Exhibit 2009 (Deposition Exhibit 2009D) Zynga, Inc. v. Personalized Media Communications, LLC Case IPR2013-00156 (SCM)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Inter Partes Review of U.S. Patent No. 7,860,131

Trial No.: Not Yet Assigned

Issued: December 28, 2010

Filed: June 7, 1995

Inventors: John Christopher Harvey, et al.

Assignee: Personalized Media Communications, LLC

Title: SIGNAL PROCESSING APPARATUS AND METHODS

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

[°]On behalf of Zynga Inc. ("Zynga" or "Petitioner") and in accordance with 35 U.S.C. § 311 and 37 C.F.R. § 42.100, *inter partes* review is respectfully requested for claims 1, 3, 4, 6, 9 and 11 of U.S. Patent No. 7,860,131 ("the Harvey '131 Patent"), attached hereto as Exhibit 1001.

The undersigned representative of Petitioner authorizes the Patent Office to charge the \$27,200 Petition Fee, along with any additional fees, to Deposit Account 501432, ref: 479204-620003. Six claims are being reviewed, so no excess claim fees are required.

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Table of Contents

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		Page	е
I.	INTR	ODUCTION	Į
II.	GRO	UNDS FOR STANDING PURSUANT TO 37 C.F.R. § 42.104(a)2	2
III.	OVE	RVIEW OF THE HARVEY '131 Patent	2
IV.	IDEN § 42.	TIFICATION OF CHALLENGE PURSUANT TO 37 C.F.R. 104(b))
	A.	37 C.F.R. § 42.104(b)(1): Claims for Which <i>Inter Partes</i> Review is Requested)
	B.	37 C.F.R. § 42.104(b)(2): The Specific Art and Statutory Grounds on Which the Challenge is Based9	}
	C.	37 C.F.R. § 42.104(b)(3): How the Challenged Claims Are to Be Construed)
	D.	37 C.F.R. § 42.104(b)(4): How the Construed Claims are Unpatentable Under the Statutory Grounds Identified11	
	E.	37 C.F.R. § 42.104(b)(5): Evidence Supporting Petitioner's Challenge	
V.	THE OF C UNP	RE IS A REASONABLE LIKELIHOOD THAT AT LEAST ONE LAIMS 1, 3, 4, 6, 9 AND 11 OF THE HARVEY '131 PATENT IS ATENTABLE	2
	A.	CLAIMS 1, 3, 4, 6, 9 AND 11 ARE ANTICIPATED BY HIGGINS	2
	B.	CLAIMS 1, 3, 4, 6, 9, AND 11 ARE ANTICIPATED BY HEDGES	5
	C.	CLAIMS 1, 3, 6, 9 AND 11 ARE ANTICIPATED BY SITRICK	1

	D.	CLAIM 4 IS OBVIOUS OVER HIGGINS IN VIEW OF HEDGES
	E.	CLAIM 4 IS OBVIOUS OVER SITRICK IN VIEW OF HEDGES
VI.	MAN	DATORY NOTICES PURSUANT TO 37 C.F.R. § 42.8(a)(1)56
	A.	37 C.F.R. § 42.8(b)(1): Real Party-In-Interest56
	B.	37 C.F.R. § 42.8(b)(2): Related Matters56
	C.	37 C.F.R. § 42.8(b)(3) and (4): Lead and Back-Up Counsel and Service Information
VII.	CON	CLUSION

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I. INTRODUCTION

The Harvey '131 Patent is currently being wielded by the patent owner, Personalized Media Communications, LLC ("PMC"), in an attempt to cover longknown computer programming and networking techniques that are far afield from the alleged invention described in the patent. (*See, Personalized Media Communications, LLC v. Zynga, Inc.,* U.S. District Court for the Eastern District of Texas, Civil Action No. 2:12-cv-68-JRG) PMC's aggressive litigation campaign is made possible by an overly-expansive claim scope that results from a long and tortured prosecution history dating back to an original filing in November 1981, and includes approximately 300 related applications filed in 1995 in an effort to extend the patent term well beyond what is justifiable.

Most of the near 300 applications filed in 1995, including the application that matured into the Harvey '131 Patent, were directed to television and radio technology, as described in the specification of the Harvey '131 Patent. Also related to television technology were most of the thousands of prior art references cited by the patent owner during prosecution, including a single IDS citing over 700 references.

The allowed claims, first added by amendment nearly four years after the Harvey '131 Patent was filed in 1995 and almost 12 years after its 1987 priority date, are being asserted against online computer gaming technology, in a way that

extends far beyond the television technology disclosed in the specification of the Harvey '131 Patent and the prior art considered by the Patent Office. (*See, e.g.,* PMC Infringement Contentions against Zynga, attached as Exhibit 1002.) This type of computer technology was well known before the 1987 priority date of the Harvey '131 Patent, however, as demonstrated by the teachings of the Higgins, Hedges and Sitrick references cited herein. Petitioner submits that had these more-relevant references been considered by the Patent Office during prosecution, at least claims 1, 3, 4, 6, 9 and 11 of the Harvey '131 Patent would not have issued, and therefore this petition for *inter partes* review should be granted.

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

Petitioner certifies that the Harvey '131 Patent is available for *inter partes* review and that Petitioner is not barred or estopped from requesting *inter partes* review challenging the patent claims on the grounds identified herein.

III. OVERVIEW OF THE HARVEY '131 PATENT

The Harvey '131 Patent was filed on June 7, 1995 and issued on December 28, 2010. The patent claims priority to a series of continuation and continuationin-part applications dating back to November 3, 1981, but, as detailed below, is only entitled to an effective filing date of no earlier than September 11, 1987 (the filing date of U.S. Patent No. 4,965,825.)

The Harvey '131 Patent includes 286 columns of specification, all detailing various examples of a system for adding personalized content to a television or radio broadcast. For instance, with reference to Figs. 1A-1C, the Harvey '131 Patent describes an example system for broadcasting a television program about stock market investing, "Wall Street Week." In this example, the Harvey '131 Patent describes the use of a microprocessor at a subscriber station (*i.e.*, the station where a subscriber views the Wall Street Week program) to store a file containing information on the subscriber's stock portfolio. Then, during the broadcast of the Wall Street Week program, the microprocessor generates a graphic relating to the performance of the subscriber's stock portfolio and displays the graphic on the television monitor along with images from the Wall Street Week television program. (*See*, Harvey '131 Patent, col. 13, line 53 – col. 14, line 17.)

Similarly, the claims that were originally filed with the Harvey '131 Patent in 1995, as well as the claims added by amendment in 1996 and 1997, were also directed to television and radio broadcast technology. It was not until the addition of claims 57-74 by amendment in 1999 that claims bearing resemblance to the issued claims were first introduced in the application. (*See*, '131 File History, Supplemental Amendment, received Mar. 15, 1999, attached at Exhibit 1003.)

In an Office Action issued on September 3, 2002, all of the pending claims were rejected by the Patent Office. Claim 57 (which ultimately issued as

independent claim 1) and its dependent claims were rejected under 35 U.S.C. \S 103(a) as being unpatentable over "delayed TV programming transmission systems, e.g., as exemplified in the publication 'Vertical Interval Signal Applications' by <u>Etkin</u>, in view of conventional automated TV program recording systems as exemplified [by] <u>Vikene</u> [WO 80/02093], further in view of <u>Corey</u> [US Patent # 4,199,791] and the publication 'The Vertical Interval: A General-Purpose Transmission Path' by Anderson." (*See*, '131 File History, Office Action, September 3, 2002, attached at Exhibit 1004.) The Office Action, however, focused its sixty-nine page analysis almost entirely on the other pending claims, which relate to methods of storing programming and are not at issue in this petition. Independent claim 57 was simply rejected "for the same reasons that were discussed for claim 51 and claim 55" without specifically addressing any of the limitations of claim 57 or its dependent claims. (*See, Id*.)

In a response filed on April 28, 2003, the patent owner generally objected to the Office Action as failing to address any of the particular limitations of independent claim 57. (*See*, '131 File History, Amendment and Request for Reconsideration, March 3, 2003, attached at Exhibit 1005.) In addition, the patent owner argued that none of the cited references teach "storing programming at said storage device, said programming comprising a computer program and a portion to be completed by accessing prestored data at said location of a particular kind" and

"storing a control signal, which is operative at at least one particular kind of station, said control signal operative to cause said execution of said computer program." (*See, Id.* at page 45.)

More than seven years later, following a telephone interview with the Examiner, a Notice of Allowance and Examiner's Amendment were issued on September 30, 2010, allowing claims 57-64, 68, 73 and 74 and cancelling the remaining claims. Claims 57-64, 68, 73 and 74 were then renumbered and issued as claims 1-11 of the Harvey '131 Patent. Claims 1, 3, 4, 6, 9 and 11, as issued, are reproduced below.

