

Consolidated Hearing

IPR2023-00995 (US 10,846,941)
IPR2023-00996 (US 10,991,165)

Sony Interactive Entertainment LLC

v.

Quantum Imaging LLC

September 13, 2024

Roadmap

- Overview of Claims
- Claim Construction
- Pisanich + POSITA's Knowledge (Ground 1)
- PSO Manual + POSITA's Knowledge (Ground 2)
- PSO Manual Authentication / Accessibility

Roadmap

- **Overview of Claims**
- Claim Construction
- Pisanich + POSITA's Knowledge (Ground 1)
- PSO Manual + POSITA's Knowledge (Ground 2)
- PSO Manual Authentication / Accessibility

Claim 1 of the '941 Patent

1. One or more non-transitory computer readable medium storing an interactive software application platform comprising:

at least one thematic/publishing logic module containing virtual thematic environment rules to coordinate actions to be taken to constitute and provide a virtual thematic environment on a visual component, the virtual thematic environment being a theme-based virtual world environment;

a primary application providing the virtual thematic environment; and a secondary application within the primary application, the secondary application being different from the primary application, the secondary application being launched from the primary application, and having first content utilized within a same application environment as second content provided by the primary application;

a graphics user interface (GUI) module including software that renders graphical display elements onto the visual component and permits a user to interact with a graphical display element within the virtual thematic environment, the GUI module providing a first user interface that is associated with the primary application and enabling the user to access the primary application through the first user interface, and a second user interface associated with the secondary application and enabling the user to access the secondary application through the second user interface;

a quantum imaging environment (QIE) module, the QIE module being a software layer that receives, interprets, and manipulates the second content so as to be accessible on different types of devices for use within the virtual thematic environment, the QIE module obtaining first real-time information and second real-time information, the QIE module supplying the first real-time information into the primary application, and supplying the second real-time information into the secondary application, the primary application configured to provide access to the first real-time information to the user within the virtual thematic environment via the first user interface, the secondary application configured to provide the second real-time information to the user within the virtual thematic environment via the second user interface; and

at least one digital content library module storing information, the information containing 2 dimensional and 3 dimensional content, and providing content management of information within the virtual thematic environment coordinated by the thematic/publishing logic module, the digital content library module being a content management application.

'941 Patent (Ex. 1001), Claim 1

Claim 23 of the '941 Patent

23. A computer system, comprising:
a client system and a server system communicating to
provide an interactive software application platform,
the interactive software application platform comprising:

* * *

'941 Patent (Ex. 1001), Claim 23

Claim 1 of the '165 Patent

1. A method of integrating real-time information into a virtual thematic environment using a computer system including a client and a server, comprising:

- providing a graphics user interface (GUI) module for use in the client system;
- providing a quantum imaging environment (QIE) module in one of the client or the server system;
- providing a thematic/publishing logic module in one of the client or the server system;
- providing a primary application in the client system;
- providing a first user interface that is associated with the primary application;
- sending a request for first real-time information via the QIE module to the world wide web;
- obtaining the first real-time information via the world wide web;
- downloading the first real-time information from the world wide web into the primary application;
- providing access to the first real-time information within the virtual thematic environment via the first user interface;

- providing at least one secondary application within the primary application at the client system;
- sending a request for second real-time information via the QIE module;
- obtaining the second real-time information via the world wide web;
- downloading the second real-time information into the secondary application;
- enabling a user to access the at least one secondary application through the first user interface; and
- enabling the user to control the at least one secondary application through a second user interface.

'165 Patent (Ex. 1001), Claim 1

Roadmap

- Overview of Claims
- **Claim Construction**
- Pisanich + POSITA's Knowledge (Ground 1)
- PSO Manual + POSITA's Knowledge (Ground 2)
- PSO Manual Authentication / Accessibility

Claim Construction: Decision on Institution



However, Patent Owner does not provide any express argument for why we should adopt any of those constructions or demonstrate that any of the constructions would be meaningfully different from the plain and ordinary meaning applied by Petitioner.⁵ *Id.* at 6–9. Indeed, we note that the constructions largely repeat the claim language with the clarification that what is claimed is computer software. *See id.* at 6–7 (setting forth district court constructions).

Having considered the record, we determine that no express claim construction is necessary for any claim terms. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (holding that only claim terms in controversy need to be construed, and only to the extent necessary to resolve the controversy (citing *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

'941 D.I. (Paper 11), 11;

'165 D.I. (Paper 11), 12

Claim Construction: Reply

Except as where noted below, the Board does not need to reach the construction of any term in order to resolve the Parties' dispute, because, as described herein, the claims are obvious even under Patent Owner's proposed constructions.

'941 Reply (Paper 31), 2

Level of Skill in the Art

The parties agree as follows:

- A **bachelor degree** in **computer engineering, computer science**, or a similar discipline
- **Two years** of professional experience in the fields of **networking** and **network-based systems or applications**, such as **client-server** and **web-based systems**, in the **specific context of console and gaming** or an equivalent level of skill, knowledge and experience
- A general knowledge of **3D rendering**

*'941 PO Response (Paper 24), 4-5;
'165 PO Response (Paper 24), 5*

Instituted Grounds

Ground	35 U.S.C. §	'941 Patent Claims	'165 Patent Claims
1 (Pisanich + POSITA's Knowledge)	103	1, 3, 5, 7-12, 23-26	1-3, 5-7, 10-12, 18
2 (PSO Manual + POSITA's Knowledge)	103	1, 3, 5, 7-12, 23-26	1-3, 5-7, 10-12, 18

'941 Petition (Paper 2), 1
'165 Petition (Paper 2), 1

Roadmap

- Overview of Claims
- Claim Construction
- **Pisanich + POSITA's Knowledge (Ground 1)**
- PSO Manual + POSITA's Knowledge (Ground 2)
- PSO Manual Authentication / Accessibility

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(19) World Intellectual Property Organization
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(25) Filing Language: English

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(71) Applicant: ELECTRONIC ARTS INC. [US/US]; 209 Redwood Shores Parkway, Redwood City, CA 94065 (US).

(72) Inventor: PISANICH, Gregory, M.; Morgan Hill, CA (US).

[Continued on next page]

(54) Title: INTEGRATION OF REAL-TIME DATA INTO A GAMING APPLICATION

(57) Abstract: Real world data is integrated into a gaming experience to influence the game and actions of a player. A game module creates game elements from the real world data associated with the location. Weather conditions are simulated based on weather information for different observation locations in the world, and traffic conditions are simulated as well. In a flight simulator game, the game integrates real aircrafts and real weather conditions as the player's aircraft navigates in the world.

WO 02/062436 A2

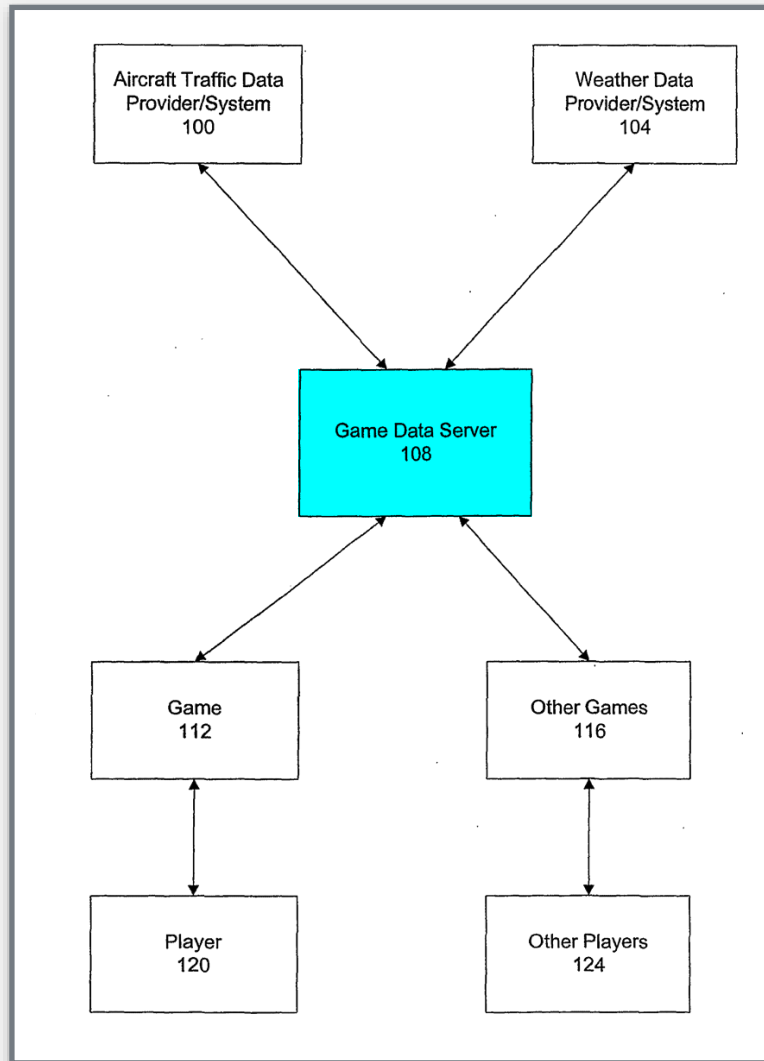
Sony Exhibit 1007
Sony v. Quantum

(57) Abstract: Real world data is integrated into a gaming experience to influence the game and actions of a player. A game module creates game elements from the real world data associated with the location. Weather conditions are simulated based on weather information for different observation locations in the world, and traffic conditions are simulated as well. In a flight simulator game, the game integrates real aircrafts and real weather conditions as the player's aircraft navigates in the world.

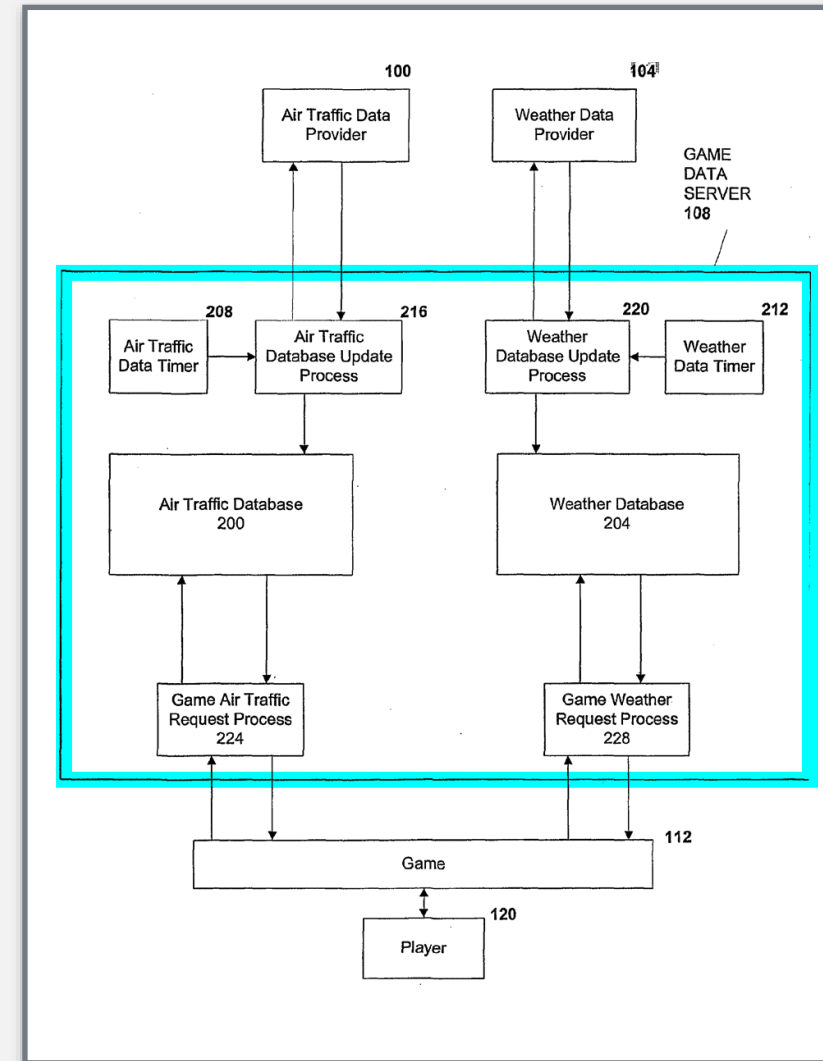
Pisanich (Ex. 1007), Abstract

Pisanich (Ex. 1007)

Pisanich: Game Data Server



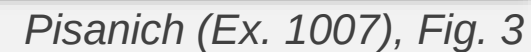
Pisanich (Ex. 1007), Fig. 1



Pisanich (Ex. 1007), Fig. 2

'941 Petition (Paper 2), 14;
'941 Reply (Paper 31), 8;
'165 Petition (Paper 2), 13;
'941 Reply (Paper 31), 8

SONY



Demonstrative Exhibit – Not Evidence

Pisanich: Four Limitations in Dispute

3

23. A computer system, comprising:

a client system and a server system communicating to provide an interactive software application platform, the interactive software application platform comprising:

at least one thematic/publishing logic module containing virtual thematic environment rules to coordinate actions to be taken to constitute a virtual thematic environment, the virtual thematic environment being a theme-based virtual world environment;

a graphics user interface (GUI) module, the GUI module including software that renders graphical display elements onto a visual component and permits the user to interact with the graphical display elements within a virtual thematic environment;

a primary application providing the virtual thematic environment;

a secondary application within the primary application, the secondary application being different from the primary application, the secondary application being launched from the primary application, and having first content utilized within a same application environment of the virtual thematic environment as second content provided by the primary application, the primary application receiving and using first real-time information to provide the second content, the secondary application

1

receiving and using second real-time information to provide the first content, the first real-time information being different from the second real-time information; a quantum imaging environment (QIE) module, the QIE module being a software layer configured to receive and interpret the first content and the second content such that the first content and the second content is manipulated so as to be accessible on different types of devices for use within the virtual thematic environment;

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at least one digital content library module storing information and providing content management of information within the virtual thematic environment, the digital content library module being a content management application; and

wherein the GUI module includes software that renders graphical display elements onto the visual component and permits the user to interact with the graphical display elements within the virtual thematic environment, the GUI module providing a first user interface that is associated with the primary application and enabling the user to access the primary application through the first user interface, and a second user interface associated with the secondary application and enabling the user to access the secondary application through the second user interface.

