Paper No. 1

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.
Petitioner,

v.

EVOLUTIONARY INTELLIGENCE, LLC,
Patent Owner

Patent No. 7,010,536
Issued: March 7, 2006
Filed: January 28, 1999
Inventor: Michael De Angelo
Title: SYSTEM AND METHOD FOR CREATING AND MANIPULATING INFORMATION CONTAINERS WITH DYNAMIC REGISTERS

Inter Partes Review No. IPR2014-00086

PETITION FOR *INTER PARTES* REVIEW

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I. COMPLIANCE WITH REQUIREMENTS FOR A PETITION FOR *INTER PARTES* REVIEW

A. Certification the '536 Patent May Be Contested by Petitioner

Petitioner certifies that U.S. Patent No. 7,010,536 (the '536 patent) (Ex. 1001) is available for *inter partes* review. Petitioner certifies that it is not barred or estopped from requesting *inter partes* review of the claims of the '536 patent on the grounds identified in this Petition. Neither Petitioner, nor any party in privity with Petitioner, has filed a civil action challenging the validity of any claim of the '536 patent. The '536 patent has not been the subject of a prior *inter partes* review by Petitioner or a privy of Petitioner.

Petitioner also certifies this petition for *inter partes* review is filed within one year of the date of service of a complaint alleging infringement of a patent. Petitioner was served with a complaint alleging infringement of the '536 and '682 patents on **October 23, 2012**, which led to Civil Action No. 6:12-cv-00783-LED in the District of Eastern District of Texas. Ex. 1007. Subsequently, Civil Action No. 6:12-cv-00783-LED was transferred to the Northern District of California and became Civil Action No. 3:13-cv-4201-WHA. Because the date of this petition is less than one year from October 23, 2012, this petition complies with 35 U.S.C. § 315(b).

B. Fee for *Inter Partes* Review (§ 42.15(a))

The Director is authorized to charge the fee specified by 37 CFR § 42.15(a)

to Deposit Account No. 50-1597.

C. Mandatory Notices (37 CFR § 42.8(b))

1. Real Party in Interest (§ 42.8(b)(1))

The real party of interest of this petition pursuant to § 42.8(b)(1) is Apple Inc. ("Apple") located at One Infinite Loop, Cupertino, CA 95014.

2. Other Proceedings (§ 42.8(b)(2))

The '536 patent is the subject of civil action Civil Action No. 3:13-cv-04201-LB, served on Petitioner on October 23, 2012, and naming Petitioner as defendant. It is also the subject of the following cases: (1) *Evolutionary Intelligence LLC v. Facebook, Inc.*, Case No. 3:13-cv-4202-JSC; (2) *Evolutionary Intelligence LLC v. FourSquare Labs, Inc.*, Case No. 3:13-cv-4203-EDL; (3) *Evolutionary Intelligence LLC v. Groupon, Inc*., Case No. 3:13-cv-4204-LB; (4) *Evolutionary Intelligence LLC v. LivingSocial, Inc.*, Case No. 3:13-cv-4205-EDL; (5) *Evolutionary Intelligence LLC v. Millennial Media, Inc.*, Case No. 5:13-cv-4206-HRL; (6) *Evolutionary Intelligence LLC v. Twitter, Inc.*, Case No. 4:13-cv-4207-KAW; and (7) *Evolutionary Intelligence LLC v. Sprint Nextel Corp. et al.*, Case No. 3:13-cv-4513-JCS. These actions were originally filed in the Eastern District of Texas but have been transferred to the Northern District of California.

The '536 patent is also the subject of three other IPRs filed concurrently with this one. Those IPRs are numbered: IPR2014-00082, IPR2014-00083, and IPR2014-00085.

3. Designation of Lead and Backup Counsel

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4. Service Information (§ 42.8(b)(4))

Service on Petitioner may be made by mail or hand delivery to: Sidley Austin LLP, 1501 K Street, N.W., Washington, D.C. 20005. The fax numbers for lead and back up lead counsel are shown above.

D. Proof of Service (§§ 42.6(e) and 42.105(a))

Proof of service of this petition is provided in **Attachment A**.

II. Identification of Claims Being Challenged (§ 42.104(b))

Claims **2-14 and 16** of the '536 patent are unpatentable as being anticipated under 35 U.S.C. § 102(e) by U.S. Patent No. 5,836,529 to Gibbs (Ex. 1006).

(i) Claims **2-14 and 16** are anticipated under §§ 102(e) by U.S. Patent No. 5,836,529 to Gibbs (Ex. 1006)

Petitioner's proposed construction of the contested claims, the evidence relied upon, and the precise reasons why the claims are unpatentable are provided in § IV, below. The evidence relied upon in support of this petition is listed in **Attachment B**.