1. A method of enabling a station of a particular kind to deliver complete programming, said station including a storage device, and said method comprising the steps of:

storing programming at said storage device, said programming comprising a computer program and a portion to be completed by accessing prestored data at said station of a particular kind,

wherein said computer program is operative to complete said portion when executed at said station of a particular kind, said execution of said computer program enabling a processor at said station of a particular kind to select a specific datum from said prestored data and place information, which results from a processing of said selected datum, into said portion to be completed, thereby completing said programming; and

storing a control signal, which is operative at at least one particular kind of station, said control signal operative to cause said execution of said computer program,

whereby said station of a particular kind is enabled to deliver complete programming.

3. The method of claim 1, wherein said prestored data designates subscriber data, said method further comprising the step of storing subscriber data.

4. The method of claim 1, wherein said control signal comprises a series or stream of sequentially transmitted control instructions, said method further comprising the step of storing in said control signal two or more control instructions in a specific order with information designating a time period.

6. The method of claim 1, wherein said portion to be completed comprises generally applicable information.

9. The method of claim 1, wherein a control signal causes a controller operatively connected to said storage station to control a peripheral device, said method further comprising the step of

storing said control signal.

11. The method of claim 1, wherein said storage device is an ultimate receiver station.

Priority Date of the Harvey '131 Patent

The patent owner has conceded that the Harvey '131 Patent is only entitled to priority to U.S. Application No. 07/096,096 (Patent No. 4,965,825) filed as a continuation-in-part on September 11, 1987 and not to the earlier priority date of November 3, 1981. In the co-pending litigation in the U.S. District Court for the Eastern District of Texas (identified below in Section VI), the patent owner has acknowledged the September 11, 1987 priority date for the Harvey '131 Patent. Specifically, in the Plaintiff's Disclosure of Asserted Claims and Infringement Contentions (attached here as Exhibit 1006), PMC has admitted that "[t]he priority date for Claims 1, 3, 4, 6, 9, and 11 from U.S. Patent No. 7,860,131... is September 11, 1987." (See, Exhibit 1006, page 3.) Accordingly, there is no dispute that claims 1, 3, 4, 6, 9 and 11 of the Harvey '131 Patent should be afforded a priority date no earlier than September 11, 1987 for the purpose of assessing patentability under 35 U.S.C. §§ 102 and 103.

The September 11, 1987 priority date is also supported by patent owner admissions made during prosecution of the Harvey '131 Patent. Specifically, in an Office Action Response filed on April 28, 2003, the patent owner responded to a rejection under 35 U.S.C. § 112 for lack of specification support for claims 57-64, 68, 73 and 74 (which ultimately issued as claims 1-11 of the Harvey '131 Patent). In this response, the patent owner cited for support to pages 356-360 of the

specification. (*See,* Exhibit 1005, pages 33-34.) These pages of the specification were not included in any of the applications filed earlier than U.S. Application No. 07/096,096. The patent owner acknowledged this in the March 3, 2003 Office Action Response, indicating that "Applicants respectfully submit that the specification filed in 1987 demonstrates that applicants possessed the invention defined by claim 57, as shown by the specific citations in Appendix B and the general discussion above." (*See,* Exhibit 1005, page 34.)

Moreover, counsel for Petitioner has reviewed the specifications of the Harvey applications filed prior to September 11, 1987, and these earlier specifications do not support the claims of the Harvey '131 Patent. For example, the 1981 specification does not provide support for at least the following elements of independent claim 1: "storing programming at said storage device, said programming comprising a computer program", "wherein said computer program is operative to complete said portion when executed at said station of a particular kind," and "storing a control signal...said control signal operative to cause said execution of said computer program."

For at least these reasons, the Harvey '131 Patent should be given a priority date of no earlier than September 11, 1987.

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 *Inter Partes* Review Is Requested

Inter Partes review is requested for claims 1, 3, 4, 6, 9 and 11 of the Harvey

'131 Patent.

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

Inter Partes review is requested in view of the following prior art references:

- U.S. Patent No. 5,270,922 to Higgins ("Higgins") (Exhibit 1007). Higgins was filed on June 27, 1991, claiming priority as a continuation of U.S. Application No. 626,339, filed on June 29, 1984. As detailed above in Section III, the Harvey '131 Patent is only entitled to a priority date of September 11, 1987. Higgins is therefore prior art to the Harvey '131 Patent under 35 U.S.C. § 102(e).
- U.S. Patent No. 4,339,798 to Hedges, *et al.* ("Hedges") (Exhibit 1008). Hedges was filed on December 17, 1979 and issued on July 13, 1982. Hedges is therefore prior art to the Harvey '131 Patent under 35 U.S.C. § 102(b). Hedges was cited in an IDS by the applicant during prosecution of the Harvey '131 Patent, along with 1000s of other references, but was not considered by the Examiner during prosecution.

U.S. Patent No. 4,572,509 to Sitrick ("Sitrick") (Exhibit 1009). Sitrick was filed on September 30, 1982 and issued on February 25, 1986. Sitrick is therefore prior art to the Harvey '131 Patent under 35 U.S.C. § 102(b).

The specific statutory grounds under 35 U.S.C. 102 or 103 on which the challenge to the claims is based and the patents relied upon for each ground are as follows:

a) Claims 1, 3, 4, 6, 9 and 11 are anticipated by Higgins under 35 U.S.C.§ 102(e);

b) Claims 1, 3, 4, 6, 9 and 11 are anticipated by Hedges under 35 U.S.C.§ 102(b);

c) Claims 1, 3, 6, 9 and 11 are anticipated by Sitrick under 35 U.S.C. § 102(b); and

d) Claim 4 is unpatentable under 35 U.S.C. § 103(a) over Higgins in view of Hedges.

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

Pursuant to 37 C.F.R. § 42.100(b), and solely for the purposes of this review, Petitioner construes the claim language such that the claims are given their broadest reasonable interpretation in light of the specification of the Harvey '131 Patent. Petitioner submits that, for the purposes of this review, each claim should

be construed in accordance with its plain and ordinary meaning under the required broadest reasonable interpretation. Because the standard for claim construction at the Patent Office is different than that used during a U.S. District Court litigation, *see In re Am. Acad. Of Sci. Tech Ctr.*, 367 F.3d. 1359, 1364, 1369 (Fed. Cir. 2004); MPEP § 2111, Petitioner expressly reserves the right to argue a different claim construction in litigation for any term of the Harvey '131 Patent as appropriate in that proceeding.

D. 37 C.F.R. § 42.104(b)(4): How the Construed Claims are Unpatentable

A detailed explanation of how claims 1, 3, 4, 6, 9 and 11 are unpatentable, including the identification of how each claim element is found in the prior art, is set forth below at Section V.

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

An Appendix of Exhibits supporting this Petition is attached. Included at Exhibit 1010 is a Declaration of Charles J. Neuhauser, Ph.D. under 37 C.F.R. § 1.68. In addition, the relevance of the evidence to the challenged claims, including an identification of the specific portions of the evidence supporting the challenge, is included in Section V.

V. THERE IS A REASONABLE LIKELIHOOD THAT AT LEAST ONE CLAIM OF THE HARVEY '131 PATENT IS UNPATENTABLE

A. Claims 1, 3, 4, 6, 9 and 11 are Anticipated by Higgins (US 5,270,922)

The Higgins patent (Exhibit 1007) discloses "[a] data processing and communication system [that] distributes and displays financial market ticker, quotation, news and ancillary information via a plurality of stored program controlled work stations." (Higgins, Abstract.) An example of a multi-window display for displaying the financial market ticker and other information received by the work stations is illustrated in Fig. 2 of Higgins, which is reproduced below.



FIG. 2

As shown in Fig. 2 (above), the work station display disclosed in Higgins may include multiple information fields, including both a general non-user-specific

field, such as a NYSE ticker 142, and personalized user-specific fields, such as a second personalized stock ticker field 147 and a MONITOR field 153 that contains price information for a predetermined population of securities of interest to that particular user. (*See*, Higgins, col. 4, line 34 – col. 5, line 36.)

As demonstrated below, the Higgins reference discloses each and every limitation of claims 1, 3, 4 6, 9 and 11 of the Harvey '131 Patent. (See, Exhibit 1010, ¶¶ 41-114.) These claims are therefore anticipated by Higgins under 35 U.S.C. § 102(e).

1. Claim 1

Preamble

The preamble of claim 1 recites "[a] method of enabling a station of a particular kind to deliver complete programming, said station including a storage device." Higgins discloses "[a] data processing and communication system [that] distributes and displays financial market ticker, quotation, news and ancillary information via a plurality of stored program controlled work stations." (Higgins, Abstract.) The plurality of stored program controlled work stations are illustrated at reference 110 i,j,k in Fig. 1B of Higgins (reproduced below). "The work station 110 i,j,k also includes a program containing memory 109, e.g., a read only (ROM) device and variable content memory 111, e.g., a random access (RAM) unit." (Higgins, col. 2, lines 18-22.) Higgins therefore discloses a station of a particular

kind (*i.e.*, work stations 110 i,j,k) that includes a storage device (*i.e.*, program containing memory 109).



