Paper No. 3

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. IPR2014-00085

CORRECTED PETITION FOR *INTER PARTES* REVIEW

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Attachment A. Proof of Service of the Petition

Attachment B. List of Evidence and Exhibits Relied Upon in Petition

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. 1008. 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

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(a) & (e), and/or for being obvious over the prior art under 35 U.S.C. § 103. Specifically:

(i) Claims **2-14 and 16** are anticipated under §§ 102(a) and 102(e) by U.S. Patent No. 5,684,476 to Anderson (Ex. 1005);

[1] On October 22, 2013, Petitioner inadvertently filed a copy of the petition in IPR2014-00086 as the petition in this proceeding (IPR2014-00085). This was an error made during the electronic filing of the petition. Petitioner is filing this petition as the corrected petition in IPR2014-00085.

(ii) Claims 2, 4-8, 13 and 16 would have been obvious under § 103 based on Ex. 1005 in view of general knowledge in the art.

(iii) Claim **2-14 and 16** are anticipated under § 102(e) by U.S. Patent No. 5,938,721 to Dussell (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" would thus 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., first register, second register, active space register, passive [space] register, neutral space register, container history register, system history register, predefined register, user-created register, system-defined register, and an acquire register). The context used in 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 the 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. 1007 at 58) and with respect to space, "attached to and forming part of the CLLocation, CLLocationManager, CLPlacemark, CLRegion, and CLHeading containers." (Ex. 1007 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. 1007 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.[2] *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 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

A. Claims 2-14 and 16 Are Anticipated by Ex. 1005 (Anderson)

U.S. Patent No. 5,684,476 (Anderson) has an effective filing date of at least December 30, 1993, and is prior art under 35 U.S.C. § 102(e) to claims 2-14 and 16 of the '536 patent. A summary of Ex. 1005 is provided at Ex. 1003 at ¶¶ 70-96.

1. Claim 2 is Anticipated by Ex. 1005

Ex. 1005 describes a system and processes for guiding the movements and actions of a vehicle within a particular geographical area using a location system that comprises a processor, storage and other computer system elements. Ex. 1003 at ¶¶ 71, 75, 97. Ex. 1005 shows the location system will send, receive and manipulate information. For example, the location system will receive location

[2] 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.

information from sensors or other devices that communicate with the processor of the location system. Likewise, the location system will analyze information it receives, in conjunction with stored information (e.g., from a global information system (GIS) database), to make determinations and direct actions of the vehicle. Ex. 1003 at ¶¶ 72-80, 81-96, 98-101. The location system also will transmit information to a display or to elements of a vehicle to trigger specified actions (e.g., release of an herbicide at a particular location). Ex. 1003 at ¶¶ 89, 96, 101. Also, to perform its actions, the location system uses information stored in data structures, such as a GIS database, to direct the actions of the vehicle. Ex. 1003 at ¶ 100. Ex. 1005, thus, discloses an "*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 ¶¶ 97-103.

Ex. 1005 discloses systems that use particular types of information stored within a data structure. For example, Ex. 1005 shows use by the location system of individual elements of information from the GIS database (e.g., checkpoint values) or which it obtains while a vehicle is on a particular run (e.g., location coordinates from a GPS unit reporting position). Ex. 1005 thus describes "*an information element having information.*" Ex. 1003 at ¶¶ 104-107.

Ex. 1005 shows that the GIS database stores records containing data elements specifying locations where actions may be required to be taken by the vehicle. The values of these data elements are used by the location system to direct actions of a vehicle. Ex. 1005, thus, describes an apparatus comprising "*a plurality of registers, the plurality of registers forming part of the container*." Ex. 1003 at ¶¶ 108-111.

Ex. 1005 shows that the location system will associate position values of a vehicle with data in the GIS database. The position values are stored in the GIS database, which thereby creates an index into the GIS database. For each run by a vehicle, a unique index will be generated and stored. Ex. 1005 therefore shows an apparatus comprising "*a first register for storing a unique container identification value.*" Ex. 1003 at ¶¶ 112-113.

Ex. 1005 describes a location system that uses a GIS database, which will contain geographic location information for a particular geographic area. Ex. 1003 ¶¶ 114-116. Each record in the GIS database contains information that indicates how the vehicle is to interact with locations corresponding to these entries in the GIS database. *Id.* When the vehicle approaches a location specifying action based on values of a record in the GIS database, the location system uses the information in the GIS database to cause the vehicle to perform the action specified for that location. *Id.* Ex. 1005, thus, describes an apparatus comprising "*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."

