,098 (“the ’224 patent”)
1003	U.S. Patent No. 6,612,928 (“Bradford”)
1004	U.S. Patent App. 2005/0054417 (“Parrott”)

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**CERTIFICATE OF SERVICE**

The undersigned hereby certifies that a copy of the foregoing Petition for *Inter Partes* Review of U.S. Patent No. 9,240,098 including all Exhibits and the Power of Attorney, was served on November 12, 2018 via UPS delivery directed to the purported attorneys of record for the patent at the following address:

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**CERTIFICATE OF WORD COUNT UNDER 37 C.F.R. § 42.24(a)**

I, the undersigned, do hereby certify that the attached Petition, including footnotes, contain 13,940 words, as measured by the Word Count function of Word 2016, not including the table of contents, mandatory notices under § 42.8, a certificate of service or word count, and the list of exhibits. This is less than the limit of 14,000 words as specified by 37 C.F.R. § 42.24(a)(i).