Higgins further discloses methods of enabling the work stations 110 $i_{,j}$,k to deliver complete programming. For example, Fig. 2 of Higgins illustrates a display 107 that presents information to a system user via a work station. (Higgins, col. 1, lines 64-66.) Higgins discloses methods of displaying user-specific financial market data on the work station user display 107, for example as shown in Figs. 3 and 4, and thus discloses methods of enabling a station of a particular kind to deliver complete programming. (*See*, Exhibit 1010, ¶¶ 59-63.)

First Element

The first element of claim 1 recites "storing programming at said storage device, said programming comprising a computer program and a portion to be

completed by accessing prestored data at said station of a particular kind." The work stations 110 i,j,k illustrated in Fig. 1B of Higgins include a computer program stored within memory 109 for driving a display 107. (Higgins, Fig. 1B and col. 2, lines 15-22.) Information presented on the display 107 by the programming is illustrated at Fig. 2 of Higgins. Specifically, with reference to the work station user display 107 shown in Fig. 2, Higgins explains (with emphasis added):

The information presented at display 107 may comprise a single field of information, e.g., a quotation, a ticker flow or the like. Alternatively, in accordance with one aspect of the instant invention, a multi-window display may be presented via the cathode ray tube 107. Moreover, depending upon the user-entered key strokes, the specific format of the multi-window display may vary.

One illustrative multi-window presentation for display 107 at a system work station is shown in FIG. 2. The composite presentation has a first field 142 which simply comprises the complete New York Stock Exchange ticker (a series of stock transaction messages for stock executions on that exchange.) ...

The multiple window display format chosen by the user via keyboard 112 includes a second ticker ("TICKER-2") specified under the user control. In accordance with varying aspects of the present invention, the user may format his own personal ticker by establishing criteria which a trade message from ticker plant 35 must satisfy to pass to the TICKER-2 window field 147 for viewing. The criteria,

stored in RAM 111, may specify trades in only a specific enumerated list of securities, trades from specific exchange(s), and/or so forth...

A further MONITOR field 153 contains price information for a predetermined population of securities of interest to that particular broker... (Higgins, col. 4, line 34 – col. 5, line 18.)

Higgins thus discloses "programming that comprises a computer program," *i.e.*, the multi-window presentation for display 107 is programming. Higgins further discloses that the programming includes a "portion to be completed" (*i.e.*, the second ticker and the MONITOR field) "by accessing prestored data" (*i.e.*, the criteria stored in RAM 111) "at said station of a particular kind." (*See*, Exhibit 1010, ¶ 64-68.)

Second Element

The second element of claim 1 recites "wherein said computer program is operative to complete said portion when executed at said station of a particular kind, said execution of said computer program enabling a processor at said station of a particular kind to select a specific datum from said prestored data and place information, which results from a processing of said selected datum, into said portion to be completed, thereby completing said programming." As explained above, Higgins discloses a computer program that presents a multi-window presentation having portions (*e.g.*, the second ticker and the MONITOR field) that are completed through execution of computer program by a processor (*i.e.*, CPU

103 in Fig. 2) on the workstation 110 i,j,k. (See, Higgins, col. 4, line 34 - col. 5, line 18.)

Higgins further discloses that the second ticker in the multi-window display 107 is formatted based on user-specific criteria that is prestored in workstation RAM 111. (Higgins, col. 4, line 60 - col. 5, line 1.) Higgins explains that this prestored criteria may, for example, include a specific enumerated list of securities or trades from specific exchanges (*i.e.*, specific datum), that is processed in order to determine the information (*i.e.*, the specified market data) to be placed into the second ticker field on the multi-window display. (*See*, *Id.*) Regarding the stored information, Higgins further discloses:

As alluded to above, it is one of the offices of the instant invention to store within each work station 110 i,j,k and in particular in the RAM memory 111 there located, information characterizing the securities of interest to that broker or other work station user. To that end, the stored computer program automatically stores in the variable price data corresponding to a limited, predetermined number (e.g., 300 for purposes of specificity only) of securities whose price information was last requested at the work station. (Higgins, col. 5, lines 41-59.)

Higgins thus discloses completing programming (*i.e.*, the multi-window display) by selecting a specific datum (e.g., "securities of interest to that broker or other work station user") from prestored data and processing the selected data to

place information (*i.e.*, the specified market data) into a portion of the programming to be completed (*e.g.*, the second ticker field). (*See*, Exhibit 1010, \P 69-73.)

Third Element

The third element of claim 1 recites "storing a control signal, which is operative at at least one particular kind of station, said control signal operative to cause said execution of said computer program." Higgins discloses multiple control signals that cause execution of the computer program on a workstation. For instance, Higgins discloses that "the work stations 110 have a single entry keyboard 112 which may be employed by a user (e.g., a broker) to specify various kinds of information desired for viewing via his display 107" and further discloses that "depending upon the user-entered key strokes, the specific format of the multi-window display may vary." (Higgins, col. 4, lines 24-41.) The user-entered key strokes disclosed in Higgins are control signals that cause execution of the programming to vary the work station display. Further, Higgins explains that such user-entered criteria (*i.e.*, control signals) are stored in RAM 111:

The multiple window display format *chosen by the user via keyboard 112* includes a second ticker ("TICKER-2") specified under the user control. In accordance with varying aspects of the present invention, the user may format his own personal ticker by establishing criteria which a trade message from ticker

plant 35 must satisfy to pass to the TICKER-2 window field 147 for viewing. *The criteria, stored in RAM 111*, may specify trades in only a specific enumerated list of securities, trades from specific exchange(s), and/or so forth. (Higgins, col. 4, line 60 - col. 5, line 5, emphasis added; *see also, col. 5*, lines 23-26 and Fig. 2.)

As another example of the use of control signals, Higgins discloses that "[a]s new trades in the monitored 300 security population are reported via the ticker plant 35, communications link receiver 98, demultiplexer 105 and work station central processor 103 automatically change the stored price information in RAM 111. The stored security price information also automatically changes the price presentation for the respective securities wherever a security appears in any of the multiple windows (fields) of the display." (Higgins, col. 5, line 65 - col. 6, line 5.) More specifically with reference to Fig. 4, Higgins explains:

Examining the flow chart of FIG. 4, the first step 301 reads into the computer CPU the next incoming stock symbol, price, volume and related information (ticker message) originated by ticker plant 35, and furnished to the work station 110 i,j,k via its corresponding branch apparatus 70, 80, 81 via cable 103 and demultiplexer 105. Test 303 examines each of the application stock lists (i.e., the LRU list, the list associated with the limit processing, and so forth). If the security being characterized by the ticker plant message is not in any such list (N.0. output of test 303), control passes to test 320 to determine whether or not the stock data is appropriate for one of the tickers (e.g.,

142 or 147 of FIG. 2) in the user display. Assuming that the trade information being reported by ticker plant 35 is germane to one or more of the applications for that specific work station 110, the data base in RAM 111 associated with that security is updated (step 308) to reflect the last trade and quotations for that stock and step 310 updates all applications (windows and the related window-driving storage) associated with that stock as necessary. Thus, as only one example and assuming that the stock having the trade information then being reported by the ticker plant was in the LRU list and data base, the information being reported replaces the older data for that security stored in the data base of the user's RAM 111. (Higgins, col. 8, lines 38-63.)

The reporting of new trades transmitted from the ticker plant 35 is therefore a control signal that is received and stored by the workstation and that causes execution of the program to automatically change the information in the multiwindow display. (*See*, Exhibit 1010, ¶¶ 74-77.)

Final Element

The final element of claim 1 recites "whereby said station of a particular kind is enabled to deliver complete programming." As explained above, the workstations 110 disclosed in Higgins are enabled to deliver complete programming by displaying and populating a multi-window display that includes one or more fields (*e.g.*, the second ticker and the MONITOR field) that are populated based on stored user-specific criteria. (*See*, Exhibit 1010, ¶ 78-80.)

In conclusion, because the Higgins reference discloses each and every element of claim 1 of the Harvey '131 Patent, the claim is anticipated under 35 U.S.C. § 102(e).

2. Claim 3

Claim 3 depends from claim 1 and further recites "wherein said prestored data designates subscriber data, said method further comprising the step of storing subscriber data." As explained above with reference to claim 1, Higgins discloses that one or more fields (*e.g.*, the second ticker) in a multi-window display are formatted and populated based on user-specific criteria that is prestored in work station RAM 111. (*See*, Higgins, col. 4, line 60 – col. 5, line 1.) Regarding the user-specific nature of the stored data, Higgins explains that "[t]he user work station RAM 111 contains a good deal of the data of most interest to the specific work station 110 user and, in general, the RAM 111 contents vary from user to user." (Higgins, col. 2, lines 21-25.) The stored criteria disclosed by Higgins is specific to a particular subscriber, and is thus subscriber data within the broadest reasonable meaning of that term. (*See*, Exhibit 1010, ¶¶ 81-87.) Claim 3 is therefore anticipated by Higgins under 35 U.S.C. § 102(e).