2

'941 Patent (Ex. 1001), Claim 23

a quantum imaging environment (QIE) module, the QIE module being a software layer that receives, interprets, and manipulates the second content so as to be accessible on different types of devices for use within the virtual thematic environment, the QIE module obtaining first real-time information and second real-time information, the QIE module supplying the first real-time information into the primary application, and supplying the second real-time information into the secondary application, the primary application configured to provide access to the first real-time information to the user within the virtual thematic environment via the first user interface, the secondary application configured to provide the second real-time information to the user within the virtual thematic environment via the second user interface; and

'941 Patent (Ex. 1001), Claim 1



providing a quantum imaging environment (QIE) module in one of the client or the server system;

'165 Patent (Ex. 1001), Claim 1

“Software Layer” According To Patent Owner

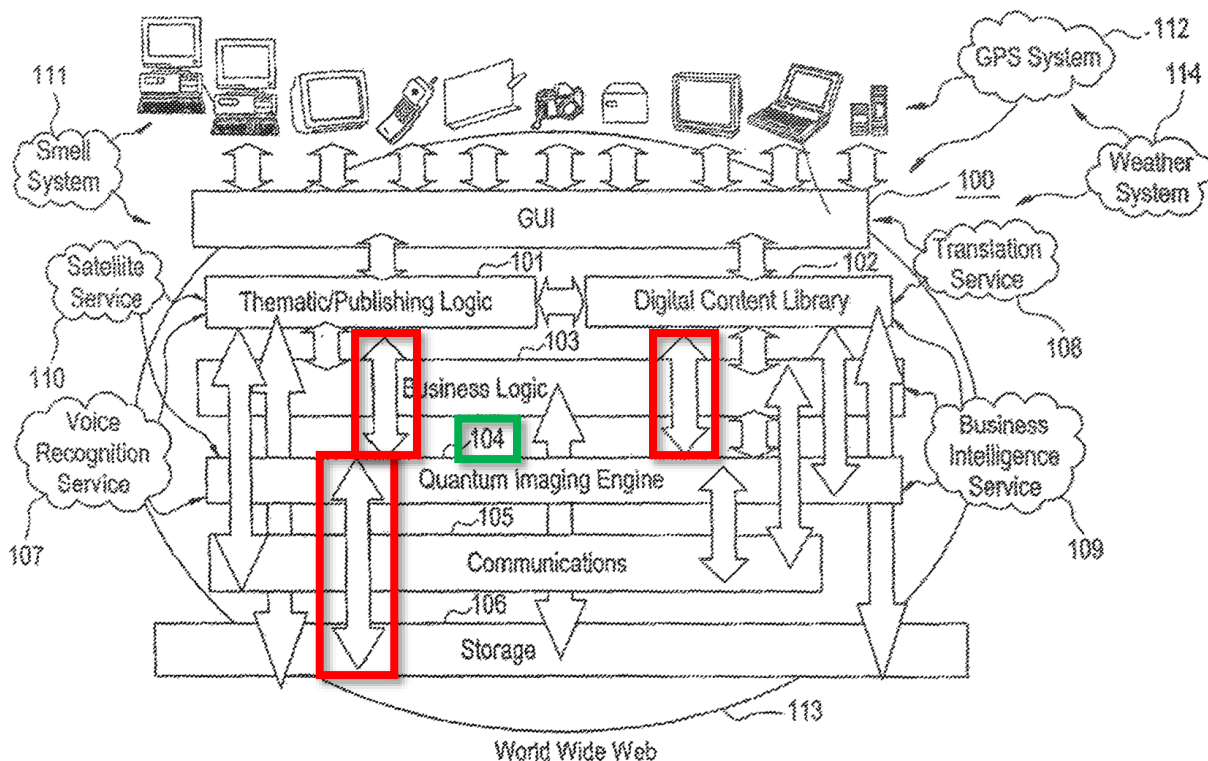
that the QIE module is “a software layer.” Further, the game data server 108 cannot be a “QIE module,” nevermind that the QIE module is “a software layer.” As explained by Medvidović, a software layer is used to guide the partitioning of a system’s functionality into modules, where the modules assigned to one layer interact only with those that are assigned to adjacent layers. Ex-2005, ¶63 discussing, Ex-2006, pp. 199, 203. The separation of a system’s functionality into layers allows

’941 PO Response (Paper 24), 17

1

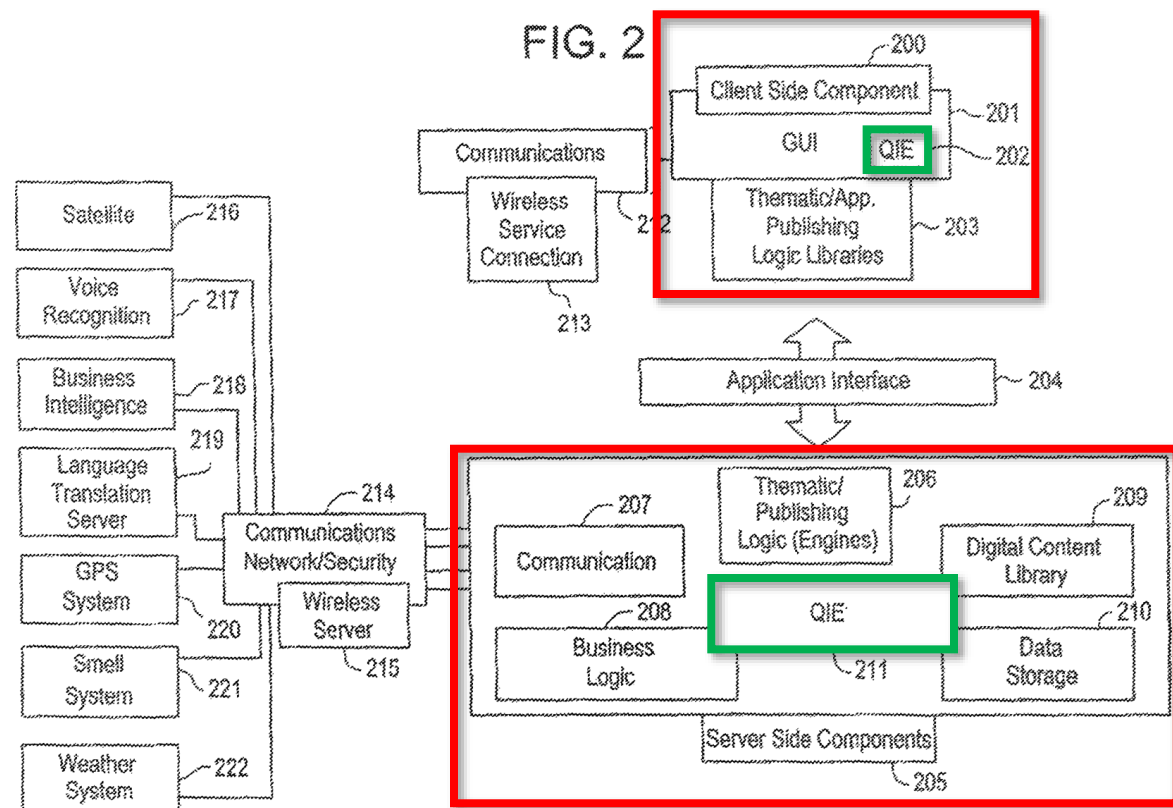
No Support for PO's Narrow "Software Layer"

FIG. 1



'941/'165 Patent (Ex. 1001), Fig. 1 (annotated)

FIG. 2



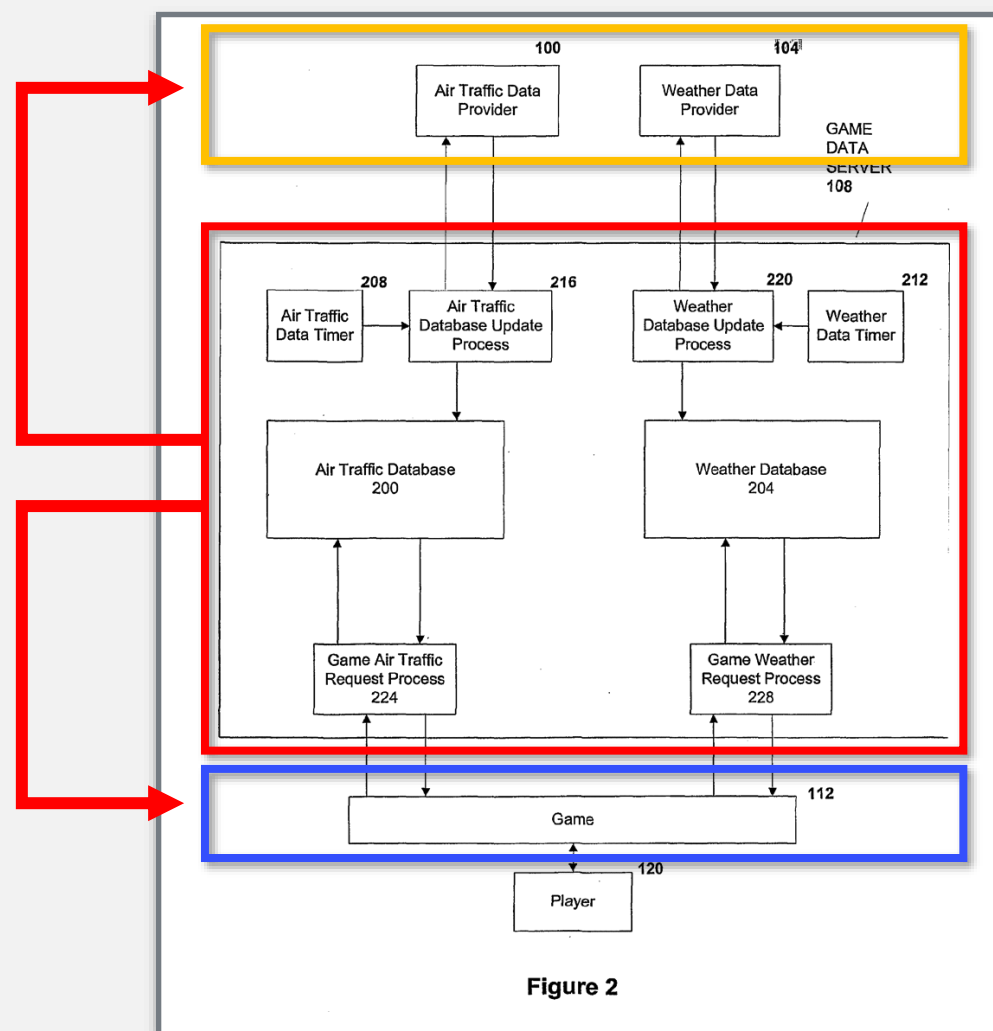
'941/'165 Patent (Ex. 1001), Fig. 2 (annotated)

“Software Layer” According To Patent Owner

discloses a software layer comprising the QIE Module. Petitioner’s own expert admitted that Pisanich teaches an object-oriented design. However, an object-oriented design does not teach or suggest “a software layer”—i.e., an object-oriented design and a software layer design are separate and distinct software architectures.

Not only does Petitioner fail to address the QIE Module being a software layer, the Petitioner also does not address that the claimed QIE Module is a single software layer that receives, interprets, and manipulates the second content so as to be accessible on different types of devices for use within the same³ virtual thematic environment. A POSITA would have understood that Pisanich discloses different

① Pisanich Meets “Software Layer” Even Under PO’s Construction



Pisanich (Ex. 1007), Fig. 2 (annotated)

“Different Types of Devices” According to PO

Not only does Petitioner fail to address the QIE Module being a software layer, the Petitioner also does not address that the claimed QIE Module is a single software layer that receives, interprets, and manipulates the second content so as to be accessible on different types of devices for use within the same³ virtual thematic environment. A POSITA would have understood that Pisanich discloses different

'941 PO Response (Paper 24), 17

Crane: “Different Types of Devices”

81. As was well known in the art prior to the filing of the '941 Patent, games were often made available for multiple devices. This allowed for players to enjoy a game regardless of what game system they had in their home or pocket. Allowing for different capabilities across devices was almost a financial necessity, spreading the high cost of game development across multiple platforms.

Crane Decl. Re: '941 (Ex. 1004), ¶ 81

Crane: “Different Types of Devices”



Apple II, 1984



Atari 8-bit, 1984



Commodore 64, 1984



Atari ST, 1984



Amiga 1986



TRS-80, 1987

6 versions of SubLOGIC Flight Simulator II game⁷
1984 - 1987

Crane Decl. Re: '941 (Ex. 1004), ¶ 83

Q. Okay. So how are different types of devices playing the flight simulator game on each device?

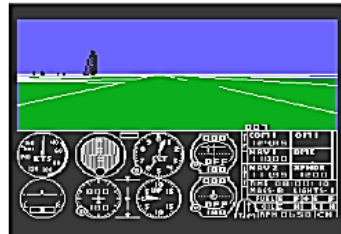
A. If you look at a flight simulator game, such as those pictured on the next page, the game is playing on the console, the Apple II, Atari, the computer, Commodore 64, Atari SC. Them programs running on those machines differ dramatically. They differ from rendering software for the 3D seen out the window. They differ on imagery that is displayed and clicked on in the – the cockpit. So these games are executed on the console in order for you to play the game.

Crane Deposition Transcript (Ex. 2011), 128:15-25

Crane: “Different Types of Devices”



Apple II, 1984



Atari 8-bit, 1984



Commodore 64, 1984



Atari ST, 1984



Amiga 1986



TRS-80, 1987

6 versions of SubLOGIC Flight Simulator II game⁷
1984 - 1987

Crane Decl. Re: '941 (Ex. 1004), ¶ 83

Q. Okay. If the other games 116 in Figure 1 at Pisanich is some other version of a flight simulator game, would you agree that a POSITA would understand the game to have a flight simulator theme?