Ex. 1005 describes processes whereby the current location of a vehicle will trigger actions by the vehicle based a determination by the location computer that the current location matches a specified entry in the GIS database. Ex. 1005 thus describes an apparatus that comprises "*an active space register for identifying space in which the container will act upon other containers, processes, systems or gateways*." Ex. 1003 ¶¶ 117-120.

Ex. 1005 also shows the location system will store historical location values that are not used further in the course of a particular run by a vehicle (e.g., locations where actions were taken by the vehicle). The historical location values can be analyzed subsequently for various reasons, such as regulatory compliance. Ex. 1005, thus, describes an apparatus that comprises "*a passive register for identifying space in which the container can be acted upon by other containers, processes, systems or gateways*." Ex. 1003 ¶¶ 121-125.

Ex. 1005 explains that the GIS database will contain certain location values that are used during a particular run by a vehicle, as well other location values that are not used in that run. The latter types of entries may identify the location of

obstacles or areas that are not on a planned path of the vehicle. These latter types of values are not intended to be used, but if the vehicle were to encounter them, would be used to trigger action (e.g., a warning on a display). Ex. 1005 thus describes an apparatus that comprises "*a neutral space register for identifying space in which the container may interact with other containers, processes, systems, or gateways*." Ex. 1003 ¶¶ 126-130.

Ex. 1005 explains the location system can cause actions by the vehicle being controlled. It also shows these actions may be effected by interactions between the location system and components of the vehicle, such as actuators that cause the vehicle to take actions (e.g., to release herbicides). Also, Ex. 1005 shows the location system provides a user interface and a display, which allows the user to interact with the system, as well as log or review messages and alerts. Ex. 1005 therefore describes an apparatus comprising "*a gateway attached to and forming part of the container, the gateway controlling the interaction of the container with other containers, systems or processes*." Ex. 1003 ¶¶ 131-134.

Because Ex. 1005 describes an apparatus having all of the elements specified in claim 2, it anticipates this claim under 35 U.S.C. § 102(e).

2. <u>Claim 3 is Anticipated by Ex. 1005</u>

Ex. 1005 describes a location system which records information to a record contained in a GIS database based on the location contained in that record. Ex.

1003 at ¶¶ 90-92. For instance, the location system updates each location record in the GIS database with information on chemicals used at that location. Ex. 1003 at ¶ 90. The system can also record any waste dumping for each location to the GIS database. Ex. 1003 at ¶ 91. The location system also can record any actions taken by the vehicle at each location to the location records of the GIS database. Ex. 1003 at ¶ 92. Ex. 1005 shows recording historical data may be important to comply with regulatory requirements from the EPA. Ex. 1003 at ¶¶ 90, 93. Ex. 1005 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 ¶¶ 135-137.

3. Claim 4 is Anticipated by Ex. 1005

Ex. 1005 shows that the location system records any actions taken by the vehicle at a location in the location records of the GIS database. Ex. 1003 at ¶¶ 90-92. For instance, the location system can updates location records in the GIS database to document use of chemicals at that particular location or to identify locations where waste was dumped. Ex. 1003 at ¶¶ 90-91. Ex. 1003 at ¶ 92. Ex. 1005 also shows recording system messages describing the parameters being passed between the location detecting devices such as the GPS and compass, the

position computer, and the GIS database. Ex. 1003 at ¶ 96. These messages describe the status and operation of the system, and are logged. *Id.* Thus, for any particular run of the vehicle, the location system will create a historical record of the path the vehicle took, the actions taken by the vehicle on that path, error or other messages generated during the run, and other historical parameters of the run. Ex. 1005 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 ¶¶ 137-140.

4. Claim 5 is Anticipated by Ex. 1005

Ex. 1005 explains that location information stored in the location records of the GIS database can be input by a user. Ex. 1003 at ¶ 82. For example, a user can designate checkpoints locations within the geographic region at which the vehicle will be directed to release an herbicide, change direction or take other actions. Ex. 1003 at ¶¶ 82-83, 86-89. Checkpoints can be added or altered before or during a particular run by the vehicle. *Id.* The original or updated checkpoint information also can be input by the user directly or by devices that communicate with the location system. Ex. 1003 at ¶ 81-82. Ex. 1005 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 ¶¶ 145-146.