3. Claim 4

Claim 4 depends from claim 1 and further recites "wherein said control signal comprises a series or stream of sequentially transmitted control instructions,

said method further comprising the step of storing in said control signal two or more control instructions in a specific order with information designating a time period." Higgins discloses the receipt of stock update information, which is received in sequential order, stored in RAM 111 and causes the ticker information on the display 107 to change. The stock update information is therefore a series or stream of two or more sequentially transmitted control instructions that are received and stored in a specific order by RAM 111. In addition, Higgins discloses that the stock update information may include a field indicating the time of the last trade. (*See*, Higgins, col. 5, lines 23-26 and Fig. 2.) The stock update information disclosed in Higgins designates the time period between trades. (*See*, Exhibit 1010, ¶¶ 88-92.) Claim 4 is therefore anticipated by Higgins under 35 U.S.C. § 102(e).

4. Claim 6

Claim 6 depends from claim 1 and further recites "wherein said portion to be completed comprises generally applicable information." As detailed above with reference to claim 1, Higgins discloses a computer program that provides a multiwindow display that includes portions to be completed (*e.g.*, the second ticker or the MONITOR field) by accessing prestored data (*e.g.*, the criteria stored in RAM 111). In addition to displaying information derived from the prestored data (*e.g.*, the user-specific market data), the multi-window display also includes generally

applicable information (*i.e.*, information that is not user-specific.) For instance, as shown in Fig. 2, the second ticker and MONITOR fields both include header and other general formatting information that is independent of the prestored user-specific data. (*See*, Higgins, Fig. 2 and col. 4, line 60 - col. 5, line 36.) The second ticker field 147 shown in Fig. 2 includes the generally applicable header "Ticker-1." In addition, the multi-window display 107 illustrated in Fig. 2 includes other generally applicable information, such as the non-user-specific NYSE ticker information displayed in field 142. (*See*, Higgins, Fig. 2 and col. 4, lines 45-59.) (*See also*, Exhibit 1010, ¶¶ 93-97.) Claim 6 is therefore anticipated by Higgins under 35 U.S.C. § 102(e).

5. Claim 9

Claim 9 depends from claim 1 and further recites "wherein a control signal causes a controller operatively connected to said storage station to control a peripheral device, said method further comprising the step of: storing said control signal." As detailed above with reference to claim 1, Higgins discloses multiple control signals that cause execution of the computer program on a workstation to control a display (*i.e.*, a peripheral device.) The display device 107 (*i.e.*, a peripheral device) is shown in Fig. 1B. Multiple controls signals are received and stored by the workstation for controlling the display 107. For instance, Higgins discloses that "the work stations 110 have a single entry keyboard 112 which may

be employed by a user (e.g., a broker) to specify various kinds of information desired for viewing via his display 107" and further discloses that "depending upon the user-entered key strokes, the specific format of the multi-window display may vary." (Higgins, col. 4, liens 24-41.) The user-entered key strokes disclosed in Higgins are control signals that control the display 107.

As another example, Higgins discloses that "[a]s new trades in the monitored 300 security population are reported via the ticker plant 35, communications link receiver 98, demultiplexer 105 and work station central processor 103 automatically change the stored price information in RAM 111. The stored security price information also automatically changes the price presentation for the respective securities wherever a security appears in any of the multiple windows (fields) of the display." (Higgins, col. 5, line 65 - col. 6, line 5.) The new trade information received and stored in RAM 111 by the work station is therefore a control signal that controls the output of the display. (*See*, Exhibit 1010, ¶¶ 98-109.) Claim 9 is therefore anticipated by Higgins under 35 U.S.C. § 102(e).

6. Claim 11

Claim 11 depends from claim 1 and further discloses "wherein said storage device is an ultimate receiver station." Higgins discloses that financial market data is received by the work station 110 from "more senior computers in the computer

hierarchy." (*See*, Higgins, col. 2, lines 27-41.) More particularly, as shown in Figs. 1A and 1B, the work station 110 is the final destination (*i.e.*, the ultimate receiver station) for information from upstream computers, including from the New York Stock Exchange 28, ticker plants 28, an area-serving computer 50 and branch computer 90. (*See*, Figs. 1A and 1B, and col. 2, lines 27-57.) (*See also*, Exhibit 1010, ¶¶ 110-114.) Claim 11 is therefore anticipated by Higgins under 35 U.S.C. § 102(e).

B. Claims 1, 3, 4, 6, 9 and 11 are Anticipated by Hedges (US 4,339,798)

The Hedges patent (Exhibit 1008) discloses "[a] remote gaming system for use with a wagering or gambling establishment such as a casino to enable a player's participation in a selected one of a plurality of wagering games from a remote location." (Hedges, Abstract.) "The player station includes a live game display for displaying a selected one of a plurality of games being played at the croupier station, such as roulette or keno. The player station includes a changeable playboard for displaying a selected one of a plurality of wagering possibilities corresponding to a selected one of the plurality of games played at the croupier station." *Id.* An example of a remotely displayed playboard for a roulette game is illustrated in Fig. 4 of Hedges, which is reproduced below.

(C	YOU	HAVE		R	OUL	ETT	ΓΕ)	C	UNIT	AMOUN	т	
ODDS THIS BET									ľ	UMBER	OF UN	IITS		
	EXCEEDED CASH AVAILABLE									C	EN	TER		
CANCEL ALL BETS THIS PLAY				AY					C	15 S T0	CLOSE		•	
4	0 0	3	6	9	12	15	18	\$1	24	27	30	33	36	3 <u>rd</u> Column
┝	0	2	5	8	11	14	17	20	23	26	29	32	35	2 <u>ND</u> Column
		1	4	7	10	13	16	19	22	25	28	31	34	I <u>st</u> Column
		FIRST DOZEN				SECOND		DOZEN		THIRD		DOZEN		
	[- ا	• 18	.ODI)	RE	D	BĻA	CK ·	EV	EN	19-	36] _
	20-	1-1-1-					F	G.—-	4					

As shown in Fig. 4 (above), the playboard disclosed in Hedges includes fields to display the current state of a remote casino game and also includes fields for displaying items relative to the player's account, such as total credit remaining. (*See*, Hedges col. 4, lines 5-13.)

As demonstrated below, the Hedges reference discloses each and every limitation of claims 1, 3, 4, 6, 9 and 11 of the Harvey '131 Patent. (See , Exhibit 1010, ¶¶ 115-183.)

1. Claim 1

Preamble

The preamble of claim 1 recites "[a] method of enabling a station of a particular kind to deliver complete programming, said station including a storage device." Hedges discloses "[a] remote gaming system for use with a wagering or

gambling establishment such as a casino to enable a player's participation in a selected one of a plurality of wagering games from a remote location." "The system includes a croupier station, a credit station and a player station remotely located from the croupier station and the credit station." (Hedges, Abstract.) The player station 10 (*i.e.*, a station of a particular kind) includes a remote gaming terminal (RGT) playboard 20 and a television monitor 21. (*See*, Hedges, Fig. 1 and col. 2, lines 66 – col. 3, lines 22.)

As shown in Fig. 9 (reproduced below), the remote gaming terminal includes "read only memory (ROM) 91 to provide sufficient storage to hold the remote gaming terminal software and random access memory (RAM) 92 to hold temporary results of processing." (Hedges, col. 6, lines 27-36.) "RAM 91 [sic] is used for temporary storage of data which may change during the operation of the RGT. An area is reserved for status tables 164 which defines the current status of the RGT, including information about the mode and game being played and, in conjunction with the mode and game control tables 159-162, defines what the next operations may or must be." (Hedges, col. 9, lines 60-66.) Hedges therefore discloses a station of a particular kind (*i.e.*, player station 10) that includes a storage device (*i.e.*, ROM 91 and RAM 92.)



Hedges further discloses methods for enabling the player station 10 to deliver complete programming. For instance, Fig. 4 of Hedges depicts an example of a roulette playboard that may be displayed by the remote gaming terminal 20. (*See*, Hedges, Fig. 4 and col. 4, lines 5-13.) The roulette playboard is a composite video signal that is generated by a controller 61 and displayed on a monitor 60. (*See*, col. 3, line 61 - col. 4, line 13.) As shown in Fig. 4 of Hedges, the roulette

playboard "contains blocks of different colors for displaying possible wagers in a format which simulates the format of a playing board in the live game selected." "Display monitor 60 also displays items relative to the player's account such as total credit remaining and items pertinent to the game such as wagering limits, payoff odds, and time remaining in which to enter a bet." (Hedges, col. 4, lines 5-13.) That is, the remote gaming terminal 20 in Hedges delivers complete programming by accessing stored data to display a roulette playboard and to populate the playboard with both user-specific and non-user-specific data, such as the wagering limits, payoff odds, and the user's total remaining credit. (*See*, Exhibit 1010, ¶ 130-133.)