A. Yes.

Q. And if the game 112 in 1 of Pisanich is a flight simulator game, would that game also have a flight simulator theme?

A. It would.

Q. Would a POSITA understand that different versions of a flight simulator game each having a flight simulator theme relate to the same virtual thematic environment?

A. They would relate to similar thematic environments. I mean, it's -- the theme would be the same.

Crane Deposition Transcript (Ex. 2012), 419:16-420:6

82. There were many differences across devices, including screen size and resolution, rendering and processing power, and differences in controllers. Per the latter, a PC would have a keyboard and a mouse; a gaming console would have a joypad; and a mobile device might have a touch screen. But arguably, the biggest differences were found in the screen resolution (including color depth, for example), and rendering and processing power. To publish a game on different platforms, the game program had to be configured to manipulate game content to work on different devices. As was well known in the art, the conventional method of doing so involved creating a different version of the game for each device or at least different size and resolution images.

Crane Decl. Re: '941 (Ex. 1004), ¶ 82

84. As far back as the 1980s, conventional rendering technology was configured to interpret and manipulate game content so as to be accessible on different types of devices.

Crane Decl. Re: '941 (Ex. 1004), ¶ 84

'941 Patent: Different Types of Devices

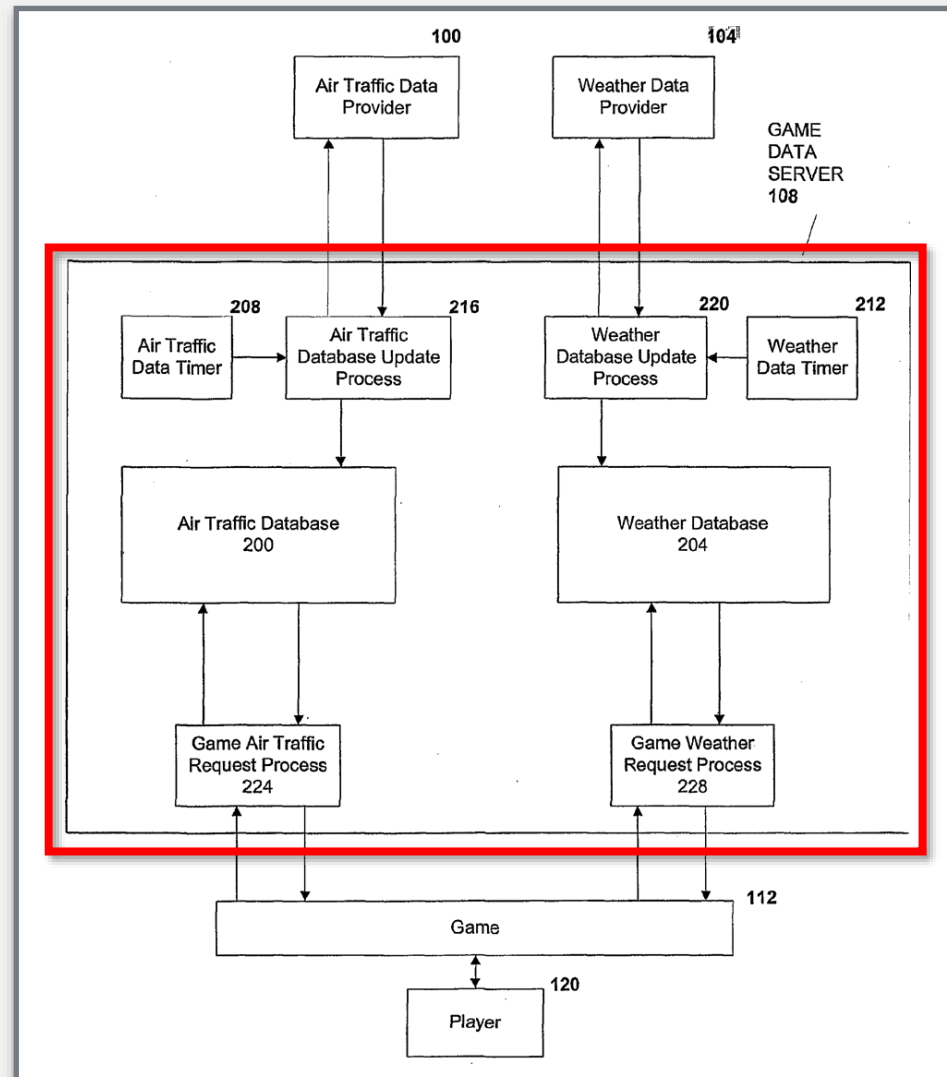
selected. The request is made to the server **205** and from the QIE **211** to obtain the clock information. The QIE **211** will then put in a request to the Business Logic **208** for the updated information and pass it back to the **QIE 211** for interpretation or rasterization to a particular display or device and to the programmed or displayed 2D/3D object, image or “clock”.

'941 Patent (Ex. 1001), 33:65-34:4

may be used). The **QIE 211** processes the information to determine the type of device and thematic environment, and may re-rasterize the information to format to that device and thematic environment.

'941 Patent (Ex. 1001), 27:34-37

Pisanich: “Different Types of Devices”



Pisanich (Ex. 1007), Fig. 2 (annotated)

① '941 Patent & Pisanich: “Receives, Interprets, Manipulates”

tor—the application architecture, and the content. QIE 202/211 is an interpreter that will take all of the rich content, interpret the information into objects to be manipulated and accessed via any device and place these objects or information in the appropriate format that is designed or will be designed by the developer.

'941 Patent (Ex. 1001), 15:62-67

For example, in one embodiment, to determine the most appropriate data, the request processes 224, 228 consider the aircraft performance (747 vs. Piper cub), state (cruise, landing, takeoff, taxiing), current aircraft data (position, heading, speed and direction) and the previous request (position, heading, speed, and direction). . . . The request processes 224, 228 gather the data at a frequency and distance around and in the direction of movement of that aircraft appropriate for that aircraft and state.

Pisanich (Ex. 1007), 8:18-9:4

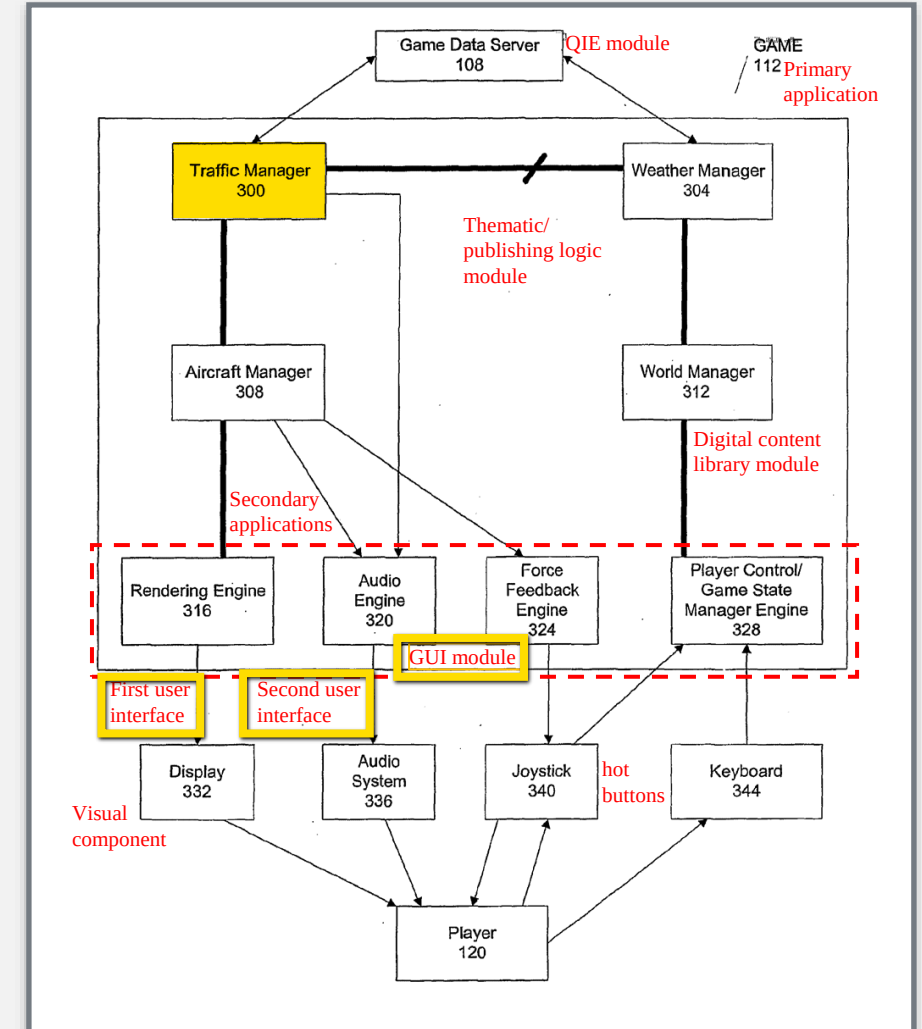
a graphics user interface (GUI) module including software that renders graphical display elements onto the visual component and permits a user to interact with a graphical display element within the virtual thematic environment, the GUI module providing a first user interface that is associated with the primary application and enabling the user to access the primary application through the first user interface, and a second user interface associated with the secondary application and enabling the user to access the secondary application through the second user interface;

'941 Patent (Ex. 1001), Claim 1

Pisanich: First User Interface

The **traffic manager 300** processes requests for air traffic data position (location, heading, altitude, speed, and identification) from the render engine 316 on a continual basis. The render engine 316 may be any conventional rendering process. **This data is used to display the aircraft within the world on the game display.** The traffic manager 300 also simulates the communications of air traffic within the game world, based on real time data. The external

Pisanich (Ex. 1007), 10:17-21

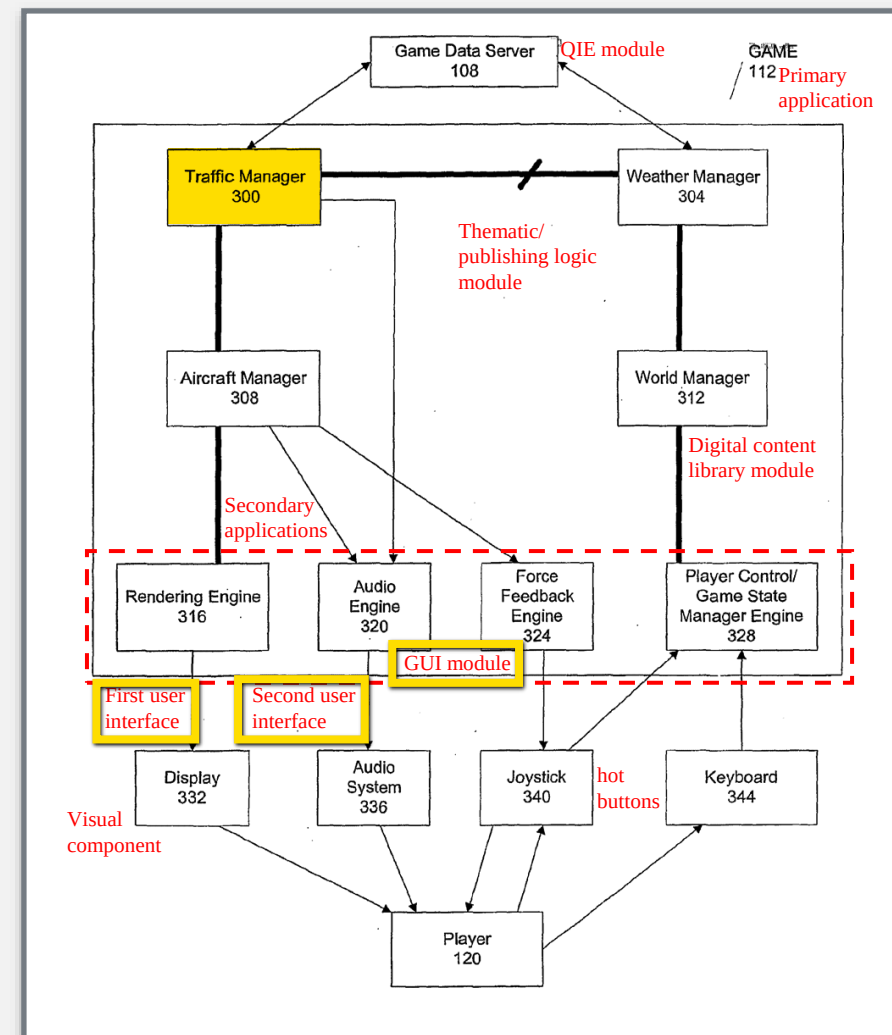


Pisanich (Ex. 1007), Fig. 3 (annotated)

Pisanich: Second User Interface

within the world on the game display. The traffic manager 300 also simulates the communications of air traffic within the game world, based on real time data. The external realization of this is through communications commands that are sent to the audio engine 336. The audio engine 336 uses these commands to output realistic audio communications messages to the user (for example, voice communications from air traffic control (ATC) and aircraft) based on the state of the player and other aircraft in the game. These messages include messages between ATC and the other aircraft and between ATC and the player 120. The voices are simulated using conventional technology as is known in the art.

Pisanich (Ex. 1007), 10:20-11:4



Pisanich (Ex. 1007), Fig. 3 (annotated)



We find that Petitioner has, on this record, adequately accounted for this limitation. As an initial matter, we disagree with Patent Owner's contention that Petitioner's analysis is conclusory. Here, Petitioner has provided an adequately detailed mapping and explanation for purposes of institution, and as set forth above does address the "second interface" requirement. We also disagree with Patent Owner's contention that Petitioner has failed to account for the requirement that GUI Module provide the second interface. As mapped in the annotated Figure 3, reproduced above, the software Petitioner has identified is within what it has mapped as the GUI Module.