5. Claim 6 is Anticipated by Ex. 1005

Ex. 1005 describes allowing a user to create location specific data (e.g., checkpoints) while the system is operating. Ex. 1003 at ¶ 82-83. The location specific data will be stored in the GIS database. Ex. 1003 at ¶¶ 84, 90-92. Ex. 1005 thus shows "*[t]he apparatus of claim 1 or 2, wherein the plurality of registers includes a user-created register, the user-created register being generated by the user, and being appendable to any container*" as specified in claim 6. Ex. 1003 at ¶¶ 150-152.

6. Claim 7 is Anticipated by Ex. 1005

Ex. 1005 describes a location system that records information to records in the GIS database, including chemical spraying information as well as any other actions carried out by the vehicle being utilized in the system. Ex. 1003 at ¶¶ 88-92. Ex. 1005 also shows that checkpoints can be added or altered while a vehicle is in operation, and that this can be done by components interacting with the location system. For example, a checkpoint may be altered while a vehicle is on a particular run, and the updated checkpoint value will then be stored in the GIS. Ex. 1003 at ¶¶ 83, 87. Ex. 1005 also shows recording system messages describing the parameters being passed between the location detecting devices such as the

GPS and compass, the position computer, and the GIS database. Messages describing the status and operation of the system can be logged. Ex. 1003 at ¶ 96. Ex. 1005 also describes a location system that uses checkpoints in a GIS database to automatically correct position information. Ex. 1003 at ¶ 86. Ex. 1005 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 ¶¶ 153-158.

7. Claim 8 is Anticipated by Ex. 1005

Ex. 1005 describes adding different types of data to a record in the GIS database, including checkpoints and information "such as weed maps, soil attributes, soil test results, pest infestation, climate, terrain, hydrography, agricultural chemical needs, and previous yields." Ex. 1005 at 8:23-26. Ex. 1003 at ¶¶ 78-80. This information can be added during the operation of the location system described by Ex. 1005. Ex. 1003 at ¶¶ 82, 90-92. Ex. 1005 thus shows a "*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.

8. Claim 9 is Anticipated by Ex. 1005

Ex. 1005 describes a location system that includes an alerting signal, which signals a vehicle to perform an action when it arrives at a specific location. Ex. 1003 at ¶ 88. Ex. 1005 also describes causing a vehicle to change the rates at which is dispenses crop related substances based on information contained in records for each location through which the vehicle travels. Ex. 1003 at ¶ 89. The location system in Ex. 1005 causes the vehicle to take action by sending information or signals to other components of the system or the vehicle, such as a display unit or an actuator that causes the vehicle to take an action. Ex. 1003 at ¶¶ 88-89, 96. Ex. 1005 thus shows a "*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 ¶¶ 163-166.

9. Claim 10 is Anticipated by Ex. 1005

Ex. 1005 describes a location system that records information to a record in a GIS database based on the location information contained in that record. Ex. 1003 at ¶¶ 90-92. For instance, the location system described in Ex. 1005 updates each location record in the GIS database with information on chemicals used at that location. Ex. 1003 at ¶ 90. The system can also record any waste dumping for each location to the GIS database. Ex. 1003 at ¶ 91. The location system also

records any actions taken by the vehicle at each location to the location records of the GIS database. Ex. 1003 at ¶ 92. Since the location database is indexed by location, the location value of each record must be used to determine whether or not to record information to that record. Ex. 1003 at ¶ 85. Ex. 1005 also describes using information in the GIS database to prompt a user to determine when a vehicle has reached a checkpoint that exists in the database, which, if the user responds to the prompt, will cause the checkpoint location information in the GIS database to be updated. Ex. 1003 at ¶ 83. Ex. 1005 also describes correcting location record information based on checkpoint data stored in the GIS database. Ex. 1003 at ¶ 86-87. Ex. 1005 thus shows "*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 ¶¶ 167-171.

10. Claim 11 is Anticipated by Ex. 1005

Ex. 1005 describes a location system that records information to a record in a GIS database based on the location information in that record. Ex. 1003 at ¶¶ 90-92. For instance, the location system can gather information on the chemicals used at each location by obtaining location information from the GPS unit and other sensors such as the radar gun. Ex. 1003 at ¶ 90. Likewise, the system can record information on waste dumping for each location to the GIS database based on

information from the GPS unit and sensors. Ex. 1003 at ¶ 91. The location system also can record information on any actions taken by the vehicle at each location to the location records of the GIS database. Ex. 1003 at ¶ 92. Ex. 1005 also shows the location system can produce messages based on information such as the parameters being passed between the location detecting devices such as the GPS and compass, the position computer, and the GIS database. These informational messages describing the status and operation of the system are logged. Ex. 1003 at ¶ 96. Ex. 1005 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 ¶¶ 172-175.