First Element

The first element of claim 1 recites "storing programming at said storage device, said programming comprising a computer program and a portion to be completed by accessing prestored data at said station of a particular kind." As detailed above, Hedges discloses a computer program that displays a playboard 20 on a monitor 60, such as the roulette playboard illustrated in Fig. 4. (*See*, Hedges, Fig. 4; *see also*, col. 2, line 66 – col. 3, line 3 ("The player station 10 includes a playboard 20 which displays, as will be described, the particular game in progress which the player will observe by watching typical TV monitor 21.")) The playboard includes portions that are completed by accessing prestored data. More

specifically, with regard to the operation of the remote gaming terminal (RGT) computer program and memory, Hedges discloses:

Referring now to FIG. 9, processor 41 of FIG. 2 is depicted in more detail and includes typically Intel's 8085 microprocessor 90 to provide computing power, read only memory (ROM) 91 to provide sufficient storage to hold the remote gaming terminal software and random access memory (RAM) 92 to hold temporary results of processing. Also included is decode logic 93 to provide means to access the playboard and communications devices by providing control signals on a portion of bus 97. (Hedges, col. 6, lines 27-36.)

The functions of the remote gaming terminal (RGT) are controlled by microprocessor instruction sequences and tables of data which are permanently stored in the Read Only Memory (ROM) 91 of FIG. 9 and hereinafter is referred to as the RGT firmware. The firmware is interpreted by microprocessor 90 in the RGT to cause it to generate the appropriate playboard display, sense commands entered by the player, control the magnetic card reader, communicate with the credit station, and so forth. (Hedges, col. 8, line 61 - col. 9, line 2.)

The specific operation of the system in response to a stimulus from the credit station or the player is determined by these program modules in conjunction with tables of data stored in ROM 91 and Random Access Memory (RAM) 92 of FIG. 9. The tables in ROM 91 define the operation of the RGT for each mode of operation and game while the tables in RAM 92 contain information about the current state of operation of the RGT. (Hedges, col. 9, lines 10-18.)

FIG. 12 illustrates how the ROM 91 and RAM 92 of FIG. 9 are used for the RGT...

ROM 91 also contains display descriptive tables 163 comprising data which are interpreted by the display control program 158 to form specific display patterns. These patterns range from small and simple ones such as a square to complex displays such as the entire roulette playboard depicted in FIG. 4.

RAM 91 [*sic*] is used for temporary storage of data which may change during the operation of the RGT. An area is reserved for status tables 164 which defines the current status of the RGT, including information about the mode and game being played and, in conjunction with the mode and game control tables 159-162, defines what the next operations may or must be. (Hedges, col. 9, lines 27-59.)

Hedges thus discloses storing programming that includes a portion to be completed (*e.g.*, the playboard 20) by accessing prestored data (*e.g.*, the tables 163, 164 in ROM 91 and RAM 92) at said station of a particular kind. (*See*, Exhibit 1010, ¶ 134-140.)

Second Element

The second element of claim 1 recites "wherein said computer program is operative to complete said portion when executed at said station of a particular kind, said execution of said computer program enabling a processor at said station of a particular kind to select a specific datum from said prestored data and place

information, which results from a processing of said selected datum, into said portion to be completed, thereby completing said programming." As detailed above with reference to the First Element of claim 1. Hedges discloses execution of a computer program (e.g., the RGT firmware) to select a specific datum from prestored data (e.g., data (including one or more "datums") from the tables 163, 164 in ROM 91 and RAM 92). (See, e.g., Hedges, col. 6, lines 27-36; col. 8, line 61 - col. 9, line 2; col. 9, lines 10-18 and 27-59.) The prestored data is used to populate the playboard 20, *i.e.*, to place information resulting from the processed datum into said portion to be completed. For instance, in the roulette playboard example illustrated in Fig. 4 of Hedges, stored datum from ROM 91 is used to complete the playboard 20 in order to form the specific display pattern of the Roulette table, and stored datum from RAM 92 is used to populate the Roulette table with current game data. (See, e.g., Figs. 4 and 12 and col. 9, lines 28-66.) Hedges thus discloses completing programming by selecting a specific datum from prestored data and processing the selected datum to place information into the portion to be completed. (See, Exhibit 1010, ¶ 141-146.)

Third Element

The third element of claim 1 recites "storing a control signal, which is operative at at least one particular kind of station, said control signal operative to cause said execution of said computer program." Hedges discloses multiple

control signals which operate to cause execution of a computer program, such as the RGT firmware. For instance, with reference to Fig. 9, Hedges explains that the operation of the system is controlled by control signals received from the credit station or the player as well as from data (*i.e.*, control signals) stored in ROM 91 and RAM 92:

The firmware is interpreted by microprocessor 90 in RGT to cause it to generate sense commands entered by the player, control the magnetic card reader, communicate with the credit station, and so forth. (Hedges, col. 8, line 65 - col. 9, line 2, emphasis added.)

The specific operation of the system in response to a stimulus from the credit station or the player is determined by these program modules in conjunction with tables of data stored in ROM 91 and Random Access Memory (RAM) 92 of FIG. 9. The tables in ROM 91 define the operation of the RGT for each mode of operation and game while the tables in RAM 92 contain information about the current state of operation of the RGT. Since certain operations are more important, or must be performed more rapidly than others, a prioritized list of tasks (the task queue) to be performed is maintained in RAM 92 of FIG. 9. One program module, the monitor, serves to coordinate the activities of processor 90 by crediting entries in the task queue and transferring control to the appropriate program module in response to stimuli to the RGT and in accordance with the rules of operation represented by the data in the tables. (Hedges, col. 9, lines 10-27, emphasis added; see also, col. 4, liens 5-13.)

The stimulus received from the credit station or from the player as well as the data stored in ROM 91 and RAM 92 all cause execution of the RGT firmware to generate and display the completed playboard (from an incomplete playboard (patterns) stored in ROM 91 and computed data.) This data is therefore control signals that are stored and are operative at the remote gaming terminal (RGT) to cause execution of the RGT firmware. (*See*, Exhibit 1010, ¶¶ 147-149.)

Final Element

The final element of claim 1 recites "whereby said station of a particular kind is enabled to deliver complete programming." As detailed above with reference to the Preamble of claim 1, Hedges discloses methods for enabling the player station 10 to deliver complete programming. For instance, with reference to the example illustrated in Fig. 4 of Hedges, the remote gaming terminal 20 delivers complete programming by accessing stored data to display a roulette playboard and to populate the playboard with both user-specific and non-user-specific data, such as the wagering limits, payoff odds, and the user's total remaining credit. (*See, e.g.,* Hedges, Fig. 4 and col. 4, lines 5-13; col. 9, lines 27-59.) (*See also*, Exhibit 1010, ¶¶ 150-152.)

In conclusion, because the Hedges reference discloses each and every element of claim 1 of the Harvey '131 Patent, the claim is anticipated under 35 U.S.C. § 102(b).

2. Claim 3

Claim 3 depends from claim 1 and further recites "wherein said prestored data designates subscriber data, said method further comprising the step of storing subscriber data." As detailed above with reference to claim 1, Hedges discloses a portion of programming (*e.g.*, the playboard 20) that is completed by accessing user-specific prestored data (*i.e.*, subscriber data.) For example, the roulette playboard illustrated in Fig. 4 of Hedges includes both user-specific and non-user-specific portions, which are displayed using data stored in ROM 91 and RAM 92. (*See*, Fig. 4 and col. 9, lines 27-59.) Hedges also discloses that "[d]isplay monitor 60 also displays items relative to the player's account such as total credit remaining and items pertinent to the game such as wagering limits, payoff odds, and time remaining in which to enter a bet." (*See*, Hedges, col. 4, lines 9-13.) This user-specific current game data (*i.e.*, subscriber data) is stored in RAM 92:

RAM 91 [*sic*] is used for temporary storage of data which may change during the operation of the RGT. An area is reserved for status tables 164 which defines the current status of the RGT, including information about the mode and game being played and, in conjunction with the mode and game control tables 159-162, defines what the next operations may or must be. (Hedges, col. 9, lines 60-66.)

For example, when the magnetic card reader program 158 causes a player account ID and encryption key data to be read from the

magnetic card reader 87 of FIG. 8 and stored in buffer area 165 of FIG. 12. (Hedges, col. 10, lines 1-5.)

Hedges thus discloses completing a portion of programming using stored user-specific data, which is subscriber data within the broadest reasonable meaning of that term. (*See*, Exhibit 1010, ¶ 153-157.) Claim 3 is therefore anticipated by Hedges under 35 U.S.C. § 102(b).

3. Claim 4

Claim 4 depends from claim 1 and further recites "wherein said control signal comprises a series or stream of sequentially transmitted control instructions, said method further comprising the step of storing in said control signal two or more control instructions in a specific order with information designating a time period." As detailed above with reference to claim 1, Hedges discloses multiple control signals that operate to cause execution of the RGT computer program. For instance, Hedges discloses that the execution of the RGT firmware to generate the playboard 20 is caused by control signals received from the credit station or player as well as data (*i.e.*, control signals) stored in ROM 91 and RAM 92. (*See, e.g.*, Hedges, col. 8, line 65 - col. 9, line 2; col. 9, lines 10-27.)