III. Relevant Information Concerning the Contested Patent

A. Effective Filing Date and Prosecution History of the ’536 Patent

The ’536 patent issued from U.S. Patent Application No. 09/284,113, filed January 28, 1999. The ‘113 application claims priority to Provisional Application No. 60/073,209, filed on January 30, 1998. The disclosures of the ‘113 and ‘209 applications differ, and whether the latter supports the claims under 35 U.S.C. § 112 has not been established. Nonetheless, only for the purposes of this proceeding, Petitioner has assumed that the earliest effective filing date of claims 2-14 and 16 of the ’536 patent is not earlier than **January 30, 1998.**

B. Person of Ordinary Skill in the Art

A person of ordinary skill in the art in the field of the ‘536 patent would have been someone with a good working knowledge of computer programming, data structures, and object oriented programming. The person would have gained this knowledge either through an undergraduate education in computer science or comparable field, in combination with training or several years of practical working experience. Ex. 1003 at ¶ 48.

C. Construction of Terms Used in the Claims

In this proceeding, claims must be given their broadest reasonable construction in light of the specification. 37 CFR § 42.100(b). The broadest reasonable construction should be determined, in part, by taking into account the subject matter Patent Owner contends infringes the claims and the constructions

Patent Owner has advanced in litigation. Also, if Patent Owner contends terms in the claims should be read to have a special meaning, those contentions should be disregarded unless Patent Owner also amends the claims compliant with 35 U.S.C. § 112 to make them expressly correspond to those contentions. *See* 77 Fed. Reg. 48764 at II.B.6 (August 14, 2012); *cf. In re Youman*, 679 F.3d 1335, 1343 (Fed. Cir. 2012). In the proposed constructions below, Petitioner identifies subject matter which falls within the scope of the claims, read in their broadest reasonable construction, which Petitioner submits is sufficient for the purposes of this proceeding.

1. Container

The '536 patent explains that a "container" is "a logically defined data enclosure which encapsulates any element or digital segment (text, graphic, photograph, audio, video, or other), or set of digital segments, or referring now to FIG. 3C, any system component or process, or other containers or sets of containers." Ex. 1001, 8:64-9:2. It continues by stating a container "at minimum includes in its construction a logically encapsulated portion of cyberspace, a register and a gateway" and that it "at minimum encapsulates a single digital bit, a single natural number or the logical description of another container, and at maximum all defined cyberspace, existing, growing and to be discovered, including but not limited to all containers, defined and to be defined in

cyberspace." Ex. 1001, 9:2-9. It also states a container "contains the code to enable it to interact with the components enumerated in 2A, and to reconstruct itself internally and manage itself on the network 201." Ex. 1001, 9:9-12

The broadest reasonable construction of "container" therefore encompasses a logically defined data structure that contains a whole or partial digital element (e.g., text, graphic, photograph, audio, video, or other), or set of digital segments, or any system component or process, or other containers or sets of containers. See Ex. 1003, ¶¶ 54-55.

2. Register

The '536 patent states:

> Registers **120** are user or user-base created or system-created values or ranges made available by the system 10 to attach to a unique container, and hold system-set, user-set, or system-evolved values. Values may be numeric, may describe domains of time or space, or may provide information about the container 100, the user, or the system 10. Registers 120 may be active, passive or interactive and may evolve with system use.

Ex. 1001 at 14:23-30. The '536 patent also indicates that "[c]ontainer registers 120 are interactive dynamic values appended to the logical enclosure of an information container 100 and serve to govern the interaction of that container 100 with other containers 100, container gateways 200 and the system 10, and to record the historical interaction of that container 100 on the system 10." Ex. 1001 at 9:14-19.

The ‘536 patent observes that “Container registers 120 may be values alone or contain code to establish certain parameters in interaction with other containers 100 or gateways 200.” Ex. 1001, 9:19-23. The broadest reasonable construction of “register” thus would encompass a value or code associated with a container. See Ex. 1003, ¶¶ 56-59.

The ‘536 patent claims recite several kinds of registers (e.g., a first register, second register, an active time register, a passive time register, a neutral time register, an active space register, a passive [space] register, a neutral space register, a container history register, a system history register, a predefined register, a user-created register, system-defined register, and an acquire register). The context used each claim provides guidance regarding the nature of each register being referred to (e.g., by specifying the kinds of information that may be stored in the register or how the register might be used). Each of these registers is discussed in connection with application of prior art to it below.

3. Gateway

The ‘536 patent does not expressly define the term “gateway.” However, its usage of this term indicates that the term is being used generally to refer to an interface between processes, system components and data files (e.g., “container” or “registers”). For example, the ‘536 patent observes:

> Gateways gather and store container register information according to system-defined, system-generated, or user determined rules as

> containers exit and enter one another, governing how containers system processes or system components interact within the domain of that container, or after exiting and entering that container, and governing how containers, system components and system processes interact with that unique gateway, including how data collection and reporting is managed at that gateway. Ex. 1001 at 4:58-66.

The '536 patent also states that "Container gateways 200 are logically defined gateways residing both on containers 100 and independently in the system 10" and "Gateways 200 govern the interactions of containers 100 within their domain, and alter the registers 120 of transiting containers 100 upon ingress and egress." Ex. 1001, 9:23-28. *See also* Ex. 1001, 15:44-49.