11. Claim 12 is Anticipated by Ex. 1005

Ex. 1005 describes a location system that can provide an alerting signal, which signals a vehicle to perform an action when it arrives at a specific location. Ex. 1003 at ¶ 88. The sensors, position computer, user interface, and GIS database may be processes or parts on the same physical system or they may be spread out over several separate physical systems. Ex. 1003 at ¶¶ 75, 77. Ex. 1005 indicates that "…historical data may be gathered and stored in the GIS database during field operations allowing data from the current and previous seasons to be integrated

into the GIS database." Ex. 1005 at 1:46-49. This information can then be displayed and logged on the user interface system. Ex. 1003 at ¶¶ 95-96.

Ex. 1005 describes causing a vehicle to change the rates at which is dispenses crop related substances based on information contained in records for each location through which the vehicle travels. Ex. 1003 at ¶ 89. Ex. 1005 also shows recording system messages describing the parameters being passed between the location detecting devices such as the GPS and compass, the position computer, and the GIS database. These messages describing the status and operation of the system are logged. Ex. 1003 at ¶ 96. Ex. 1005 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 ¶¶ 176-180.

12. Claim 13 is Anticipated by Ex. 1005

Ex. 1005 describes a location system that stores rules for how seeds and chemicals should be applied to a geographical area such as a field. Ex. 1003 at ¶¶ 88-89. The location system also can use a set of rules to determine the correct position of the vehicle, and in certain situations, the rules will account for the driver of the vehicle deviating around an obstacle. Ex. 1003 at ¶ 86. The location system also can update the information stored in the GIS, and alter the path or

conduct of a vehicle based on variances from stored information in the GIS that are detected during a particular run of the vehicle. So, for example, if a vehicle following a path or pattern of conduct defined by a set of checkpoints encounters a variance relative to stored data (e.g., an obstacle that was not previously recorded), then the system can alter its path or conduct based on rules for handling those circumstances, including without user input. Ex. 1003 at ¶¶ 86, 87. Ex. 1005 thus shows that "*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 ¶¶ 181-185.

13. Claim 14 is Anticipated by Ex. 1005

Ex. 1005 describes a location system that includes a GIS database containing records making up a map. Ex. 1003 at ¶ 78. Data representing "weed maps, soil attributes, soil test results, pest infestation, climate, terrain, hydrography, agricultural needs, and previous yields" for each location record is stored in the GIS database. Ex. 1003 at ¶ 80. The data stored in the GIS is stored in a variety of formats, including text, natural numbers, strings or other forms. See, e.g., Ex. 1005 (Anderson) at 9:10-19. Ex. 1005 thus shows that "*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 ¶¶ 186-187.

14. Claim 16 is Anticipated by Ex. 1005

As explained in § IV.A.1 above, Ex. 1005 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 in claim 16. Ex. 1003 at ¶¶ 97-103. Ex. 1005 also shows "an information element having information" as specified in claim 16. Ex. 1003 at ¶¶ 104-107; see also § IV.A.1, above. Ex. 1005 also shows "a plurality of registers, the plurality of registers forming part of the container and including" as specified in claim 16. Ex. 1003 at ¶¶ 108-111; see also § IV.A.1, above. Ex. 1005 also shows "a first register for storing a unique container identification value" as specified in claim 16. Ex. 1003 at ¶¶ 112-113; see also § IV.A.1, above. Ex. 1005 further 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 ¶¶ 114-116; see also § IV.A.1, above. Ex. 1005 also 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; see also § IV.A.7, above. Finally, Ex. 1005 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 ¶¶ 131-134; see also § IV.A.1, above. Ex. 1005, thus, anticipates claim 16.

B. Claim 2 Would Have Been Obvious Based on Ex. 1005 (Anderson) in View of General Knowledge in the Field

Ex. 1005 describes an apparatus having all of the elements specified in claim 2, as explained in § IV.A.1, above. Patent Owner may contend that Ex. 1005 does not describe "*a neutral space register for identifying space in which the container may interact with other containers, processes, systems, or gateways*." Such a contention is contradicted by the actual disclosure in Ex. 1005. Nonetheless, if it is found that this element is not described in Ex. 1005, it would have been obvious to a person of ordinary skill in the art before January of 1998 based on Ex. 1005 considered with general knowledge that the person of ordinary skill would possess.