'941 D.I. (Paper 11), 20

Pisanich: Second User Interface

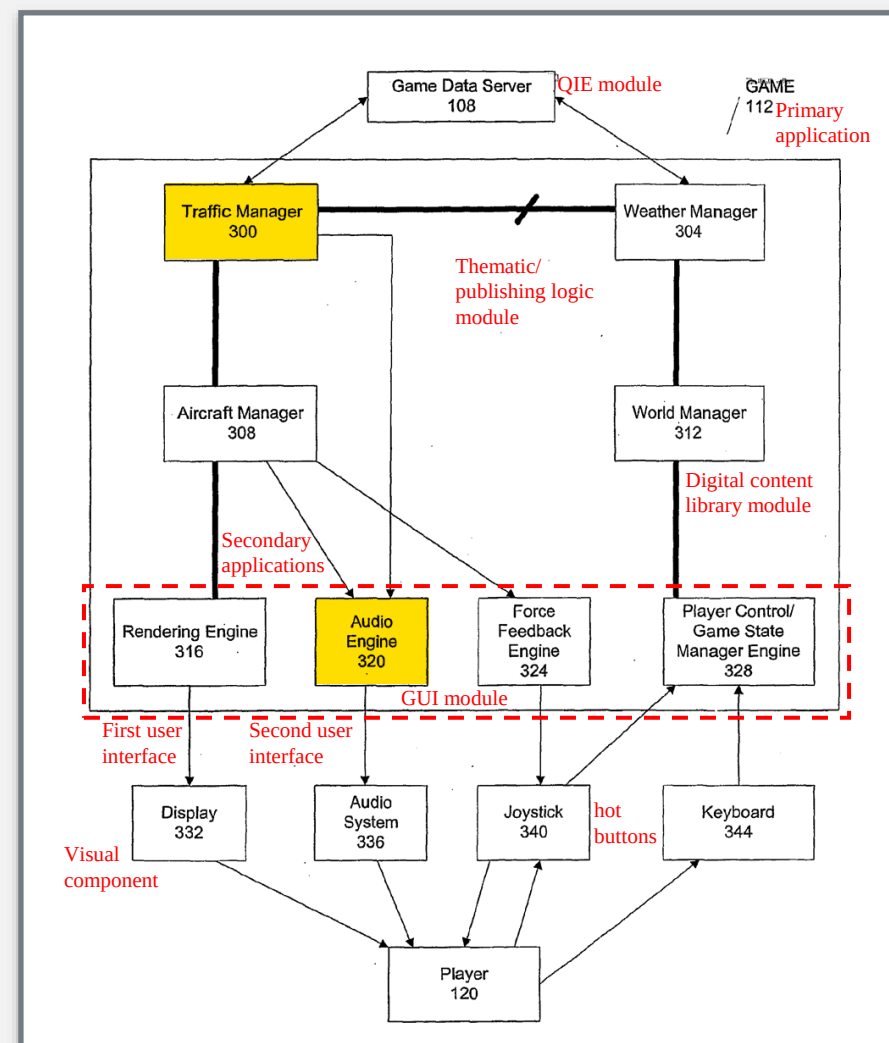
The Specification also does not support Patent Owner's efforts to limit the "second interface" to a graphical one. The Specification explains that "[t]he GUI 201 contains an engine for providing graphic hardware capabilities, . . . management of voice, music, and other graphic and voice formats, voice recognition, and translation services drivers." Ex. 1001, 15:5–22 (emphasis added). The Specification also explains that

Voice is also used in this sense to take information via a microphone or some type of input device into the system, which is processed through the GUI 250, passed to the QIE for processing and/or to the Voice library 255 for instruction to be passed back to the Graphics library 251 and back through the GUI 250 and drivers 261 to be outputted through a set of speakers or output device.

Id. at 20:13–19; see also *id.* at 20:30–34 ("After the Music library 258 finds the appropriate piece of music, the program will transfer the data back to the GUI 250 and Drivers 261, to an output device or set of speakers."). This disclosure supports the conclusion that the GUI module can provide other interfaces, including audio. Thus, we disagree with Patent Owner's suggestion that the second user interface that must be "graphical in nature."

'941 D.I. (Paper 11), 23

'941 Petition (Paper 2), 19, 21–22; '941 Reply (Paper 31), 14–15



Pisanich (Ex. 1007), Fig. 3 (annotated)

However, Pisanich does not disclose how or even if the audio engine 336 (i.e., what Petitioner identifies as the claimed “second user interface”) can accept inputs from a user. *Id.* The audio engine 336 merely outputs audio. *Id.* Therefore, Pisanich’s audio engine 336 cannot be a second user interface as it does not accept inputs from a user. *Id.* A POSITA would understand that there is no second user interface disclosed in Pisanich that enables the user to interact with and provide inputs into the audio engine 336—i.e., the audio engine 336 only outputs audio to the user and does not accept user input. *Id.*⁵

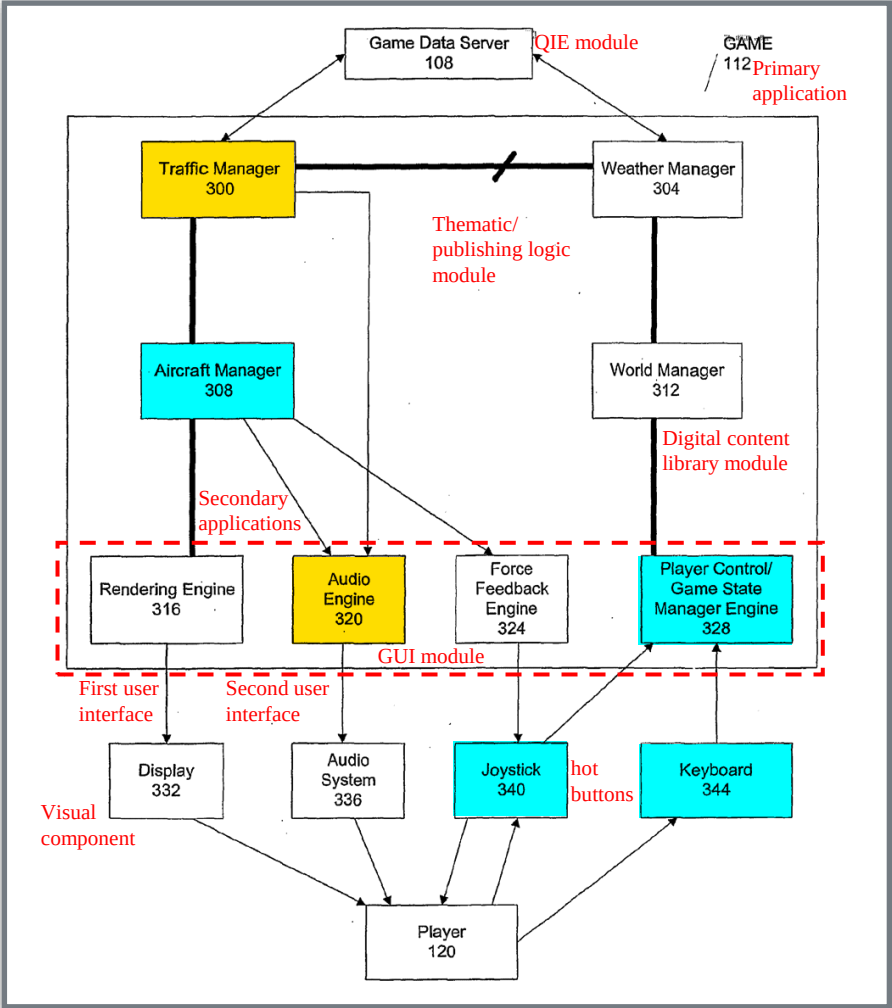
’941 PO Response (Paper 24), 37-38

Second User Interface: '941 Patent

In another embodiment consistent with the present invention, the virtual thematic environment can interface with a GPS system, which will show the user a map showing the user's (or any other) location, and provide details down to street and house. The program will allow the user to view either real world satellite maps/street photographs, etc., or a virtual representation of the same, showing buildings, grounds, landmarks etc. The user, in a tie-in with the product placement and other information, can "hot click" on a building, for example, and information, such as description, telephone number, directions, sponsored information etc., can be provided on that building.

'941 Patent (Ex. 1001), 9:31-42

Pisanich Meets “Second User Interface” Under PO’s Construction



Pisanich (Ex. 1007), Fig. 3 (annotated)

information about the player’s aircraft and internal systems. The aircraft manager 308 takes control input from the player control process 328 (movement of the aircraft, and control of systems). The aircraft manager 308 then interfaces with the weather manager 304 for real time

Pisanich (Ex. 1007), 15:14-17

23. A computer system, comprising:
a client system and a server system communicating to
provide an interactive software application platform,
the interactive software application platform comprising:

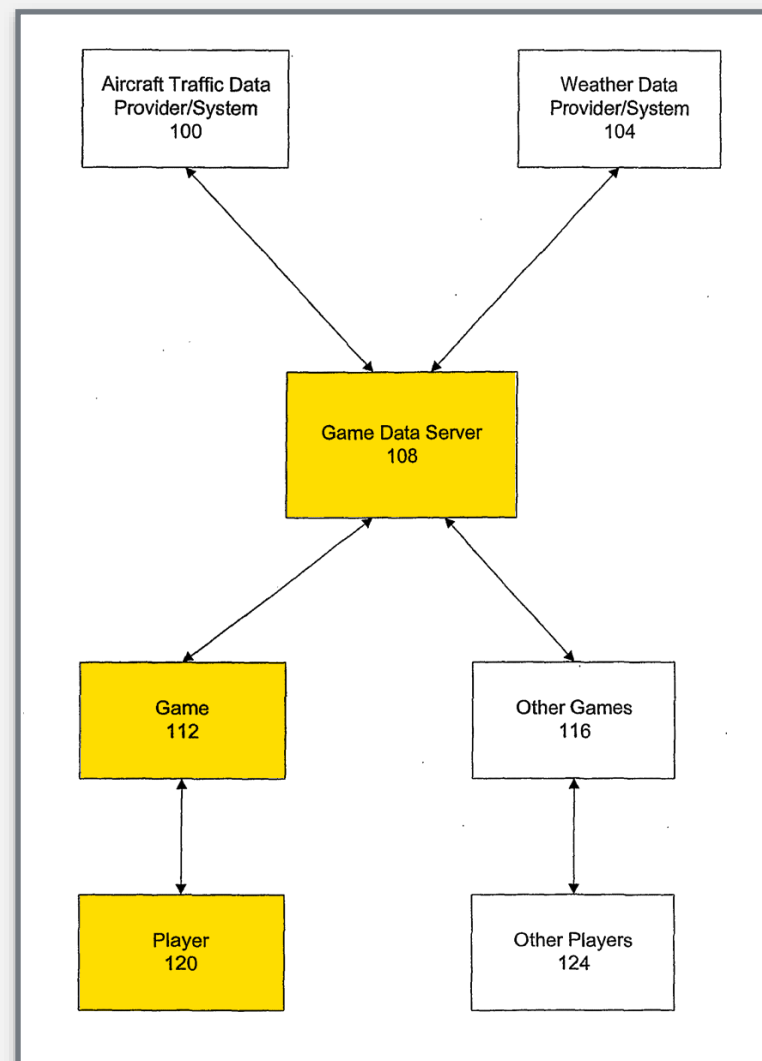
'941 Patent (Ex. 1001), Claim 23

1. A method of integrating real-time information into a
virtual thematic environment using a computer system
including a client and a server, comprising:

'165 Patent (Ex. 1001), Claim 1

123. Pictured in Pisanich Fig. 1 (See ¶88), “Game 112” (a computer game) was located on the client computer operated by “Player 120.” “Game 112” was connected to the “Game Data Server 108,” which integrates real-time information into the game as discussed in detail below. A POSITA would have understood that a computer game that received information from an external server (commonly referred to as a client/server game system) included a **client** (the computer system upon which the game was played) and a **server**.

Crane Decl. Re: '165 (Ex. 1004), ¶ 123



Pisanich (Ex. 1007), Fig. 1

Pisanich & POSITA's Knowledge: Client / Server

199. Pisanich disclosed the claimed **interactive software application platform** (See claim 1[pre] ¶120). Pisanich disclosed “Game Data Server 108” (See ¶88) configured to serve data to a game on a client “player’s computer.” A POSITA would have recognized the system taught by Pisanich to be a client-server configuration including the claimed **client system** and **server system**.

Crane Decl. Re: '941 (Ex. 1004), ¶199

- A **bachelor degree** in **computer engineering, computer science**, or a similar discipline
- **Two years of professional experience** in the fields of **networking** and **network-based systems or applications**, such as **client-server** and **web-based systems**, in the **specific context of console and gaming** or an equivalent level of skill, knowledge and experience
- A general knowledge of **3D rendering**

at least one digital content library module storing information, the information containing 2 dimensional and 3 dimensional content, and providing content management of information within the virtual thematic environment coordinated by the thematic/publishing logic module, the digital content library module being a content management application.

'941 Patent (Ex. 1001), Claim 1

Pisanich: Content Management



Apple II, 1984



Atari 8-bit, 1984



Commodore 64, 1984



Atari ST, 1984



Amiga 1986



TRS-80, 1987

6 versions of SubLOGIC Flight Simulator II game⁷
1984 - 1987

Crane Decl. Re: '941 (Ex. 1004), ¶ 83

The world manager 312 maintains information about the physical state of the world as is known in the art. This includes information about the terrain, ground cover, hydrology, buildings, roads, and navigation features. The world manager 312 takes real-time input from the

Pisanich (Ex. 1007), 16:3-5

1007, 16:3-5. A POSITA would understand that such information on the “physical state of the world” such as terrain has to be 2 dimensional and 3 dimensional content because terrain is by nature 3 dimensional.

Crane Decl. Re: '941 (Ex. 1004), ¶160



that Pisanich teaches a module that “store[s] information.” We also find that Petitioner has shown sufficiently that Pisanich teaches a “digital content library module” that stores “2 dimensional and 3 dimensional content,” as explained by Mr. Crane. *See id.* ¶¶ 130 (“Content provided by the primary

'941 D.I. (Paper 11), 28

Pisanich: Other '165 Limitations In Dispute

sending a request for first real-time information via the QIE module to the world wide web;

5

sending a request for second real-time information via the QIE module;

6

obtaining the second real-time information via the world wide web;

7

downloading the second real-time information into the secondary application;

8

providing access to the first real-time information within the virtual thematic environment via the first user interface;

9

providing at least one secondary application within the primary application at the client system;

10

enabling the user to control the at least one secondary application through a second user interface.