Patent Owner has contended in litigation that "gateways" can be algorithms and Application Program Interfaces (APIs), with respect to time, are "attached to and forming part of the Event, EventStore, Alarm, and Reminder containers" (Ex. 1005 at 58) and with respect to space, "attached to and forming part of the CLLocation, CLLocationManager, CLPlacemark, CLRegion, and CLHeading containers." (Ex. 1005 at 81). In other words, Patent Owner has alleged that code that executes by calling objects via an API will be a "gateway" within the meaning of the claims.

The broadest reasonable construction of "gateway" thus would encompass code that governs interactions between containers and that can alter registers associated with containers. See Ex. 1003, ¶¶ 60-62.

4. "Active Space Register" / "Passive Register For Identifying Space" / "Neutral Space Register"

Claim 1 recites three "register" elements, stating: (i) "an active space register for identifying time at which the container will *act upon* other containers, processes, systems or gateways"; (ii) "a passive register for identifying time at which the container *can be acted upon* by other containers, processes, systems or gateways" and (iii) "a neutral space register for identifying time at which the *container may interact with other* containers, processes, systems or gateways." The '536 patent does not expressly define any of these registers.

In its infringement contentions, Patent Owner has identified the same features of the Apple iOS operating system as being all three types of "registers" specified in claim 1. Compare Ex. 1005 at 43 (for the active register: "the 'allDay', 'endDate', and/or 'startDate'") to *Id.* at 48 (for the passive register: same); *compare also Id*. at 44 (active register: "'completionDate', 'dueDateComponents', and/or 'startDateComponents'") to *Id.* at 49 (passive register: same).

Notably, Patent Owner does not show how any of the objects in iOS being identified have parameters that allow anything to act upon them, in the ordinary

sense of that phrase. For example, Patent Owner identifies "reminders" as being passive and neutral registers, even though reminders generally cause action on other portions of the system rather than provide a time on which an action can happen to them.

Petitioner believes that these terms are ordinary English words and do not need to be construed to understand their broadest reasonable construction. But in understanding the prior art, consideration should be given to Patent Owner's reading of these claim terms on Petitioner's products.

5. Means Elements (Claims 9-12)

Claims 9-12 each contain a means plus function claim elements:

- means for acting upon another container, the means for acting upon another container using the plurality of registers to determine whether and how the container acts upon other containers (claim 9)
- means for allowing interaction, the means for allowing interaction using the plurality of registers to determine whether and how another container can act upon the container (claim 10)
- means for gathering information, the means for gathering information recording register information from other containers, systems or processes that interact with the container (claim 11)

- means for reporting information, the means for reporting information providing register information to other containers, systems or processes that interact with the container (claim 12)

Means elements are construed to include the structure disclosed in the specification for performing the claimed function, and "the corresponding structure for a § 112 ¶ 6 claim for a computer-implemented function is the algorithm disclosed in the specification." *Aristocrat Techs. Austl. PTY Ltd. V Int'l Game Tech*, 521 F.3d 1328, 1333 (Fed. Cir. 2008), *quoting Harris Corp. v. Ericsson Inc.*, 417 F.3d 1241, 1249 (Fed. Cir. 2005). For claims 9-12, however, the only "means" identified in the '536 Patent is a processor 18 which can execute programmed instruction steps. (Ex. 1001, 7:58-65). The '536 patent, however, identifies no algorithm that performs the particular function associated with each "means" element, and does not otherwise identify any other particular structure corresponding to these means elements. Claims 9 to 12, thus, do not comply with 35 U.S.C. § 112.[1] *Aristocrat*, 521 F.3d at 1338 (a patent that fails to disclose an algorithm for a computer-implemented function is invalid for "lack[ing] sufficient disclosure of structure under 35 U.S.C. § 112 ¶ 6 and [is] therefore indefinite under 35 U.S.C. § 112 ¶ 2."). In order to provide some basis for evaluating these claims

[1] Petitioner reserves its right to assert that claims 9-12 are invalid under 35 U.S.C. § 112 in any court action relating to the '536 patent.

against the prior art, Petitioner assumes that the means specified in each of claims 9 to 12 must at least be a processor that performs the specified function for each means element when the claims are considered using the broadest reasonable construction in view of the specification.

IV. Precise Reasons for Relief Requested

U.S. Patent No. 5,836,529 to Gibbs (Ex. 1006) has an effective filing date of at least October 31, 1995, and is prior art under 35 U.S.C. § 102(e) to claims 2-14 and 16 of the '536 patent. A general summary of Ex. 1006 is provided at Ex. 1003 at ¶¶ 68-106.