Further, Hedges discloses that one of the portions of the playboard controlled by execution of the RGT firmware may include a field displaying the time remaining to enter a bet:

Display monitor 60 also displays items relative to the player's account such as total credit remaining and items pertinent to the game such as wagering limits, payoff odds, *and time remaining in which to enter a bet*. (Hedges, col. 4, lines 5-13, emphasis added.)

In FIG. 7, controller 61 generates the display under control of a sequence of control bytes of data which are stored in a display storage memory 92. *Both the processor 41 and controller 61 have the ability to access the display storage memory 92 via data bus 96. Processor 41 stores the appropriate control bytes into the display storage memory via address bus 95, 97 and decode logic 93, as determined by the game selected and the subsequent play of the game.* Controller 61 of FIG. 3A reads the stored data from display storage memory 92 of FIG. 7 once every 1/30th of a second and generates the appropriate TV signals on buses 62-64, 67 to cause the display of the particular game selected on monitor 60 by the processor determined information. (Hedges, col. 4, lines 14-27, emphasis added.)

Hedges thus discloses storing a series or stream of two or more sequentially transmitted control signals that are stored in a specific order and that cause execution of the RGT firmware by processor 41 to designate a time period (*e.g.*, the time remaining to enter a bet) on the display monitor 60.

As another example of a stored sequence of two or more control signals, Hedges discloses a stored task queue that designates a task schedule (*i.e.*, information designated time period) to be executed by the RGT processor:

Since certain operations are more important, or must be performed more rapidly than others, a prioritized list of tasks (the task queue) to be performed is maintained in RAM 92 of FIG. 9. (Hedges, col. 9, lines 18-21.)

A third area of RAM 92 is the task queue 166, which is a list of data maintained and interpreted by monitor program 153 to define all of the operations or tasks currently scheduled to be accomplished by the RGT. (Hedges, col. 10, lines 10-13.)

Hedges thus discloses a stored control signal that comprises a series or stream of two or more sequentially transmitted control instructions, where the control signal includes control instructions in a specific order with information designating a time period. (*See*, Exhibit 1010, ¶¶ 158-167.) Claim 4 is therefore anticipated by Hedges under 35 U.S.C. § 102(b).

4. Claim 6

Claim 6 depends from claim 1 and further recites "wherein said portion to be completed comprises generally applicable information." As detailed above with reference to claim 1, Hedges discloses a portion of programming (*e.g.*, the playboard 20) that is completed by accessing both user-specific and non-userspecific prestored data. (*See, e.g.*, Hedges, col. 4, lines 14-27 and col. 11, lines 9-40.) For example, the roulette playboard illustrated in Fig. 4 of Hedges includes both user-specific and non-user-specific portions, which are displayed using data stored in ROM 91 and RAM 92. (*See,* Fig. 4 and col. 9, lines 27-59.) In the

example illustrated in Fig. 4, non-user-specific (*i.e.*, generally applicable) information on the playboard includes, for example, the general layout of the roulette playboard and current game information applicable to all players, such as the time remaining until the bet closes. (*See*, Hedges, Fig. 4 and col. 4, lines 5-13.) (*See also*, Exhibit 1010, ¶ 168-173.) Claim 6 is therefore anticipated by Hedges under 35 U.S.C. § 102(b).

5. Claim 9

Claim 9 depends from claim 1 and further recites "wherein a control signal causes a controller operatively connected to said storage station to control a peripheral device, said method further comprising the step of: storing said control signal." As detailed above with reference to claim 1, Hedges discloses multiple control signals that are stored in ROM 91 and RAM 92 and that are used by the RGT firmware to cause the controller 61 to display a changeable playboard 40 on a monitor 60 (*i.e.*, a peripheral device.) (*See, e.g.*, Hedges, Figs. 3A and 3B, col. 3, lines 36-63.)

In addition, Hedges discloses the control of other peripheral devices by the RGT firmware. For example, Hedges discloses that the RGT processor 41 also controls a magnetic card reader 87 (*i.e.*, a peripheral device) that is used to read player account data from a plastic card:

In FIG. 8, the authenticator 43 includes a magnetic card reader 87 (typically AMP-210) which scans magnetically encoded data on a plastic card. As depicted in FIG. 8 the card reader 87 is connected to processor 41 of FIG. 2 via I/O port 84, which could be Intel's Model 8255. I/O port 84 reads the logic level on input line 85, 86 (which are data and clock signals, respectively) from card reader 80 and places data on data bus 96 upon command on bus 97 from processor 41 of FIG. 2. In a preferred embodiment, processor 41 periodically reads the I/O port 84 at a rate exceeding the highest clock rate on bus 86 from card reader 87. When the clock signal makes a transition from low logic level to high logic level, I/O port 84 reads and saves the data in data bus 85 from the card reader 80. (Hedges, col. 5, lines 9-23.)

Hedges thus discloses a stored control signal that causes a controller operatively connected to said storage station to control a peripheral device. (*See*, Exhibit 1010, ¶¶ 174-179.) Claim 9 is therefore anticipated by Hedges under 35 U.S.C. § 102(b).

6. Claim 11

Claim 11 depends from claim 1 and further discloses "wherein said storage device is an ultimate receiver station." Hedges discloses that the player station 10, which includes the ROM 91 and RAM 92 storage devices, is connected with a casino station 11 via a digital coaxial bus 22. (*See*, Hedges, Fig. 1 and col. 2, line 66 – col. 3, line 3.) The images and current game data for the casino game being displayed on the player station 10 originate at the casino station 11 and are

transmitted and displayed at the player station 10. (*See, e.g.,* Hedges, col. 3, lines 4-11 and 18-39.) The player station 10 is therefore an ultimate receiver station in the Hedges system. (*See*, Exhibit 1010, ¶¶ 180-183.) Claim 11 is therefore anticipated by Hedges under 35 U.S.C. § 102(b).

C. Claims 1, 3, 6, 9 and 11 are Anticipated by Sitrick (US 4,572,509)

The Sitrick patent (Exhibit 1009) discloses "a distributed game system comprising a plurality of video game apparatus, selectively interlinkable to form a homogeneous single identity game system." (Sitrick, col. 1, lines 20-23.) Within the video game audiovisual display, "each user is identified by a distinguishable representation." "In one embodiment a digitized image of each user's face is used as the distinguishable representation." (Sitrick, col. 1, lines 45-49.) In one example, a plurality of video game consoles 3100 are controlled by a master controller 3200, as illustrated in Fig. 3 (reproduced below.)



As demonstrated below, the Sitrick reference discloses each and every limitation of claims 1, 3, 6, 9 and 11 of the Harvey '131 Patent. These claims are therefore anticipated by Sitrick under 35 U.S.C. § 102(b). (See, Exhibit 1010, ¶¶ 184-237.)

1. Claim 1

Preamble

The preamble of claim 1 recites "[a] method of enabling a station of a particular kind to deliver complete programming, said station including a storage device." Sitrick discloses "[a] system of distributed video game apparatus [that] are capable of exhibiting an interactive single identify game." "In one embodiment

there is provided a distributed game system comprising a plurality of video game apparatus, selectively interlinkable to form a homogenous single identity game or as a peer game in the single identify system." (Sitrick, Abstract.) As shown in Figs. 2C-2D, the distributed game system may include a plurality of user consoles (*i.e.*, stations of a particular kind) that are controlled by a master controller 3000. (See, Sitrick, Figs. 2C and 2D and col. 4, line 48 – col. 6, line 2.) As illustrated in Fig. 3, each of the user console stations 3100 includes local storage 3040 and a hardware layer 3001. The hardware layer 3001 "comprises the central processing unit, memory, and various support logic circuitry." "Nonvolatile memory and/or magnetic storage medium may also be provided at this layer." (Sitrick, col. 6, lines The "local storage area (3040 and 3240) provides a data buffer for 45-49. temporarily storing data for communications to adjacent layers, and in the case of the master controller 3200 for communications to the disk 3110." (Sitrick, col. 6, line 65 - col. 7, line 1.) Sitrick thus discloses a station of a particular kind (*i.e.*, the user consoles) that includes a storage device (*i.e.*, the memory in hardware layer 3001 or the local storage area 3040.)

Sitrick further discloses enabling the user consoles to deliver complete programming. For instance, with reference to Fig. 3, Sitrick discloses that the "video management layer 3260 of the master controller 3200 can act as a display composer performing global and special functions while leaving local display

composing functions to the local video management layers 3060 of the consoles 3100." (Sitrick, col. 7, lines 11-16.) The user consoles thus complete the programming to display the game audiovisual presentation. (*See*, Exhibit 1010, ¶¶ 195-202.)