11

'165 Patent (Ex. 1001), Claim 1

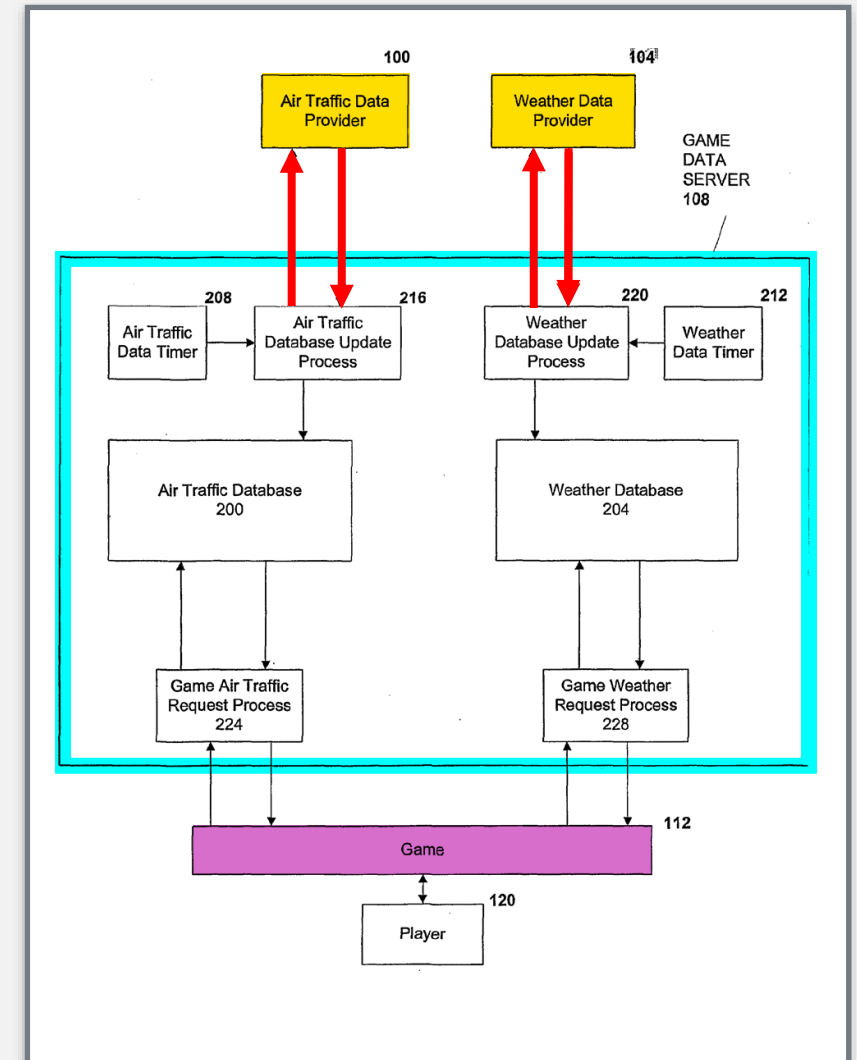
5 9 Pisanich: “First Real-Time Information” via WWW

Referring to Figure 1, a game data server 108 continually gathers “real time” data from traffic 100 and a weather 104 data provider systems. On request, the game data server 108 permits data available to a game 112, 116 and players 120, 124. The data providers 100, 104 are

Pisanich (Ex. 1007), 5:13-15

of one known element for another to obtain a predictable result. Further, a POSITA would have understood that to access information over the Internet required **sending a request** as claimed. A POSITA would understand that when

Crane Decl. Re: '165 (Ex. 1004), ¶ 141



Pisanich (Ex. 1007), Fig. 2

5 9 “First Real-Time Information”: Decision on Institution



On this record we find Petitioner’s position persuasive, specifically that where the claimed method is sending a “request” to a server or location on the internet or world wide web, it would logically receive, or obtain, a response, i.e., the requested information or data, from the server or location on the internet or world wide web. Accordingly, on this record we are persuaded that Petitioner has shown a reasonable likelihood that Pisanich discloses or teaches “obtaining the first real-time information via the world wide web” as recited in limitation 1[g].

’165 D.I. (Paper 11), 30-31

Pisanich: “Second Real-Time Information” via WWW

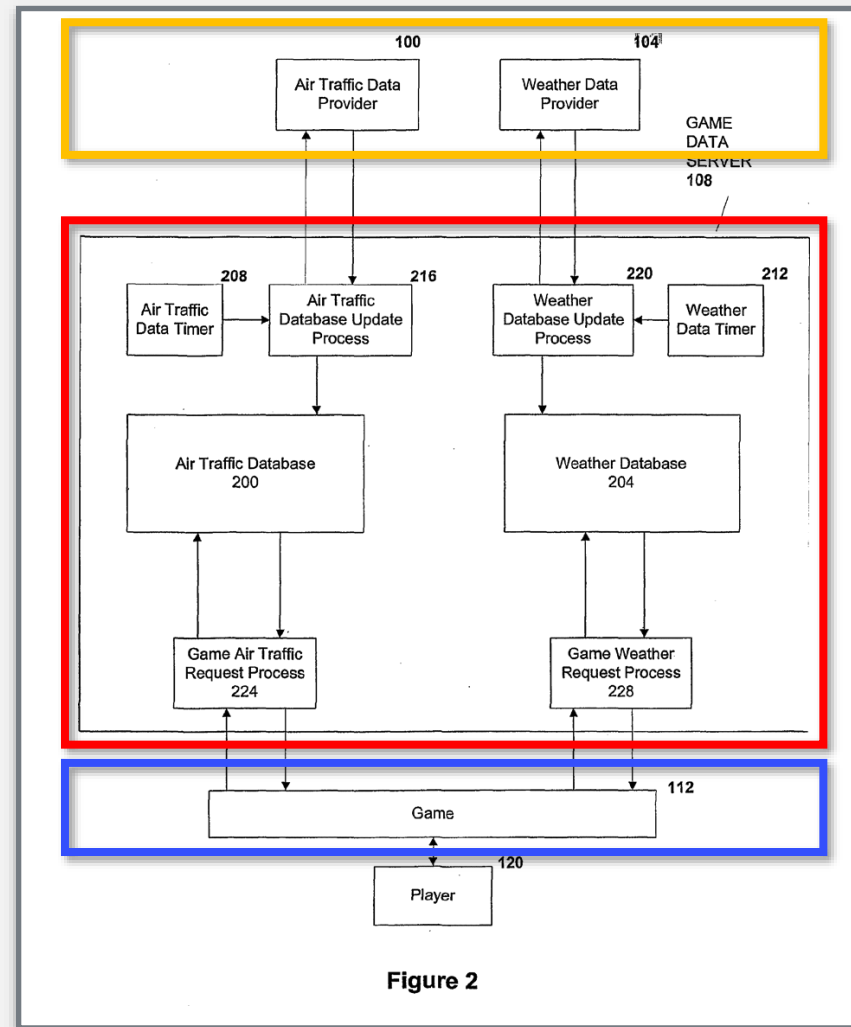


Figure 2
Pisanich (Ex. 1007), Fig. 2 (annotated)

7 8 Pisanich: “Second Real-Time Information” via WWW

154. As noted above, Pisanich taught obtaining real time audio communications between the player and the ATC (the claimed **second real-time information**) for a specific location from a remote data provider (*See* claim 1[k]).

Pisanich taught that said remote data provider was accessed via the Internet:

“The data providers 100, 104 are located remotely and are typically accessed via the internet...” [*Id.*, 5:15-16]

Crane Decl. Re: '165 (Ex. 1004), ¶ 154

157. Pisanich taught that “Game Data Server 108” gathered and cached real-time audio communication between the player and the ATC (the claimed **second real-time information**) to be downloaded to Game 112. Said claimed real-time information was gathered from the world wide web, cached in the game server, and made available to be downloaded to a game, disclosing the claimed **downloading the second real-time information from the world wide web into the primary application** (*See* ¶89).

Crane Decl. Re: '165 (Ex. 1004), ¶ 157

7 8 “Second Real-Time Information”: Decision on Institution

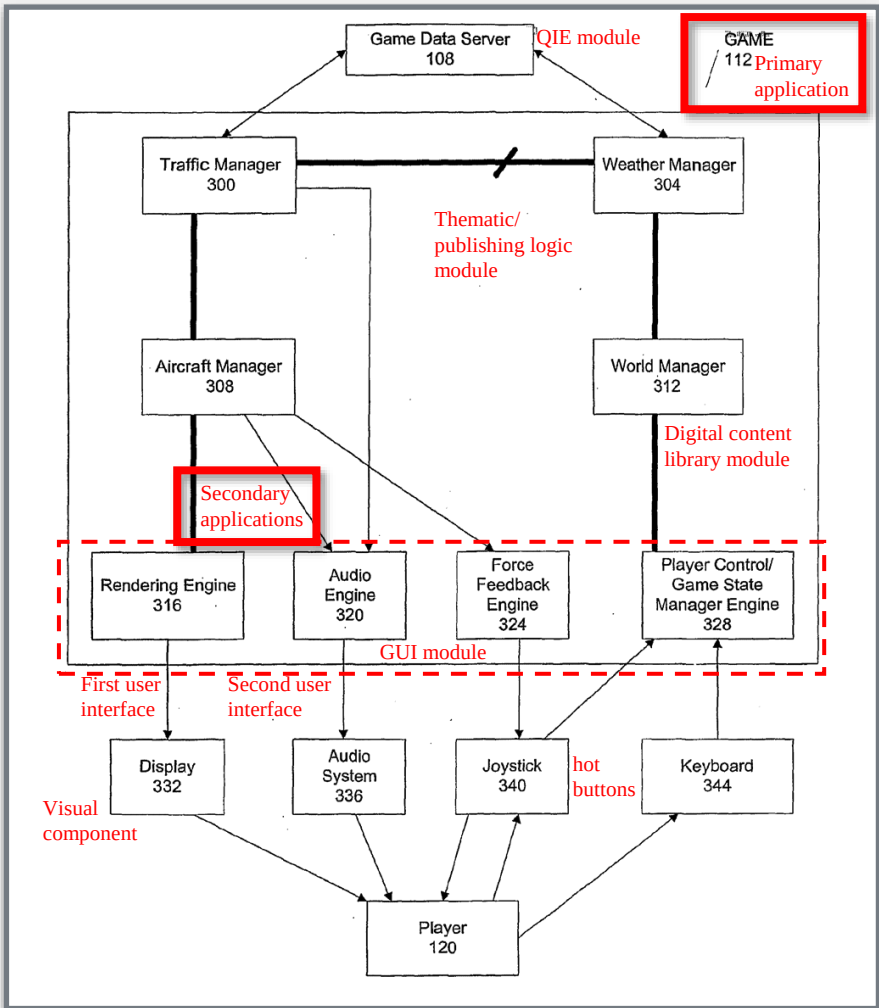


On this record, we find persuasive Petitioner’s arguments and evidence, including Mr. Crane’s testimony, that there is a reasonable likelihood that an ordinary skilled artisan would have understood Pisanich to disclose receiving real-time audio communications and thus “obtaining the second real-time information via the world wide web” as called for in limitation 1[l].

’165 D.I. (Paper 11), 36

On this record, we find persuasive Petitioner’s arguments and evidence, including Mr. Crane’s testimony, that there is a reasonable likelihood that an ordinary skilled artisan would have understood Pisanich to disclose receiving real-time audio communications, for example, and thus permitting “downloading the second real-time information into the secondary application” as called for in limitation 1[m].

’165 D.I. (Paper 11), 36-37



Pisanich (Ex. 1007), Fig. 3 (annotated)

On this record, we find persuasive Petitioner’s arguments and evidence, including Mr. Crane’s testimony, that there is a reasonable likelihood that an ordinary skilled artisan would have understood Pisanich to teach “providing at least one secondary application within the primary application at the client system” as called for in limitation 1[j].

’165 D.I. (Paper 11), 34-35

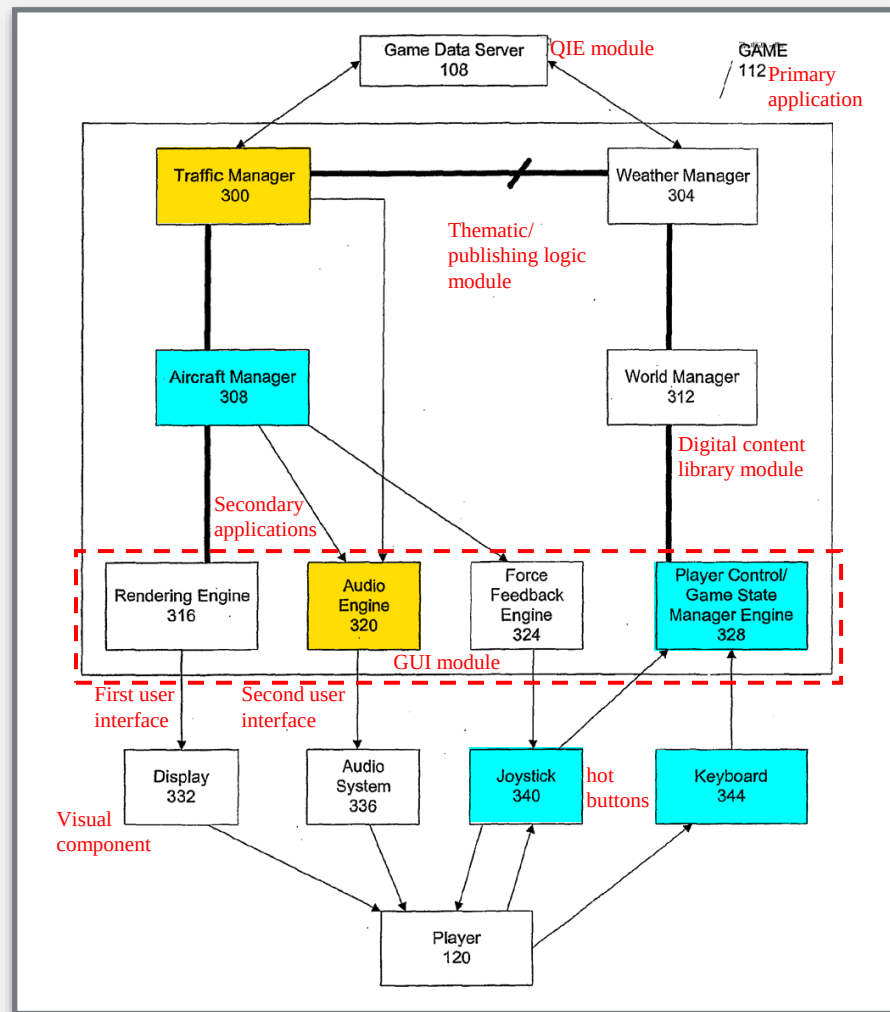
11 “Enabling the User to Control”: Decision on Institution



On this record, we find persuasive Petitioner’s arguments and evidence, including Mr. Crane’s testimony, that there is a reasonable likelihood that an ordinary skilled artisan would have understood Pisanich to teach “enabling the user to control the at least one secondary application through a second user interface” as called for in limitation 1[o].