A. Claim 2 is Anticipated by Ex. 1006 (Gibbs)

Ex. 1006 describes a system and process for monitoring and managing the operation of a railroad system. Ex. 1003 at ¶ 69. The railroad management system operates on a computer system and its components are connected via a network. The network transmits messages to and from devices, such as wayside occupancy detectors deployed in the railroad network, to a central computer system. Ex. 1003 at ¶¶ 70, 75. The system is object oriented and uses objects to represent important aspects of a railroad system such as trains, car, locomotives and tracks. Ex. 1003 at ¶¶ 73-75. The railroad management system also uses objects to display and transmit information to the user, such as through maps and reports. Ex. 1003 at ¶¶ 89, 96. The railroad management system also describes use of a control

management object, which allows the user to provide instructions to the management system. Ex. 1003 at ¶¶ 88. These objects are stored in object libraries within the computer system. Ex. 1003 at ¶¶ 77, 87. The objects used by the Ex. 1006 railroad management system are examples of logically defined data enclosures, and are "containers" as specified in claim 2 of the '536 patent. Ex. 1006 thus shows "*[a]n apparatus for transmitting, receiving and manipulating information on a computer system, the apparatus including a plurality of containers, each container being a logically defined data enclosure and comprising*:" as specified by claim 2. Ex. 1003 at ¶¶ 107-111.

The railroad management system shown in Ex. 1006 utilizes a large number of objects, each having large amounts of data associated with the object (information). For instance, Ex. 1006 describes a train object, a locomotive object, a car object, a crew object, a terminal object, a yard object, a shop object, a coal zone object, and many other objects. Ex. 1003 at ¶¶ 75-76. Each object in the railroad management system has at least four distinct types of data: locational attributes, labeling attributes, consist attributes, and timing attributes. Ex. 1003 at ¶ 81. These attributes can include information such as a unique ID, the physical location of the object, and object specific data. Ex. 1003 at ¶¶ 82-84. The object specific data varies by object, but for a train, for example, the object might contain information such as the train name, the number of cars in the train, the length of

the train, the train direction, the train's terminal of origin, and the train's destination terminal. Ex. 1003 at ¶ 85. Ex. 1006 thus shows "*an information element having information*" as specified in claim 2. Ex. 1003 at ¶¶ 112-114.

Each object in the Ex. 1006 system is a separate entity within the system and contains a number of different data fields divided into at least four separate types of information. Ex. 1003 at ¶ 78-81. The individual data fields include information such as an object's unique ID, the physical location of the physical equipment or facility to which it refers, a train name, a train length, the number of cars in the train, and the train direction. Ex. 1003 at ¶ 82-83, 85. Each different object type has different data fields representing different information about the real world object to which it refers. Ex. 1003 at ¶¶ 82-85. These objects are stored within object libraries, which reside on the computer system running the railroad management system shown in Ex. 1006. Ex. 1003 at ¶¶ 77, 87. Ex. 1006 thus shows "*a plurality of registers, the plurality of registers forming part of the container and including*" as specified in claim 2. Ex. 1003 at ¶¶ 115-117.

The objects used in the railroad management system each have a unique ID which corresponds to the physical equipment or facility that is associated with the object. Ex. 1003 at ¶ 82. Ex. 1006 thus shows "*a first register for storing a unique container identification value*" as specified in claim 2. Ex. 1003 at ¶¶ 118-119.

Each object in the system contains a field with a value representing the location of the corresponding physical equipment or facility. The railroad management system uses location detectors such as wayside occupancy detectors to transmit location information from physical equipment and enter that information into the appropriate object for that equipment. Ex. 1003 at ¶¶ 83-84. The physical railroad network and the equipment and facilities that make it up are all located within a three-dimensional space located outside the railroad management system. The transport objects interact with the map and report objects to display information relating to the physical equipment and facilities that the transport objects represent. Ex. 1003 at ¶ 90. For instance, the user can zoom the map he wants to see in or out. Ex. 1003 at ¶ 93. This zooming requires the map object to determine which transport objects are within the selected map area. Ex. 1003 at¶¶ 93. In another example, the user can request a train report that will display each car in a train along with those cars' content. Ex. 1003 at ¶ 98. This requires the report object to interact with the appropriate train and car transport objects. Ex. 1003 at ¶¶ 86, 89-95, 96-98. A user can also use a "context menu object" to interact with map and report objects by inputting information and setting parameters for those objects. Ex. 1003 at ¶ 88. Ex. 1006 thus shows "*a second register having a representation designating space and governing interactions of the container with other containers, systems or processes according to utility of*

information in the information element relative to an external-to-the-apparatus three-dimensional space" as specified in claim 2. Ex. 1003 at ¶¶ 120-124.

The user can set up alerts and warnings which will be automatically displayed to the user when specified conditions regarding particular objects are met. Ex. 1003 at ¶¶ 103-106. Ex. 1006 describes monitoring the value of a data item in real time in order to properly trigger the audible or visual alert. Ex. 1003 at ¶ 106. One data item that can be included in a map or report is the physical location of a train. Ex. 1003 at ¶¶ 90-94. Thus, the user can set a warning or alarm to continuously monitor a train's physical location. If this location exceeds the parameters set by the user, the railroad management system will generate an audible or visual alarm. Ex. 1003 at ¶¶ 103-106. The alerts also will directly trigger action through the railroad management system's output device in response to a parameter such as an object's location exceeding a boundary set by the user. Ex. 1003 at ¶¶ 103, 105. The map object also actively displays the location of each type of train that is selected by the user for display. This location is updated whenever the train's location is updated. Ex. 1003 at ¶¶ 94-95. Ex. 1006 thus shows "*an active space register for identifying space in which the container will act upon other containers, processes, systems or gateways*" as specified in claim 2. Ex. 1003 at ¶¶ 125-129.