First Element

The first element of claim 1 recites "storing programming at said storage device, said programming comprising a computer program and a portion to be completed by accessing prestored data at said station of a particular kind." As detailed above with reference to the Preamble, both the user consoles and the master controller of Sitrick, as illustrated in Fig. 3, include memory for storing the interactive gaming computer program and programming to be completed. (*See*, Sitrick, Fig. 3 and col. 6, line 39 - col. 7, line 25.) In addition, Sitrick further discloses that user-specific information may be entered and stored in order to customize the gaming program to the particular user (*i.e.*, to complete a portion of the computer program by accessing prestored data.) For instance, Sitrick discloses using the video console to enter and store data for adding user created visual imagery or an image of the user for use in the video game audiovisual presentation:

In accordance with another aspect of the present invention, each user is identified by a distinguishable representation. For example, color, size or shape can be used to distinguish users. *In one embodiment a*

digitized image of each user's face is used as the distinguishable representation. (Sitrick, col. 1, lines 44-49, emphasis added.)

The video game system has a video image input means, 200 of FIG. 1B, which provides the necessary hardware to input and digitize a visual image of the user of the individual game apparatus 1000. This mode may be selected either by the switch 105 or by input from the keyboard 110, and positioning of the video image input means 200 can be controlled via means of the joy stick 100 with the video image output being displayed on the display screen 140 to provide visual feedback to the user of the individual game apparatus of the image being digitized. *When the desired image has been digitized and fed back for display to the user, the user can provide an input stimulus, either from the keyboard or via the switch 105, to cause the storage in the memory of the apparatus 1000 of the visual image of the user... (Sitrick, col. 11, lines 16-31, emphasis added.)*

The user created visual display, either of the user or of the user created visual imagery, can then represent that user in the video game audiovisual presentation, either for the stand-alone game, or for a multiuser video game. Thus, the user can create his or her own spacecraft, race car, or other preselected character functions (e.g., subimage identifier segments) which can then be incorporated into the overall video game audiovisual presentation in combination with a predefined set of complimentary audiovisual imagery segments according to a predefined set of game rules. (Sitrick, col. 11, lines 41-51.)

Sitrick thus discloses storing programming at a storage device that includes a computer program and a portion to be completed by accessing prestored data at a station of a particular kind. (*See*, Exhibit 1010, ¶¶ 203-207.)

Second Element

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The second element of claim 1 recites "wherein said computer program is operative to complete said portion when executed at said station of a particular kind, said execution of said computer program enabling a processor at said station of a particular kind to select a specific datum from said prestored data and place information, which results from a processing of said selected datum, into said portion to be completed, thereby completing said programming." As detailed above with reference to the first element of Claim 1, Sitrick discloses that userspecific information, such as a visual image of the game user, is prestored and processed to be included in the game audiovisual presentation displayed by the game console. (See, e.g., Sitrick, col. 1, lines 44-49, col. 11, lines 16 – 51.) Sitrick thus discloses selecting a specific datum from prestored data, such as the visual image of the game user or other user created visual imagery, and processing the data to complete the programming by generating the game audiovisual presentation. (See, Exhibit 1010, ¶¶ 208-210.)

Third Element

The third element of claim 1 recites "storing a control signal, which is operative at at least one particular kind of station, said control signal operative to cause said execution of said computer program." Sitrick discloses multiple control signals that are used to cause execution of the game program on a console in order to generate the game audiovisual presentation. Control signals received by a game console are at least stored in the console's temporary memory 3040, as illustrated in Fig. 3. (*See,* Sitrick, col. 6, line 65 - col. 7, line 1.) For instance, with reference to the embodiment shown in Fig. 2B, Sitrick discloses:

The display apparatus 1200 can include a controller apparatus for coordinating data received from the plurality of user stations interconnected thereto. Alternatively, each of the user consoles 1000 can contain control circuitry for coordinating global action, and the display apparatus 1200 can contain only a minimum of interface circuitry. (Sitrick, col. 4, lines 39-45.)

Further examples of control signals that cause execution of game programming on a game console are included throughout the Sitrick reference:

The master controller 3000 provides *means for controlling* the displayed visuals of selected game apparatus on the video display unit responsive to respective user responsive inputs of the selected game apparatus V.G.1 to V.G.N., and according to one of a plurality of predetermined logical sequences. (Sitrick, col. 5, lines 8-14, emphasis added.)

The master controller can provide unique user activated selection of audiovisual imagery *responsive to the users selected control signals*. For example, means can be provided for displaying a radar function for tracking other selected users movements and actions, or alternatively for providing an exploded view of a selected quadrant or subquadrant of previously or presently displayed imagery. (Sitrick, col. 5, lines 36-44, emphasis added.)

The display apparatus, V.D.U., are as described above with reference to FIGS. 2A-2D, and provide means for producing game imagery *representative of at least some of the user control signals* and responsive to the logical sequencing means. (Sitrick, col. 6, lines 10-15.)

The logical sequencing means sequences through one of a plurality of audiovisual works responsive to the data output of the memory *and to the plurality of user control signals*, thereby producing game action on the display apparatus according to a predetermined set of game rules as stored in the memory. As discussed above with reference to FIGS. 2C and 2D, the master controller and/or distributed logic sequencing means can provide one of the plurality of display functions responsive to user activation of a respective function control within the game consoles V.G.l to V.G.N. (Sitrick, col. 6, lines 19-30, emphasis added.)

Sitrick thus discloses storing a control signal, which is operative at at least one particular kind of station, said control signal operative to cause said execution of said computer program. (*See*, Exhibit 1010, ¶¶ 211-215.)

Final Element

The final element of claim 1 recites "whereby said station of a particular kind is enabled to deliver complete programming." As detailed above, Sitrick discloses that user-specific information, such as a visual image of the game user, is prestored and processed to be included in the game audiovisual presentation displayed by the game console, and thus enables the game console to deliver complete programming. (*See, e.g.*, Sitrick, col. 1, lines 44-49, col. 11, lines 16 – 51.) (*See also*, Exhibit 1010, ¶ 216-218.)

In conclusion, because the Sitrick reference discloses each and every element of claim 1 of the Harvey '131 Patent, the claim is anticipated under 35 U.S.C. § 102(b).

2. Claim 3

Claim 3 depends from claim 1 and further recites "wherein said prestored data designates subscriber data, said method further comprising the step of storing subscriber data." As detailed above with reference to Claim 1, Sitrick discloses that user-specific information may be entered and stored in order to customize the gaming program to the particular user. For instance, Sitrick discloses using the video console to enter and store data for adding user created visual imagery or an image of the user for use in the video game audiovisual presentation. (*See, e.g.*, Sitrick, col. 1, lines 44-49, col. 11, lines 16 - 51.) The user created visual imagery

or visual image of the user is specific to a particular game console user, and is thus subscriber data within the broadest reasonable meaning of the term. (*See*, Exhibit 1010, ¶¶ 219-223.) Claim 3 is therefore anticipated by Sitrick under 35 U.S.C. § 102(b).

3. Claim 6

Claim 6 depends from claim 1 and further recites "wherein said portion to be completed comprises generally applicable information." As detailed above with reference to Claim 1, Sitrick discloses interactive game programming that executes on a plurality of game consoles to display a game audiovisual presentation on each console. (See, e.g., Sitrick, col. 1, lines 19-49.) The audiovisual presentation includes both user-specific and non-user-specific information. For instance, the audiovisual presentation may include user-specific visual images (e.g., user created images such as customized race cars or rocketships) that are incorporated into the overall video game audiovisual presentation (i.e., non-user-specific game information, such as the image of a race track, etc.) (See, e.g., Sitrick, col. 1, lines 44-49, col. 11, lines 41-51.) The non-user-specific information displayed in the game audiovisual presentation is generally applicable information. (See, Exhibit 1010, ¶ 224-227.) Claim 6 is therefore anticipated by Sitrick under 35 U.S.C. § 102(b).

4. **Claim 9**

Claim 9 depends from claim 1 and further recites "wherein a control signal causes a controller operatively connected to said storage station to control a peripheral device, said method further comprising the step of: storing said control signal." As detailed above with reference to claim 1, Sitrick discloses multiple control signals that cause execution of the console game software to control an audiovisual game presentation. (See, e.g., Sitrick, col. 5, lines 8-14.) As shown in Fig. 3. Sitrick discloses that each video game console 3100 may include a video display unit 3070 (i.e., a peripheral device) on which the audiovisual game presentation is displayed. (See, Sitrick, col. 7, lines 19-25.) Sitrick thus discloses a control signal that causes a controller (e.g., the master controller 3200)operatively connected to a storage station (e.g., local storage 3040 and hardware memory 3001) to control a peripheral device (e.g., video display unit 3070.) Further, The control signals causing display of the audiovisual game presentation are stored in at least the local buffer memory 3040 of the game consoles 3100. (See, Sitrick, col. 6, line 65- col. 7, line 25.) (See also, Exhibit 1010, ¶¶ 228-232.) Claim 9 is therefore anticipated by Sitrick under 35 U.S.C. § 102(b).