’165 D.I. (Paper 11), 39

Pisanich: “Enabling the User to Control”



Pisanich (Ex. 1007), Fig. 3 (annotated)

Roadmap

- Overview of Claims
- Claim Construction
- Pisanich + POSITA's Knowledge (Ground 1)
- **PSO Manual + POSITA's Knowledge (Ground 2)**
- PSO Manual Authentication / Accessibility

Phantasy Star Online (PSO) Manual



PSO Manual: Three Limitations in Dispute

23. A computer system, comprising:

a client system and a server system **3** communicating to provide an interactive software application platform, the interactive software application platform comprising:

at least one thematic/publishing logic module containing virtual thematic environment rules to coordinate actions to be taken to constitute a virtual thematic environment, the virtual thematic environment being a theme-based virtual world environment;

a graphics user interface (GUI) module, the GUI module including software that renders graphical display elements onto a visual component and permits the user to interact with the graphical display elements within a virtual thematic environment;

a primary application providing the virtual thematic environment;

a secondary application within the primary application, the secondary application being different from the primary application, the secondary application being launched from the primary application, and having first content utilized within a same application environment of the virtual thematic environment as second content provided by the primary application, the primary application receiving and using first real-time information to provide the second content, the secondary application receiving and using second real-time information to provide the first content, the first real-time information being different from the second real-time information;

1 a quantum imaging environment (QIE) module, the QIE module being a software layer configured to receive and interpret the first content and the second content such that the first content and the second content is manipulated so as to be accessible on different types of devices for use within the virtual thematic environment;

4

at least one digital content library module storing information and providing content management of information within the virtual thematic environment, the digital content library module being a content management application; and

wherein the GUI module includes software that renders graphical display elements onto the visual component and permits the user to interact with the graphical display elements within the virtual thematic environment, the GUI module providing a first user interface that is associated with the primary application and enabling the user to access the primary application through the first user interface, and a second user interface associated with the secondary application and enabling the user to access the secondary application through the second user interface.

'165 Patent (Ex. 1001), Claim 1

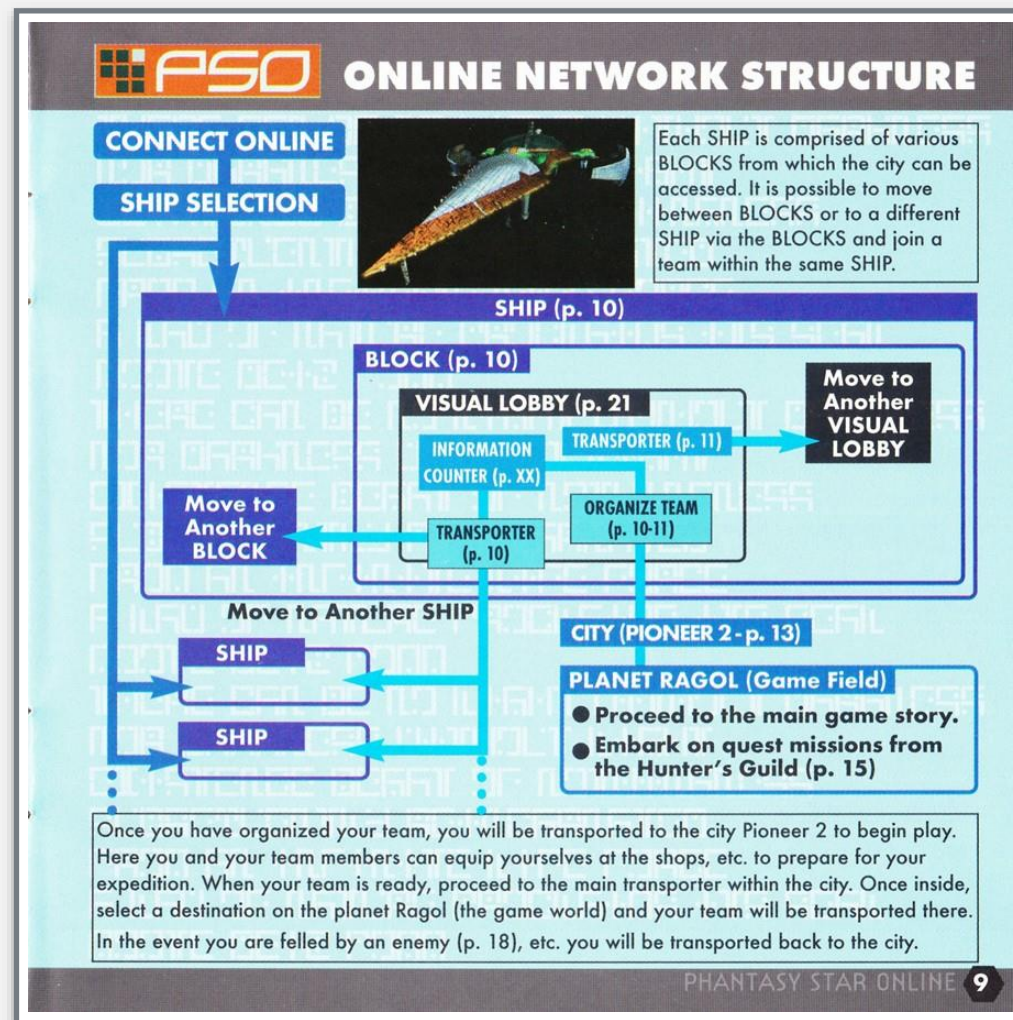
a quantum imaging environment (QIE) module, the QIE module being a software layer that receives, interprets, and manipulates the second content so as to be accessible on different types of devices for use within the virtual thematic environment, the QIE module obtaining first real-time information and second real-time information, the QIE module supplying the first real-time information into the primary application, and supplying the second real-time information into the secondary application, the primary application configured to provide access to the first real-time information to the user within the virtual thematic environment via the first user interface, the secondary application configured to provide the second real-time information to the user within the virtual thematic environment via the second user interface; and

'941 Patent (Ex. 1001), Claim 1

providing a quantum imaging environment (QIE) module in one of the client or the server system;

'165 Patent (Ex. 1001), Claim 1

PSO Manual: “Software Layer”



PSO Manual (Ex. 1008), 9

'941 Petition (Paper 2), 47-48; '941 Reply (Paper 31), 24-26

'165 Petition (Paper 2), 44-46; '165 Reply (Paper 31), 22-24

PSO Manual: “Different Types of Devices”

¶61, citing Ex-2007, p.1274; Ex-2010, ¶4. Consequently, the term “types” (as used in the challenged claims) is plural and includes at least two particular kinds, classes, or groups. Ex-2005, ¶61. The proposed construction is consistent with the

’941 PO Response (Paper 24), 6

¹⁴ It was well known in the art at the time that game systems/consoles such as Dreamcast sold into different countries were different hardware and/or software systems, including the use of different voltage sources, different language operating systems, and compatible with different television standards.

Crane Decl. Re: ’941 (Ex. 1004), ¶ 238 n. 14

Crane Decl. Re: ’165 (Ex. 1004), ¶ 102

’941 Petition (Paper 2), 47, 52; ’941 Reply (Paper 31), 26-28

’165 Petition (Paper 2), 44-46; ’165 Reply (Paper 31), 25-26



PROLOGUE

Faced with the imminent destruction of their home world, a large-scale evacuation plan known as the Pioneer Project was established to find a new home planet. Unmanned probes sent into deep space discovered a habitable planet they dubbed Ragol and the first interstellar transport ship Pioneer 1 was sent to establish a colony. After confirming Ragol was suitable, the initial colonists began preparing the planet starting with construction of the central dome.

7 years later...

Pioneer 2 completed its long voyage with the main wave of refugees aboard but just as they entered orbit and opened a communications link with the Central Dome, an enormous explosion occurred. All contact with the men and women of Pioneer 1 was lost.

Exactly what happened on Ragol?

What is PSO?

PSO is a network RPG. Online you will meet a variety of people from all over the world. Overcome language barriers by using the five language “word select” feature that enables communication with users whose language is different from your own. Organize a team to play the game online or embark on Hunter’s Guild quests, all the while chatting to exchange information.

Of course you don’t have to be online to play PSO. There is also an offline mode that enables gameplay. Online or offline, we hope you will enjoy the exciting world of PSO.



What is PSO?

PSO is a network RPG. Online you will meet a variety of people from all over the world. Overcome language barriers by using the five language “word select” feature that enables communication with users whose language is different from your own. Organize a team

PSO Manual (Ex. 1008), 2

WORD SELECT

Use the Word Select menu to communicate by constructing simple sentences from a number of pre-selected phrases with the controller. This system is 5 language (English, French, German, Spanish and Japanese) compatible so all messages created and sent will be automatically translated into the language setting designate by each player. (E.g., if you display a Word Select message in English, the selected message will appear in Japanese for a player whose language setting is Japanese.)

Receives

Interprets / Manipulates

USING THE WORD SELECT MENU

- 1 With the software keyboard displayed, press **X** to toggle to the Word Select menu.
- 2 Use **↑/↓** to select a “form” and press **A** to enter.
- 3 Press **L/R** to toggle between pages, **↑/↓** to select a phrase and press **A** to enter. (Depending on the form, selection may continue.)
- 4 Select a target and the constructed message will be displayed.
Use **→** to move between selection menus. Select “Send” during message construction to display the message (or partial message) without designating a target. Select “Return” or press **B** to return to the previous menu. Select “EXIT” or press **Y** to close the Word Select menu at any point without displaying a message.

Message Under Construction



Form/Phrase
Selection Menu

Send/Return/
EXIT

PSO Manual (Ex. 1008), 12

① “Receives, Interprets, Manipulates”: Decision on Institution



limitation 1[d], we disagree with Patent Owner’s contention that Petitioner has failed to show that the QIE module “receives, interprets, and manipulates the second content.” Prelim. Resp. 49–50. As the Petition explains, the PSO Manual discloses that *Phantasy Star Online* receives real time information for information counter, transporter, and organize team functions, so as to accessible on a player’s Dreamcast for use while playing *Phantasy Star Online*. See Pet. 47 (citing Ex. 1008, 9–11). We find this sufficient, on this record, to account for this limitation. Patent Owner also

’941 D.I. (Paper 11), 31

'941 Patent & PSO Manual: “Receives, Interprets, Manipulates”

The program is also designed to provide real time translations into multiple languages within the virtual environment, so that the virtual environment is international in accessibility.

'941 Patent (Ex. 1001), 10:13-16

WORD SELECT

Use the Word Select menu to communicate by constructing simple sentences from a number of pre-selected phrases

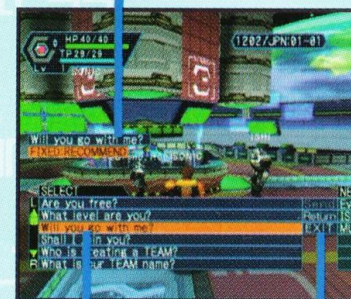
with the controller. This system is 5 language (English, French, German, Spanish and Japanese) compatible so all messages created and sent will be automatically translated into the language setting designate by each player. (E.g., if you display a Word Select message in English, the selected message will appear in Japanese for a player whose language setting is Japanese.)



USING THE WORD SELECT MENU

- 1 With the software keyboard displayed, press X to toggle to the Word Select menu.
- 2 Use ↑↓ to select a “form” and press A to enter.
- 3 Press L/R to toggle between pages, ↑↓ to select a phrase and press A to enter. (Depending on the form, selection may continue.)
- 4 Select a target and the constructed message will be displayed.
Use → to move between selection menus. Select “Send” during message construction to display the message (or partial message) without designating a target. Select “Return” or press B to return to the previous menu. Select “EXIT” or press Y to close the Word Select menu at any point without displaying a message.

Message Under Construction



Form/Phrase
Selection Menu

Send/Return/
EXIT

PSO Manual (Ex. 1008), 12

PSO Manual: “Receives, Interprets, Manipulates”



THE WORLD OF PSO ONLINE

BALLOON CHAT

Chatting in PSO occurs via chat balloons that are displayed over your characters head. A total of 32 alphanumeric characters can be input into each balloon. Press **Y** to display the software keyboard to input messages using the controller. Or you can use the Dreamcast Keyboard (sold separately) to type in your messages directly.



WORD SELECT

Use the Word Select menu to communicate by constructing simple sentences from a number of pre-selected phrases with the controller. This system is 5 language (English, French, German, Spanish and Japanese) compatible so all messages created and sent will be automatically translated into the language setting designate by each player. (E.g., if you display a Word Select message in English, the selected message will appear in Japanese for a player whose language setting is Japanese.)



USING THE WORD SELECT MENU

- 1 With the software keyboard displayed, press **X** to toggle to the Word Select menu.
- 2 Use **↑/↓** to select a “form” and press **A** to enter.
- 3 Press **L/R** to toggle between pages, **↑/↓** to select a phrase and press **A** to enter. (Depending on the form, selection may continue.)
- 4 Select a target and the constructed message will be displayed.
Use **→** to move between selection menus. Select “Send” during message construction to display the message (or partial message) without designating a target. Select “Return” or press **B** to return to the previous menu. Select “EXIT” or press **Y** to close the Word Select menu at any point without displaying a message.