A user can generate a map which only contains part of the railroad network. Ex. 1003 at ¶ 93. The user does this by restricting the geographic boundaries of the map, or zooming in. Ex. 1003 at ¶¶ 93. When the user is zoomed in, the map object responsible for displaying the map accesses and display transport objects that are within the geographic boundaries. Ex. 1003 at ¶ 93. The report objects in the railroad management system record information based on the location of various transport objects. Ex. 1003 at ¶¶ 98-99. For instance, a train report object can generate a report which lists each car associated with a specific train. Ex. 1003 at ¶ 98. The report further lists the contents of each car. Ex. 1003 at ¶ 98. Finally, a graphical representation of the entire train, with each car and its contents, can be displayed to the user. Ex. 1003 at ¶ 98. The cars and their contents are recorded into the consist report based on their location, which is attached to the train for which the report was requested. Ex. 1003 at ¶ 98. Similarly, a user can generate a terminal status report which contains the number of trains that are in both the arrival and departure yards of a terminal. Ex. 1003 at ¶ 99. Thus, the transports objects for those trains are selected based on their physical locations, e.g., in either the arrival or departure yards. Ex. 1006 thus shows "*a passive register for identifying space in which the container can be acted upon by other containers, processes, systems or gateways*" as specified in claim 2. Ex. 1003 at ¶¶ 133-137.

Ex. 1006 describes instances in which transport, map, and report objects intersect. For instance, a train consist report display a graphical image that shows the location of multiple cars, and the contents of those cars, within a train object. Thus, the train object and the car objects intersect via the report object. See Ex. 1003 at ¶ 98. Also, the description of the "active register" in ¶¶ 125-132, that identifies where a container can act, and the "passive register" in ¶¶ 133-137, that identifies where a container can be acted upon, also will inherently describe where a container may "interact." Ex. 1003 at ¶¶ 125-137. Ex. 1006 thus shows "*a neutral space register for identifying space in which the container may interact with other containers, processes, systems, or gateways*" as specified in claim 2. Ex. 1003 at ¶¶ 138-140.

Each object in the railroad management system has program instructions and routines which allow it to interact with other objects. Ex. 1003 at ¶¶ 86, 90, 97. For instance, the routines in a transport object are used to retrieve data from the central computer through a network and a gateway. Ex. 1003 at ¶ 86. The program instructions and routines are used to obtain and update data for each piece of information in an object. Ex. 1003 at ¶¶ 78, 86. The map and report objects also contain program instructions and routines. Ex. 1003 at ¶¶ 90, 97. These instructions and routines are used to gather information from the various transport objects in order to generate and modify maps and reports for the user. Ex. 1003 at

¶¶ 90, 97. The program instructions and routines are means by which the various objects in the railroad management system interact with each other. Ex. 1006 thus shows "*a gateway attached to and forming part of the container, the gateway controlling the interaction of the container with other containers, systems or processes*" as specified in claim 2. Ex. 1003 at ¶¶ 141-144.

B. Claim 3 is Anticipated by Ex. 1006 (Gibbs)

The railroad management system described by Gibbs stores and displays historical data such as performance statistics. Ex. 1003 at ¶ 101. For instance, a train object keeps track of the physical train's status and performance. Ex. 1003 at ¶ 101. A map or report object then uses this historical data as part of the determination of whether to display the train, or other transport object, on an output list to the user. Ex. 1003 at ¶ 102. The historical information is also used to determine whether to trigger an alert or warning to the user. Ex. 1003 at ¶¶ 101-102. Ex. 1006 thus shows "*[t]he apparatus of claim 1 or 2, wherein the plurality of registers includes at least one container history register for storing information regarding past interaction of the container with other containers, systems or processes, the container history register being modifiable*" as specified in claim 3. Ex. 1003 at ¶¶ 145-146.

C. Claim 4 is Anticipated by Ex. 1006 (Gibbs)

The railroad management system described by Ex. 1006 stores and displays historical data such as performance statistics. Ex. 1003 at ¶ 101. For instance, a train object keeps track of the physical train's status and performance. Ex. 1003 at ¶ 101. A map or report object then uses this historical data as part of the determination of whether to display the train, or other transport object, on an output list to the user. Ex. 1003 at ¶ 102. The historical information is also used to determine whether to trigger an alert or warning to the user. Ex. 1003 at ¶¶ 101-102.

The railroad management system shown in Ex. 1006 is also composed of a number of separate systems, including a computer aided dispatching system, a central computer, and various transportation workstations. Ex. 1003 at ¶¶ 70-71. These transportation workstations are connected to the central computer via a transportation workstation network, and each workstation maintains its own operating system. Ex. 1003 at ¶¶ 70-72. These separate computer systems and networks must interact with each other in order for the railroad management system to function. Ex. 1003 at ¶ 70, 84.