6. Claim 11

Claim 11 depends from claim 1 and further discloses "wherein said storage device is an ultimate receiver station." As detailed above with reference to claim

1, Sitrick discloses that each video game console 3100 includes local storage 3040 as well as nonvolatile memory and a magnetic storage medium in the hardware layer 3001. (*See*, Sitrick, Fig. 3, col. 6, lines 45-49 and 65-68.) In the example illustrated in Fig. 3, the memory devices (*i.e.*, said storage device) are located in video game consoles 3100 controlled by a master controller 3200, where the master controller 3200 may initiate control signal transmissions to the video game consoles 3100 to cause display of an audiovisual game presentation. (*See*, Sitrick, col. 7, lines 6-25.) The game consoles 3200 are therefore ultimate receiver stations. (*See*, Exhibit 1010, ¶ 233-237.) Claim 11 is thus anticipated by Sitrick under 35 U.S.C. § 102(b).

D. Claim 4 is Obvious over Higgins in view of Hedges

As detailed above at Section V.A.1 of this Petition, each and every element of independent claim 1 and dependent claim 4 is disclosed by Higgins. To the extent, however, that it should be determined that Higgins does not explicitly disclose "wherein said control signal comprises a series or stream of sequentially transmitted control instructions, said method further comprising the step of storing in said control signal two or more control instructions in a specific order with information designating a time period," as recited in dependent claim 4, this claim element is disclosed by Hedges.

As detailed above in Section V.B.3, Hedges discloses a stored control signal that comprises a series or stream of two or more sequentially transmitted control instructions, where the control signal includes control instructions in a specific order with information designating a time period (*e.g.*, the time remaining to enter a bet or the task schedule). The combination of Higgins and Hedges thus teaches each and every element of claim 4. (*See*, Exhibit 1010, ¶¶ 238-241.)

Motivation to Combine

One of ordinary skill in the art would be motivated to consider both Higgins and Hedges because they are both related to displaying user-configurable information at a station in a distributed computer system. (See, Exhibit 1010, ¶¶ 242.) The person of ordinary skill in the computing arts would be motivated to combine Higgins and Hedges for many reasons, such as to supplement the teachings of Higgins relating to the display of various types of information pertaining to the user's stock portfolio with the teachings of Hedges regarding how to cause a station in a computing network to display information designating a time period. For instance, Higgins teaches that it is desirable to transmit information to a station in order to monitor user-specific stock-related information, such the time of the last trade for a particular stock. (See, Higgins, col. 5, lines 16-36.) Combined with the teachings of Hedges, it would have been obvious to the person of ordinary skill in the art to extend the teachings of Higgins to achieve the

predictable result of monitoring stock information pertaining to the lapse of a time period (*e.g.*, the amount of time since the last purchase, the amount of time remaining until a market closes, *etc.*)

Because the combination of Higgins and Hedges teaches all of the limitations of claim 4, claim 4 of the Harvey '131 Patent is obvious based on Higgins in view of Hedges and is unpatentable under 35 U.S.C. § 103(a).

E. Claim 4 is Obvious over Sitrick in view of Hedges

As detailed above at Section V.C.1 of this Petition, each and every element of independent claim 1 is disclosed by Sitrick. To the extent, however, that Sitrick does not disclose "wherein said control signal comprises a series or stream of sequentially transmitted control instructions, said method further comprising the step of storing in said control signal two or more control instructions in a specific order with information designating a time period," as recited in dependent claim 4, this claim element is disclosed by Hedges.

As detailed above in Section V.B.3, Hedges discloses a stored control signal that comprises a series or stream of two or more sequentially transmitted control instructions, where the control signal includes control instructions in a specific order with information designating a time period (*e.g.*, the time remaining to enter a bet or the task schedule). The combination of Sitrick and Hedges thus teaches each and every element of claim 4. (*See*, Exhibit 1010, ¶ 243-244.)

Motivation to Combine

One of ordinary skill in the art would be motivated to consider both Sitrick and Hedges because they are both related to displaying user-configurable information in an electronic gaming system. (*See*, Exhibit 1010, ¶ 245.) The person of ordinary skill in the computing arts would be motivated to combine Sitrick and Hedges for many reasons, such as to supplement the teachings of Sitrick relating to the coordination of multiple game terminals to provide a multiplayer gaming environment with the teachings of Hedges regarding how to coordinate information designating a time period between systems in a distributed environment. For instance, it would have been obvious to the person of ordinary skill in the art to extend the teachings of Sitrick with the teachings of Hedges to achieve the predictable result of coordinating a time period between the multiple game terminals in Sitrick's distributed video game system (*e.g.*, to uniformly display an amount of time remaining in a game.)

Because the combination of Sitrick and Hedges teaches all of the limitations of claim 4, claim 4 of the Harvey '131 Patent is obvious based on Sitrick in view of Hedges and is unpatentable under 35 U.S.C. § 103(a).

VI. MANDATORY NOTICES PURSUANT TO 37 C.F.R. § 42.8(a)(1)

Pursuant to 37 C.F.R. § 42.8(a)(1), the mandatory notices identified in 37

C.F.R. § 42.8(b) are provided below as part of this Petition.

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A. C.F.R. § 42.8(b)(a): Real Party-In-Interest

Zynga is the Petitioner and real party-in-interest.

B. C.F.R. § 42.8(b)(2): Related Matters

The Harvey '131 Patent is currently the subject of a patent infringement lawsuit brought by the assignee of the Harvey '131 Patent, Personal Media Communications, LLC ("PMC") against Zynga, captioned *Personalized Media Communications, LLC v. Zynga Inc.*, U.S. District Court for the Eastern District of Texas, Civil Action No. 2:12-cv-68-JRG ("PMC v. Zynga"). This judicial matter may affect, or be affected by, decisions made in this proceeding.

C. C.F.R. § 42.8(b)(3) and (4): Lead and Back-up Counsel and Service Information

Zynga provides the following designation of counsel:

Lead Counsel	Back-up Counsel
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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 address above. Zynga also consents to electronic service by email at the email addresses listed above.

VII. CONCLUSION

For the reasons set forth above, Petitioner has established a reasonable likelihood of prevailing with respect to at least one claim of the Harvey '131 Patent. PMC took advantage of the Patent Office rules to obtain an overlyexpansive claim scope that is far removed from the alleged invention described in its original patent application filed more than two decades earlier. Petitioner has demonstrated that the claims of the Harvey '131 Patent, now being asserted against online computer gaming technology, cover technology that was well known before the 1987 priority date of the patent. Indeed, Petitioner has set forth multiple

independent *prima facie* cases of invalidity with respect to each of claims 1, 3, 4, 6, 9 and 11 of the Harvey '131 Patent. Petitioner therefore requests that the Patent Office order an *Inter Partes Review* trial and then proceed to cancel claims 1, 3, 4,

6, 9 and 11.

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Respectfully submitted,

Date: 2/22/13

By:

David B. Cochran, Reg. No. 39,142 Joseph M. Sauer, Reg. No. 47,919 JONES DAY North Point, 901 Lakeside Avenue Cleveland, Ohio 44114 (216) 586-3939

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing Petition for *Inter Partes* Review of U.S. Patent No. 7,860,131, along with all exhibits supporting and filed with the Petition, were served on February 22, 2013 via Express Mail delivery directed to the attorney of record for the patent at the following address:

Thomas J. Scott Goodwin Procter LLP 901 New York Avenue, N.W. Washington, DC 20001

Date: 2/22/13

Joseph M. Sauer

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APPENDIX OF EXHIBITS

Exhibit No.	Title					
1001	U.S. Patent No. 7,860,131 ("the Harvey '131 Patent")					
1002	PMC Infringement Contention Claim Charts against Zynga for the Harvey '131 Patent, <i>Personalized Media Communications, LLC v.</i> <i>Zynga, Inc.</i> , Civil Action No. 2:12-cv-68 (E.D. Texas)					
1003	Excerpt from the file history of the Harvey '131 Patent: March 15, 1999 Supplemental Amendment					
1004	Excerpt from the file history of the Harvey '131 Patent: September 3, 2002 Office Action					
1005	Excerpt from the file history of the Harvey '131 Patent: March 3, 2003 Amendment					
1006	Plaintiff's Disclosure of Asserted Claims and Infringement Contentions, <i>Personalized Media Communications, LLC v. Zynga,</i> <i>Inc.</i> , Civil Action No. 2:12-cv-68 (E.D. Texas)					
1007	U.S. Patent No. 5,270,922 ("Higgins")					
1008	U.S. Patent No. 4,339,798 ("Hedges")					
1009	U.S. Patent No. 4,572,509 ("Sitrick")					
1010	Declaration of Dr. Charles J. Neuhauser Under 37 C.F.R. § 1.68 in Support of Petition for <i>Inter Partes</i> Review of U.S. Patent No. 7,860,131					
1011	Appendix to the Declaration of Dr. Charles J. Neuhauser: Dr. Neuhauser's current <i>curriculum vitae</i>					

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