SYMBOL CHAT

Use the Symbol Chat menu to communicate using a simple picture to express a feeling or action. With the software keyboard displayed, press **X** twice to display the Symbol Chat menu. Then use **↑/↓** to select an item and press **A** to display it.



updated with the game play, locations, and action of the remote players. Likewise, the secondary application [was] configured to provide the second real-time information to the user within the virtual thematic environment via the second user interface when displaying the “Balloon Chat,” “Symbol Chat,” and “Simple Mail.”

Crane Decl. Re: '941 (Ex. 1004), ¶ 240

PSO Manual (Ex. 1008), 12

'941 Petition (Paper 2), 43-44; '941 Reply (Paper 31), 27-30

23. A computer system, comprising:
a client system and a server system communicating to
provide an interactive software application platform,
the interactive software application platform comprising:

'941 Patent (Ex. 1001), Claim 23

3

1. A method of integrating real-time information into a
virtual thematic environment using a computer system
including a client and a server, comprising:

'165 Patent (Ex. 1001), Claim 1

PSO Manual: Client / Server

278. PSO Manual taught this limitation, disclosing that PSO operated in a client-server configuration, requiring users to log into the “PSO server” with a serial number and access key (See ¶198), thus disclosing **a client system and a server system communicating to provide an interactive software application platform as claimed.**

Crane Decl. Re: '941 (Ex. 1004), ¶ 278

OFFLINE MODE

GAME DIFFICULTY

The NORMAL level is automatically selected the first time you play PSO. After you clear the game at this level, this screen will appear the next time you play. Use to select either NORMAL or HARD and press . Press to cancel. Clear the game in HARD to earn the right to attempt VERY HARD.

OFFLINE PLAY

As with the online mode, there are a number of Hunter's Guild quests for you to embark upon in the offline mode in addition to the main storyline. Essentially you will proceed through the scenario alone. However, there are a number of NPCs (Non Player Characters) with whom you will interact. You can also use the offline mode to build your character's experience and then make your debut online.

ONLINE MODE

SERIAL NUMBER & ACCESS KEY

The first time you connect to the PSO network to play online you must input the unique serial number and access key from the label that was included inside your PSO package. Use to select each character and press to enter. Press to cancel. Enter the serial number as it appears on the label and select the enter key, then do the same for the access key. When you have input both the codes, select ENTER and press . This information will then be sent to the PSO server and once verified, will be saved to the main file in your VMU so that you won't need to input the serial number and access key every time you connect. However, it is very important that you **do not lose these numbers or allow a third party access to them before you can register with the PSO server. You must use the same Dreamcast to play PSO in the online mode.**

CHARGES FOR ONLINE PLAY

You will need to pay for access time from your Internet Service Provider (ISP) and any additional phone charges needed to connect to your ISP's access point.

Inquires

SEGA Customer Services Department
Internet: www.sega.com
Telephone: 1-800-USA-SEGA

PSO Manual (Ex. 1008), 8

231. Should the preamble be deemed to be limiting, PSO Manual taught this limitation, disclosing the claimed **virtual thematic environment** in the form of a science fiction fantasy virtual environment on the planet Ragol (See ¶99) as played on the Sega® Dreamcast™ game console, which took the role of the claimed **client** computer in a client/server game system connected to the “PSO **server**” (See ¶98).

232. Said science fiction fantasy game included methods for **integrating real-time information into a virtual thematic environment** as claimed, at least including real-time actions, positions, and electronic communications from remote players through the game server into the game displayed on the client (See ¶103 - ¶109).

at least one digital content library module storing information, the information containing 2 dimensional and 3 dimensional content, and providing content management of information within the virtual thematic environment coordinated by the thematic/publishing logic module, the digital content library module being a content management application.

'941 Patent (Ex. 1001), Claim 1

PSO Manual: “Digital Content Library”

ITEM PACK

Use the item pack menu to equip weapons or armor, utilize tool items, take care of your MAG (see p. 23), view a map of the area you are currently in, review quest information, etc. Your item pack can hold a maximum of 30 total item types (including weapons and armor) at a time. Use   to make selections and press  to enter. Press  to return to the previous menu.

PSO Manual (Ex. 1008), 21

243. Said Item Pack stored and managed the inventory for each player.

Stored information included the claimed **2 dimensional** (See ¶111 re icons) and **3 dimensional** content (See ¶114 re weapon use). The content managed by the

“Item Pack” was used **within the virtual thematic environment [and]**

coordinated by the thematic/publishing logic module as claimed.

Roadmap

- Overview of Claims
- Claim Construction
- Pisanich + POSITA's Knowledge (Ground 1)
- PSO Manual + POSITA's Knowledge (Ground 2)
- **PSO Manual Authentication / Accessibility**

PSO Manual: Harry Declaration

7. On April 20, 2023, I received a package from “Matthew’s Merch” which included the PSO. A picture of the PSO and packaging, as received, is attached as Attachment C.

8. As shown in Attachment D, the PSO arrived in a sealed package comprising a plastic crystal DVD case sealed with clear, heat-sealed cellophane wrap. Upon visual inspection, although the plastic DVD case had several cracks, the cellophane wrap appeared to be intact and original from the factory.

Harry Decl. (Ex. 1009/1011), ¶¶ 7-8

9. I personally removed the cellophane seal and inspected the contents, which as shown in Attachments E-N, included the following:

Harry Decl. (Ex. 1009/1011), ¶ 9



Harry Decl. (Ex. 1009/1011), Attachment E

PSO Manual: Harry Declaration



Harry Decl. (Ex. 1009/1011), Attachment F

10. The manual was a visible insert to the DVD crystal case and the cover of the manual served as the cover to the product packaging.

11. I have reviewed Ex-1008, which is the identical copy of PSO manual described above. Ex-1008 and Attachment M include identical front and back cover and table of contents pages. I have also compared the headings on pages 8-12, 16, 21, 25, and 33 (containing the printed “©SEGA CORPORATION, 2000”) in Ex-1008 with the headings on pages 8-12, 16, 21, 25, and 33 (also containing the printed “©SEGA CORPORATION, 2000”) in Attachment M, and found them to be identical. I also compared the Sonic Adventure 2 promotional advertising insert (containing the copyright statement “SEGA/SONICTEAM, 2000”) depicted

Harry Decl. (Ex. 1009/1011), ¶¶ 10-11

PSO Manual: Harry Deposition

Q. Okay. And what would you characterize those white markings to be, then, if it's not glare?

A. It would appear that it is degradation of the manual, maybe due to age or -- it would depend. I'd have to look at another photo. It looks like that aligns with a staple in the document, and that would cause it to wear in its folded state.

Harry Depo. (Ex. 2013), 61:22-62:3

Q. What -- why do you -- why did you have the belief that it was original from the factory?

A. The way that the cellophane was sealed was typical of how CD cases, DVD cases at that time would have been sealed if you purchased them new from a store, and the cellophane also had an aged quality about it when I did remove it.

Harry Depo. (Ex. 2013), 39:2-8

PSO Manual: Harry Deposition

Q. Okay. And it's your testimony that these are scanning artifacts. Is that correct?

A. Yes, I believe so. Or wear from opening the manual after we had received it.

Harry Depo. (Ex. 2013), 54:18-21

Q. ... Could it be wear from opening the manual from before you received it?

A. It might have been wear from when the insert was placed into the packaging.

Harry Depo. (Ex. 2013), 54:23-55:2

PSO Manual: Hudgins Declaration

CREDITS

The following credits list the staff responsible for the localization, marketing and manual production for the U.S. version of PSO. Credits for the original development staff of the game are listed in the credits of the game itself.

SEGA of JAPAN Manual Production

Writer/Translator/DTP
Monika Hudgins

Design

Yoshihiro Sakuta

Writer (JPN)

Chieko Nakamura

Supervisor

Kaoru Ichigozaki

Sega of America Dreamcast, Inc.

Director of Product Marketing

John Golden

Product Manager

Rich Briggs

Associate Product Manager

Dennis Lee

Localization Producer

Jason Kuo

Localization Manager

Osamu Shibamiya

VP of Localization

Jin Shimazaki

Lead Analyst

Gabrielle Brown

Assistant Leads

Tom Fong

Shaheed Khan

Game Analysts

Mabel Chung

Brent Fillmore

Kari Hattner

Keewan Her

Michael Jao

Chris Meyer

Game Analysts (con't)

Brian Miller

Ray Murakawa

Mike Rhinehart

Ron Rodriguez

Jordan Romaidis

Mike Schmidt

David Talag

Alan Ting

Alex Vaughan

Pedro Ponce

Paul Proner

SEGA.COM

Network Producer

Ryan Hurth

Marketing Project Manager

Bee Yinn Low

Lead Network Analyst

Jason Nolen

Network Game Analysts

Paco Youngel Darren Nagtalon

Samira Gupta Eric Wilhelm

Josh Simpson Cliff Wilhelm

Ryan Sindlededecker Joey Edwards

Nic Azizian Leland Ware

SPECIAL THANKS

Hitoshi Okuno Bob Schonfisch John Kuner

Shinobu Shindo Angela Santos David Cahill

Heather Hawkins Simon McIlroy Ricky Viray

Gwen Marker Scott Howard Chris Olson

Sheri Hockaday Fred Borchardt Sirr Less

30

PHANTASY STAR ONLINE

PSO Manual (Ex. 1008), 30

PSO Manual: Hudgins Declaration

2. From 1997 to end of 2000, I was employed at Sega Corporation, formerly known as Sega Enterprises, Ltd. (collectively, “Sega”). During this time, I worked as a writer and translator, and assisted in desktop publishing, of printed materials for Sega’s electronic video games, including *Phantasy Star Online*.

3. I was personally involved with the development and production of the printed materials that were included in the packaging of the U.S. version of *Phantasy Star Online*. Based on the work performed for the Japanese printed materials for *Phantasy Star Online*, I translated and wrote the English language user manual of the U.S. version of *Phantasy Star Online* around the Fall of 2000. I also assisted in the desktop publishing of the user manual around the same time. The user manual was completed around December 2000 and was provided to the Sega U.S. marketing team that in turn provided the user manual to a U.S.-based printing company for processing and printing. To the best of my knowledge, the user manual was then included with the packaging for the U.S. version of *Phantasy*

Star Online, which was first released for sale to the public in the United States around January 2001.

4. I have reviewed an example of the user manual for the U.S. version of *Phantasy Star Online* that has been marked as Exhibit 1008 and attached hereto as Attachment A. This example is a true and correct copy of the user manual that I submitted for packaging with the U.S. version of *Phantasy Star Online* in 2001.

On page 30 of Exhibit 1008, I am the same Monika Hudgins that is credited as “writer/translator/DTP.” The term “DTP” is an abbreviation for Desktop Publishing. On page 33 of Exhibit 1008, I see a copyright notice dated 2000. This notice is consistent with my recollection of the timing for the preparation and completion of the user manual for the U.S. version of *Phantasy Star Online*.

Hudgins Decl. (Ex. 1024), ¶ 2-4

PSO Manual: 2000 Copyright Date

Sega is registered in the U.S. Patent and Trademark Office. Sega, Dreamcast, the Dreamcast logo, and Phantasy Star Online are either registered trademarks or trademarks of SEGA CORPORATION. All Rights Reserved. This game is licensed for use with the Sega Dreamcast system only. Copying and/or transmission of this game is strictly prohibited. Unauthorized rental or public performance of this game is a violation of applicable laws. ©SEGA CORPORATION, 2000. Sega of America, P.O. Box 7639, San Francisco, CA 94120. All rights reserved.

Programmed in Japan. Made and printed in the USA.

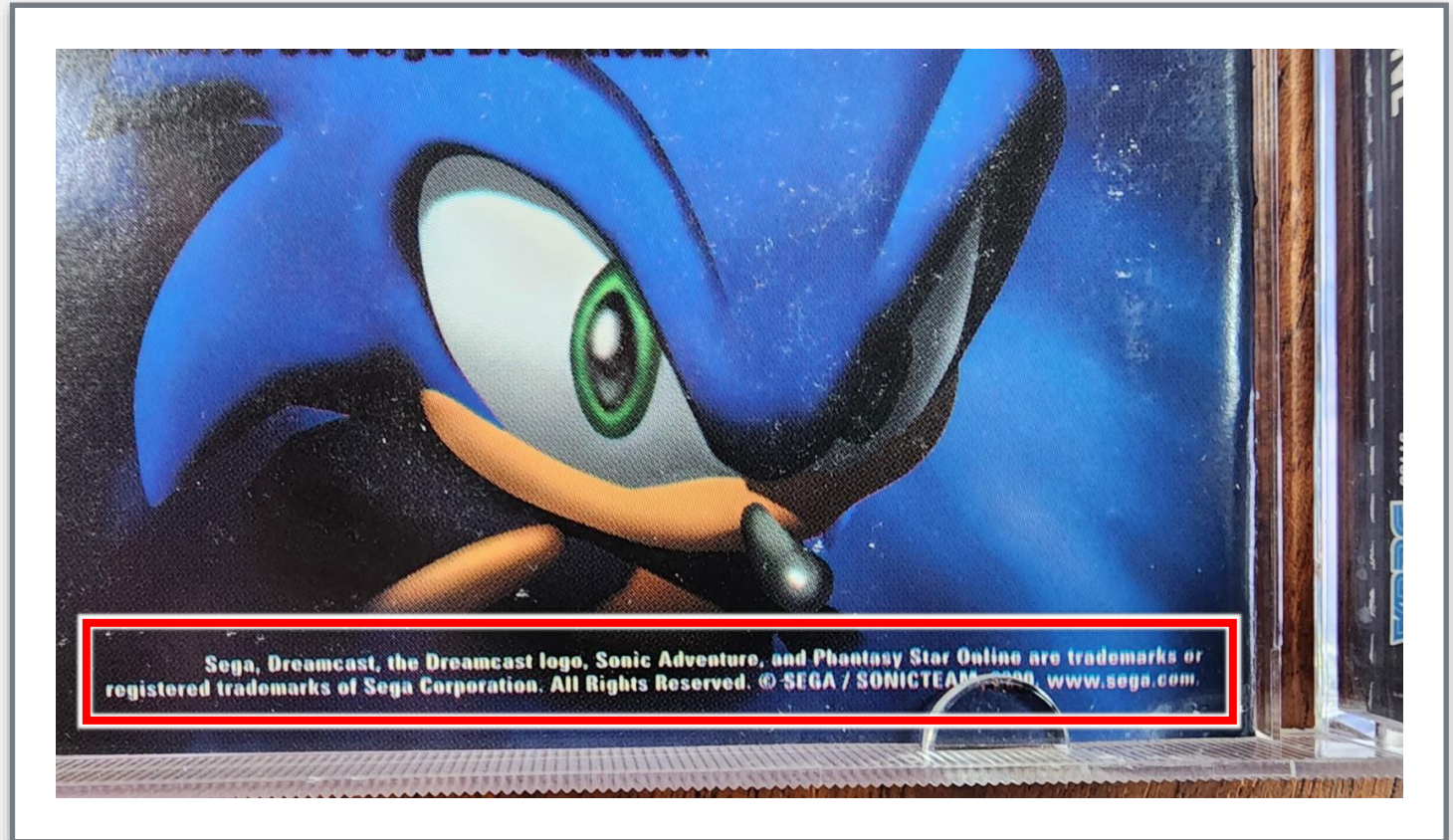
Product covered under one or more of the following: U.S. Patents No's: 5,460,374; 5,627,895; 5,688,173; 4,442,486; 4,454,594; 4,462,076; Re. 35,839; Japanese Patent No. 2870538 (Patents pending in U.S. and other countries); Canadian Patent No. 1,183,276.