Ex. 1006 thus shows "*[t]he apparatus of claim 1 or 2, wherein the plurality of registers includes at least one system history register for storing information*

regarding past interaction of the container with different operating system and network processes" as specified in claim 4. Ex. 1003 at ¶¶ 147-149.

D. Claim 5 is Anticipated by Ex. 1006 (Gibbs)

Ex. 1006 describes a context menu object which serves as a user interface for the railroad management system. Ex. 1003 at ¶ 88. The context menu object allows a user to select and directly activate which information is displayed by map and report objects. Ex. 1003 at ¶ 88.

The user can also use this context menu object to set alarm and warning parameters, which will cause the railroad management system to alert the user whenever a selected object exceeds those parameters. Ex. 1003 at ¶¶ 106. The user can also select parameters such as the size of a map and which units to display on that map. Ex. 1003 at ¶¶ 90-95. The user can also use the context menu object to generate customized reports. Ex. 1003 at ¶¶ 96-99.

Ex. 1006 thus shows "*[t]he apparatus of claim 1 or 2, wherein the plurality of registers includes at least one predefined register, the predefined register being a register associated with an editor for user selection and being appendable to any container*" as specified in claim 5. Ex. 1003 at ¶¶ 150-152.

E. Claim 6 is Anticipated by Ex. 1006 (Gibbs)

Ex. 1006 shows that a user can create maps and reports to display information that the user selects. Ex. 1003 at ¶¶ 89, 96. These reports are

generated in response to a user request via the use of map and report objects. Ex. 1003 at ¶¶ 97-99. For instance, to generate a train consist report, the railroad management system prompts the user to select a train. Ex. 1003 at ¶ 98. In response to the user's input, the system then generates the train consist report. Ex. 1003 at ¶ 98. In addition to train object information, this report will also include car object information. Ex. 1003 at ¶ 98. Ex. 1006 also shows that a user can also generate customized reports for many other objects in the system, including a terminals and locomotives. Ex. 1003 at ¶ 100.

The railroad management system uses map and report objects to display warnings and alerts to the user. Ex. 1003 at ¶¶ 104, 106. These warnings and alerts are based on "a system-defined or user-defined set of status and performance criteria," which are monitored by the map and report objects. Ex. 1006 (Gibbs) at 22:18-19. Ex. 1003 at ¶¶ 103-105.

Ex. 1006 thus shows "*[t]he apparatus of claim 1 or 2, wherein the plurality of registers includes a user-created regis ter, the user-created register being generated by the user, and being appendable to any container*" as specified in claim 6. Ex. 1003 at ¶¶ 153-156.

F. Claim 7 is Anticipated by Ex. 1006 (Gibbs)

The railroad management system uses map and report objects to display warnings and alerts to the user. Ex. 1003 at ¶¶ 104, 106. These warnings and alerts

are based on "a system-defined or user-defined set of status and performance criteria," which are monitored by the map and report objects. Ex. 1006 (Gibbs) at 22:18-19. Ex. 1003 at ¶¶ 103-105. Ex. 1006 thus shows "*[t]he apparatus of claim 1 or 2, wherein the plurality of registers includes a system-defined register, the system-defined register being set, controlled and used by the system, and being appendable to any container*" as specified in claim 7. Ex. 1003 at ¶¶ 157-158.

G. Claim 8 is Anticipated by Ex. 1006 (Gibbs)

Ex. 1006 describes map and report objects containing settings which determine which transport objects will be displayed on a map or shown in a report. Ex. 1003 at ¶¶ 93-95, 98. For instance, the user enters parameters into the report object which determine which transport objects, representing physical equipment such as trains or facilities such as terminals, will be shown in a map or report. Ex. 1003 at ¶¶ 89, 92-95, 96, 98-99. Each map and report object contains routines and program instructions which are used to interact with other objects, such as transport objects, in the system. Ex. 1003 at ¶¶ 90, 97.

The railroad management system also generates an output list, which contains any transport objects that meet selected criteria entered by the user into a report or map object. Ex. 1003 at ¶¶ 102. The transport objects added to the output list are displayed by the map or report. Ex. 1003 at ¶¶ 101-102, 106.

Ex. 1006 thus shows "*[t]he apparatus of claim 1 or 2, wherein the plurality of registers includes at least one acquire register for controlling whether the container adds a register from other containers or adds a container from other containers when interacting with them*" as specified in claim 8. Ex. 1003 at ¶¶ 159-162.

H. Claim 9 is Anticipated by Ex. 1006 (Gibbs)

The user can set up alerts and warnings which are automatically displayed to the user when specified conditions regarding particular objects are met. Ex. 1003 at ¶¶ 103-106. Ex. 1006 describes monitoring the value of a data item in real time in order to properly trigger the audible or visual alert. Ex. 1003 at ¶ 106. One data item that can be included in a map or report is the physical location of a train. Ex. 1003 at ¶¶ 90-94. The user can set a warning or alarm to continuously monitor a train's physical location. Ex. 1003 at ¶ 164. If this location exceeds the parameters set by the user, the railroad management system will generate an audible or visual alarm. Ex. 1003 at ¶¶ 103-106. Thus, the alerts will directly trigger action through the railroad management system's output device in response to a parameter such as an object's location exceeding a boundary set by the user.

The map object also actively displays the location of each type of train that is selected by the user for display. This location is updated whenever the train's location is updated. Ex. 1003 at ¶¶ 94-95.

All objects in the railroad system contain both data and routines and program instructions. Ex. 1003 at ¶¶ 86, 90, 97. The routines and program instructions are used by objects to interact with each other, including to enter and retrieve data to and from other objects. For instance, the map and report object use routines and program instructions contained within to retrieve information from transport objects and display that information appropriately to the user. Ex. 1003 at ¶¶ 86, 90, 97.

Ex. 1006 thus shows "*[t]he apparatus of claim 1 or 2, wherein the gateway includes means for acting upon another container, the means for acting upon another container using the plurality of registers to determine whether and how the container acts upon other containers*" as specified in claim 9. Ex. 1003 at ¶¶ 163-168.

I. Claim 10 is Anticipated by Ex. 1006 (Gibbs)

Ex. 1006 shows a railroad management system that contains a context menu object, which allows the user to customize maps and reports for display. Ex. 1003 at ¶¶ 88. Depending on the options selected by the user in the context menu object, map and report objects will interact with the transport objects indicated by the user in order to display these customized maps and reports. Ex. 1003 at ¶¶ 87-88. All objects in the system contain both data and routines and program instructions. Ex. 1003 at ¶¶ 86, 90, 97. The routines and program instructions are

used by objects to interact with each other, including to enter and retrieve data to and from other objects. Ex. 1003 at ¶¶ 86, 90, 97. Ex. 1006 thus shows "*[t]he apparatus of claim 1 or 2, wherein the gateway includes means for allowing interaction, the means for allowing interaction using the plurality of registers to determine whether and how another container can act upon the container*" as specified in claim 10. Ex. 1003 at ¶¶ 169-171.

J. Claim 11 is Anticipated by Ex. 1006 (Gibbs)

Ex. 1006 shows that a user can generate a map that only contains a part of the railroad network. Ex. 1003 at ¶¶ 91-93. The user does this by restricting the geographic boundaries of the map, or zooming in. Ex. 1003 at ¶ 93. When the user is zoomed in, the map object responsible for displaying the map accesses and display transport objects that are within the geographic boundaries. Ex. 1003 at ¶ 93.

Ex. 1006 shows that the report objects in the Ex. 1006 railroad management system record information based on the location of various transport objects. Ex. 1003 at ¶ 173. For instance, a train report object can generate a report which lists each car associated with a specific train. Ex. 1003 at ¶ 98. The report further lists the contents of each car. Finally, a graphical representation of the entire train, with each car and its contents, can be displayed to the user. Ex. 1003 at ¶ 98. The cars

and their contents are recorded into the consist report based on their location, which is attached to the train for which the report was requested. Ex. 1003 at ¶ 98.

Ex. 1006 also shows that a user can generate a terminal status report which contains the number of trains that are in both the arrival and departure yards of a terminal. Ex. 1003 at ¶ 99. Thus, the transports objects for those trains are selected based on their physical locations, e.g., in either the arrival or departure yards. Ex. 1003 at ¶ 99. Further, all objects in the system contain both data and routines and program instructions. Ex. 1003 at ¶ 78. The routines and program instructions are used by objects to interact with each other, including to enter and retrieve data to and from other objects. Ex. 1003 at ¶¶ 86, 90, 97.

Ex. 1006 thus shows "*[t]he apparatus of claim 1 or 2, wherein the gateway includes means for gathering information, the means for gathering information recording register information from other containers, systems or processes that interact with the container*" as specified in claim 11. Ex. 1003 at ¶¶ 172-177.

K. Claim 12 is Anticipated by Ex. 1006 (Gibbs)

Ex. 1006 shows that a user can use both the map and report objects to generate maps and reports which both provide information on transport objects representing physical equipment and facilities. Ex. 1003 at ¶¶ 89-95, 96-100, *above*. These maps and reports are selected via the context menu object and displayed to the user on a display device. Ex. 1003 at ¶¶ 87-88, 91, 96.

Ex. 1006 also shows that both report and map objects contain routines and program instructions which enable the map and report objects to gather information from the transport objects. Ex. 1003 at ¶¶ 90, 97. The routines and program instructions also enable the map and report objects to generate the appropriate report and display them to the user. Ex. 1003 at ¶¶ 90, 97. Further, all objects in the system contain both data and routines and program instructions. Ex. 1003 at ¶¶ 78. The routines and program instructions are used by objects to interact with each other, including to enter and retrieve data to and from other objects. Ex. 1003 at ¶¶ 86, 90, 97.