PSO Manual (Ex. 1008), 33

PSO Manual: Other Indicia

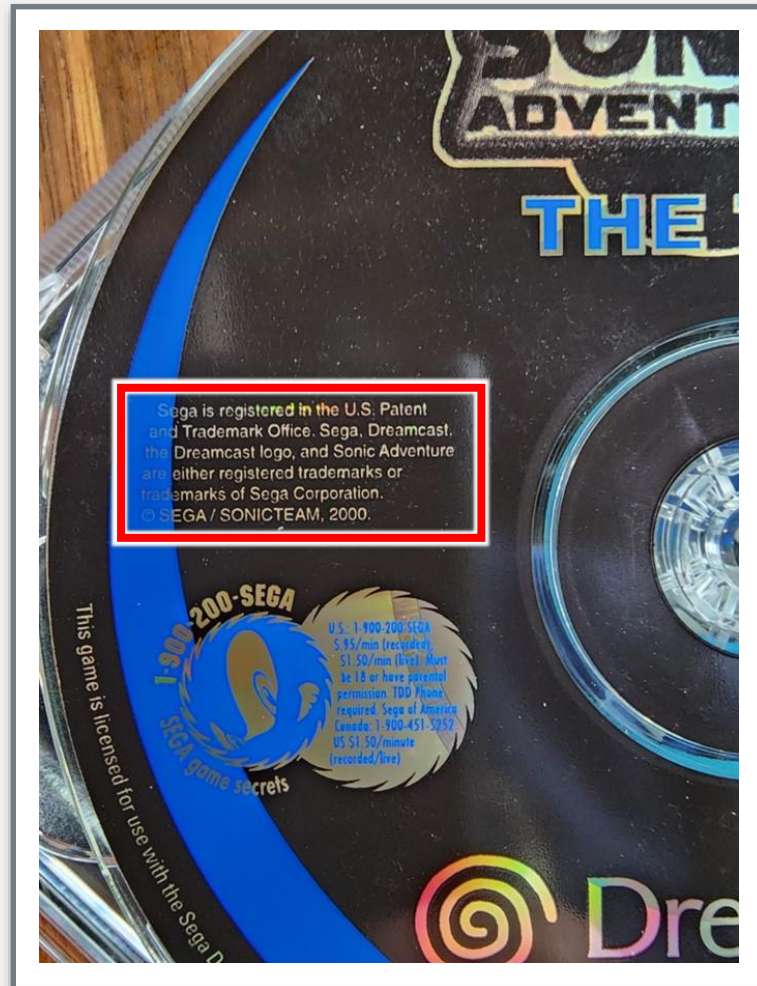


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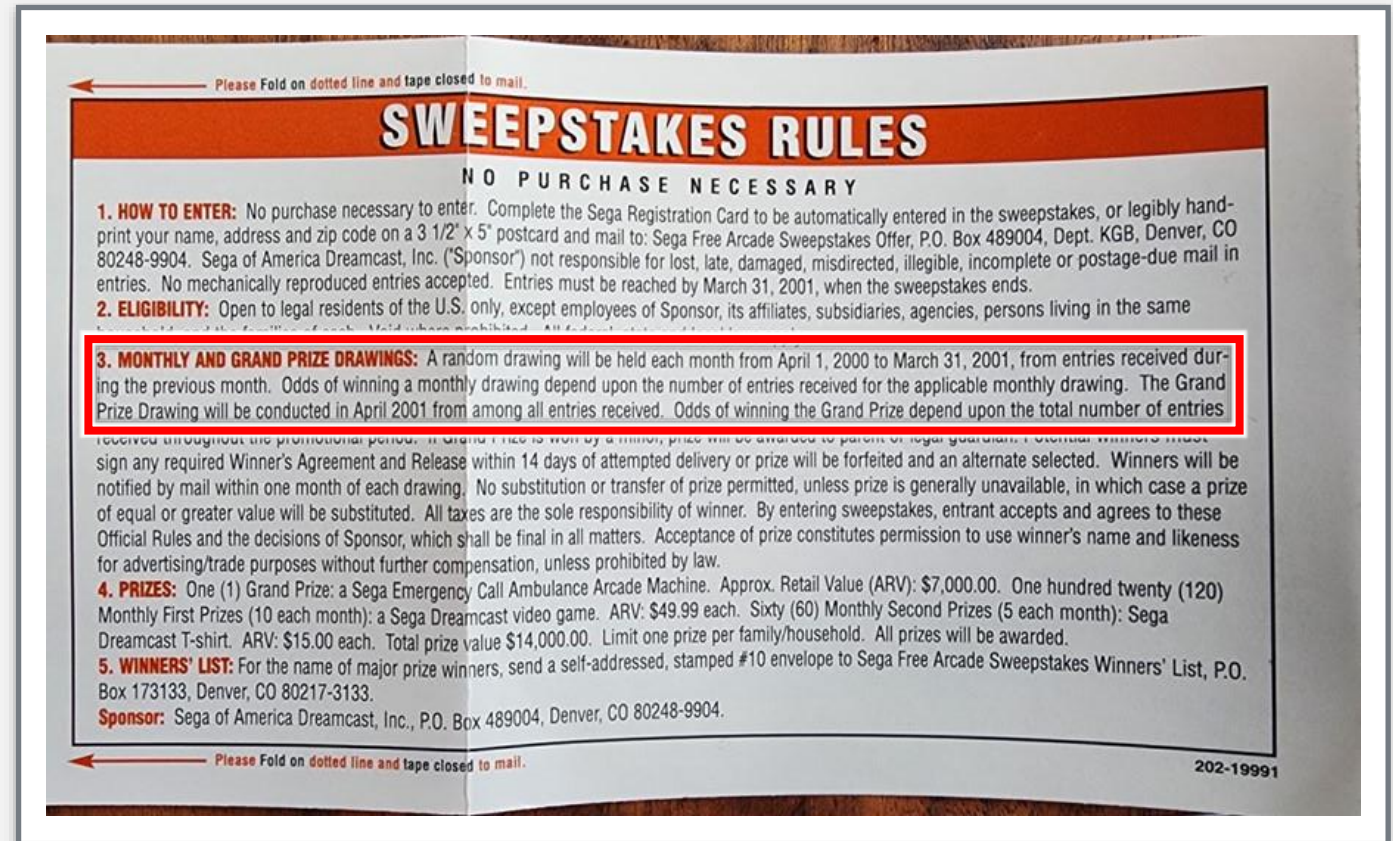


Harry Decl. (Ex. 1009/1011), Attachment H

PSO Manual: Other Indicia



Harry Decl. (Ex. 1009/1011), Attachment J



Harry Decl. (Ex. 1009/1011), Attachment K

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5. Which Dreamcast product did you purchase?

6. Which of the following products do you currently own? And which of the following products are you very or somewhat likely to buy within the next year?

	Own	Intend to Buy		Own	Intend to Buy
Sega Saturn™ System	1. ☐	1. ☐	Super Nintendo Entertainment System®	5. ☐	5. ☐
Sega Genesis®	2. ☐	2. ☐	Sony PlayStation®	6. ☐	6. ☐
Nintendo 64®	3. ☐	3. ☐	Sony PlayStation II	7. ☐	7. ☐
Nintendo Dolphin	4. ☐	4. ☐			

7. What is your favorite type of game? (check only 1 response)

1. ☐ Action/Adventure	4. ☐ Racing	7. ☐ Simulation
2. ☐ Arcade	5. ☐ Role Playing/Strategy	8. ☐ Sports
3. ☐ Fighting	6. ☐ Shooter	

8. What type of computer do you own?

1. ☐ Mac	3. ☐ PC, 300 MHz or higher
2. ☐ PC, 266 MHz or lower	4. ☐ Do not own

9. Do you currently have access to the Internet? 1. ☐ Yes 2. ☐ No

10. Do you access the Internet to play games online? 1. ☐ Yes 2. ☐ No

11. Would you want to receive e-mail from Sega? 1. ☐ Yes 2. ☐ No
If yes, tell us your e-mail address:

If you are 12 years old or under, you need your parent's or legal guardian's permission to provide us with this information. We may use this to provide you with information on Sega's products and services and to inform you of special offers. For more information, please see our on-line privacy policy at www.sega.com.

I am the parent/legal guardian of the person listed above and consent to the provision and use of the information as described above:

Parent/Legal Guardian Signature

Thanks for taking the time to fill out this card.

Copyright © 2000 All Rights Reserved
Please seal with tape. Do not staple.

WWW.SEGA.COM

Harry Decl. (Ex. 1009/1011), Attachment L

PSO Manual: Other Indicia

June 6, 2001

The screenshot shows the EB Games website interface. At the top, the logo "EBgames.com" is displayed with the tagline "electronics boutique". Navigation links include "Welcome", "PlayStation 2", "PlayStation", "XBOX", "Game Boy Advance AND GAME BOY", "GAMECUBE", "Dreamcast", and "Toys". Utility links for "HELP", "MY ORDERS", "MY ACCOUNT", and "MY CART" are in the top right. A left sidebar contains a "Product Search" box, a "Where to search:" section with radio buttons for "All Products" and "Dreamcast", and a "Browse" section with a list of categories including "Welcome", "PlayStation 2", "PlayStation", "Xbox", "GameCube", "Nintendo 64", "Dreamcast", "Accessories", "Adventure", "Family", "Fighting", "Hardware", "Platform", "Preowned", "Racing", "RPG", "Shooters", "Simulation", "Sports", "Strategy", "Game Boy Adv.", and "Game Boy".

The main content area features the "Phantasy Star Online" product page. It includes the game's cover art, a price of "\$39.99", and a green "Add to shopping cart" button. A note states "Usually ships within 24 hours." and a "TEEN" rating icon indicates "This game is rated 'T' for Teen." Below the product image, a paragraph reads: "This time you're not the only hero... The dawn of a new world is at hand with Phantasy Star Online, the first online multiplayer RPG designed for a home console. Using the Dreamcast modem, connect to the Phantasy Star universe and explore distant lands populated with real players like you. Chat, exchange items and information, and go into battle with players from all over the world -- all in real-time. With Phantasy Star Online, RPG gaming has no boundaries." This is followed by a bulleted list of features: "Massively multiplayer RPG action over a worldwide network. Play with people from America, Japan and Europe!", "Collaborate with other players to slay monsters and achieve goals in a real-time battle system.", "Advanced chat feature allows conversation without language barriers.", and "Swatch's BEAT system unites the world with a single time zone." To the right of the main product area, there are promotional banners for "Dreamcast Smash Pack Console", "INTERACT" (featuring Tremor Pak w/ Tomb Raider and Enforcer w/ Fighting Force 2), "DRIVEN 2" (with the text "Unlawful and reckless driving is prohibited!! encouraged!!"), and "18 WHEELER" (with a "CLICK HERE" button). At the bottom right, a "DRINK SPRITE" banner is visible.

White Decl. (Ex. 1011), 11

Claim Construction Details

Claim Construction

Patent Owner has urged the Board to adopt a host of constructions in its PORs

First and Second User Interface: a portion of a program with which a user interacts to accept input commands from the user as well as outputting information (e.g., visual, auditory, haptic, etc.) to a user

Type: a particular kind, class, or group

Types: two particular kinds, classes, or groups

Different Types of Devices: at least two devices, with the first device being of a first kind, group, or class and the second device being of a second kind, group, or class

Software Layer: used to guide the partitioning of a system's functionality into modules, where the modules assigned to one layer interact only with those that are assigned to adjacent layers

Client System and Server System: a client-server computer architecture

'941 PO Response (Paper 24), 5-9; '165 PO Response (Paper 24), 6-11

Claim Construction

Patent Owner has urged the Board to adopt District Court constructions

Virtual Thematic Environment: a theme-based virtual computer interface

Graphics User Interface (GUI) Module: software that provides a graphical display and processes user inputs to allow a user to interact with the graphical display

Quantum Imaging Environment (QIE) Module: a software layer which receives and interprets content such that the content is manipulated so as to be accessible on different types of devices for use within the virtual thematic environment

'165 PO Response (Paper 24), 6-8; Ex. 2015, 2-4

CERTIFICATE OF SERVICE

I hereby certify that the attached PETITIONER'S DEMONSTRATIVES
was served as of the below date via email (by agreement) on the Patent Owner to
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Date: September 10, 2024

By: /Bryan Blumenkopf/
Bryan Blumenkopf