Ex. 1006 thus shows "*[t]he apparatus of claim 1 or 2, wherein the gateway includes means for reporting information, the means for reporting information providing register information to other containers, systems or processes that interact with the container*" as specified in claim 12. Ex. 1003 at ¶¶ 178-182.

L. Claim 13 is Anticipated by Ex. 1006 (Gibbs)

Ex. 1006 shows a railroad management system that uses user-defined or system-defined parameters, which can be considered rule sets, to determine when to display warnings and alerts to the user. Ex. 1003 at ¶¶ 101-106. This use of rule sets qualifies as an expert system within the broadest reasonable construction of claim 13. Ex. 1006 thus shows "*[t]he apparatus of claim 1 or 2, wherein the gateway includes an expert system including rules defining the interaction of the*

container with other containers, systems or processes" as specified in claim 13. Ex. 1003 at ¶¶ 183-184.

M. Claim 14 is Anticipated by Ex. 1006 (Gibbs)

Ex. 1006 describes map objects which display both graphic images and textual information to the user. Ex. 1003 at ¶¶ 89-95. Further, report objects display graphic and textual information to the user. For instance, a train consist report can display a graphical representation of a particular train to the user. Ex. 1003 at ¶ 98. This representation also contains text detailing the contents of the train cars. Ex. 1003 at ¶¶ 96-100.

Ex. 1006 also shows that each transport object contains both data elements containing text such as a train name or terminal name and routines and programming instructions which allow those objects to interact with the rest of the system. Ex. 1003 at ¶¶ 81-86. The train name and terminal name data consists of text, while the routines and program instructions describe a process.

Ex. 1006 thus shows "*[t]he apparatus of claim 1 or 2, wherein the information element is one from the group of text, graphic images, video, audio, a digital pattern, a process, a nested container, bit, natural number and a system*" as specified in claim 14. Ex. 1003 at ¶¶ 185-187.

N. Claim 16 is Anticipated by Ex. 1006 (Gibbs)

As explained in § IV.A above, Ex. 1006 shows "*[a]n apparatus for transmitting, receiving and manipulating information on a computer system, the apparatus including a plurality of containers, each container being a logically defined data enclosure*." Ex. 1003 at ¶¶ 107-111,

As explained in § IV.A above, Ex. 1006 shows "an information element having information" as specified in claim 16. Ex. 1003 at ¶¶ 112-114.

As explained in § IV.A above, Ex. 1006 shows "a plurality of registers, the plurality of registers forming part of the container and including" as specified in claim 16. Ex. 1003 at ¶¶ 115-117.

As explained in § IV.A above, Ex. 1006 shows "a first register for storing a unique container identification value" as specified in claim 16. Ex. 1003 at ¶¶ 118-119.

As explained in § IV.A above, Ex. 1006 shows "a second register having a representation designating space and governing interactions of the container with other containers, systems or processes according to utility of information in the information element relative to an external-to-the-apparatus event space" as specified in claim 16. Ex. 1003 at ¶¶ 120-124.

As explained in § IV.G above, Ex. 1006 thus shows "at least one acquire register for controlling whether the container adds a register from other containers

or adds a container from other containers when interacting with them" as specified in claim 16. Ex. 1003 at ¶¶ 159-162.

As explained in § IV.A above, Ex. 1006 shows "a gateway attached to and forming part of the container, the gateway controlling the interaction of the container with other containers, systems or processes" as specified in claim 16. Ex. 1003 at ¶¶ 141-144.

Consequently, Ex. 1006 anticipates claim 16 under 35 U.S.C. § 102(e).

V. CONCLUSION

Because the information presented in this petition shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition, the Petitioner respectfully requests that a Trial be instituted and that claims 2-14 and 16 of the '536 patent be canceled as unpatentable.

Dated: October 22, 2013 Respectfully Submitted,

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PETITION FOR INTER PARTES REVIEW

OF U.S. PATENT NO. 7,010,536

ATTACHMENT A:
PROOF OF SERVICE OF THE PETITION

CERTIFICATE OF SERVICE

I hereby certify that on this 22nd day of October, 2013, a copy of this Petition, including all attachments, appendices and exhibits, has been served in its entirety by e-mail and Federal Express on the following counsel of record for patent owner:

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Dated: October 22, 2013

Respectfully submitted,

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PETITION FOR INTER PARTES REVIEW

OF U.S. PATENT NO. 7,010,536

ATTACHMENT B:
LIST OF EVIDENCE AND EXHIBITS RELIED UPON IN PETITION

Exhibit #	Reference Name
1001	U.S Patent No. 7,010,536
1002	File History of U.S Patent No. 7,010,536
1003	Declaration of Henry Houh re ‘536 Patent
1004	Henry Houh CV
1005	Evolutionary Intelligence Infringement Contentions re 7,010,536
1006	U.S. Patent No. 5,836,529 to Gibbs
1007	Return of Service for 6:12-cv-00783 (E.D. Tex.)