The concept of using one data element to govern interactions between other sets of data elements was a well known and conventional programming technique before January of 1998. Ex. 1003 at ¶ 129. The systems described in Ex. 1005 collect and store and data elements that are, by their very design, to be used together to make determinations by the location computer (e.g., using database records, checkpoint information, and GPS information to direct actions of the vehicle and record data). A person of skill in the art would be motivated to use his or her general knowledge of these well-known programming techniques to manage

interactions between the various types of data collected and stored in the systems described in Ex. 1005. Thus, based on his or her general knowledge, a person of ordinary skill would have believed an apparatus that included "*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 would have been an obvious variation of the systems described in Ex. 1005, if that element is found to not be shown in Ex. 1005. Ex. 1003 at ¶¶ 129.

C. Claim 4 Would Have Been Obvious Based on Ex. 1005 (Anderson) in View of General Knowledge in the Field

Ex. 1005 describes an apparatus having all of the elements specified in claim 4, as explained in § A.3, above. Patent Owner may contend that Ex. 1005 does not describe an apparatus "*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. Such a contention would be contradicted by the teachings of Ex. 1005.

Nonetheless, if it is determined this element is not shown to be an element of the systems described in Ex. 1005, including such an element in those systems would have been considered obvious to a person of ordinary skill based on Ex. 1005 considered with the general knowledge possessed by the person of ordinary skill. For example, Ex. 1005 identifies the need to record historical actions of a vehicle being controlled by the locations systems shown in Ex. 1005 (e.g., to

comply with EPA regulations). A person of ordinary skill also would recognize that data relating to operation of the vehicle will be generated by different components and processes (e.g., the location system, the vehicle and other devices), and this data is indexed by location to records in the GIS database. Capturing the historical data being generated and collected on a run of the vehicle and retaining it for future use thus would have been specifically suggested by Ex. 1005. Implementing capture and storage of that historical data would have been routine, with the obvious location for that information being an additional "register" in the GIS database. Consequently, if it is determined that Ex. 1005 does not describe the element of the apparatus recited in claim 4, an apparatus including this element would have been obvious to a person of ordinary skill based on Ex. 1005 considered in view of that person's general knowledge of conventional programming techniques. Ex. 1003 at ¶ 143.

D. Claim 5 Would Have Been Obvious Based on Ex. 1005 (Anderson) in View of General Knowledge in the Field

Ex. 1005 describes an apparatus having all of the elements specified in claim 5, as explained in § A.4, above. Patent Owner may contend that Ex. 1005 does not describe an apparatus "*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. Such a contention would be contradicted by the teachings of Ex. 1005.

In addition, Ex. 1005 explains that "[m]ap 36 and checkpoint locations 38 can be formed and stored in GIS database 35 through various methods. A first method uses existing maps and/or aerial photos to obtain field features of interest. Checkpoint locations are then entered based on the existing sources." Ex. 1005 (Anderson) at 11:63-67. It would have been obvious to one of ordinary skill in the art that entering checkpoint locations as called for in Ex. 1005 would be facilitated using an editor that enables a user to enter associated geographical entry fields. Ex. 1003 at ¶ 147. A person of ordinary skill also would recognize that associating contextually related data elements could be done efficiently by appending the related data to the record or file containing the related data element. Ex. 1003 at ¶ 148. As Ex. 1005 is directed to manipulating data in a database and elsewhere in order to direct and record the actions of a moving object, a person of ordinary skill would have been motivated to use his or her knowledge of conventional techniques for manipulating and storing data, including techniques for appending various data elements to other data elements, to implement the systems described in Ex. 1005. Thus, a person of ordinary skill would have considered the additional capabilities of the apparatus specified in claim 5 to have been obvious based on Ex. 1005 in view of that person's knowledge of conventional programming techniques. Ex. 1003 at ¶¶ 147-148.

E. Claim 6 Would Have Been Obvious Based on Ex. 1005 (Anderson) in View of General Knowledge in the Field

Ex. 1005 describes an apparatus having all of the elements specified in claim 6, as explained in § A.5, above. Patent Owner may contend that Ex. 1005 does not describe an apparatus "*wherein the plurality of registers includes a user-created register, the user-created register being generated by the user, and being appendable to any container,*" as specified in claim 5. Such a contention would be contradicted by the teachings of Ex. 1005.

In addition, it was a well-known programming technique to append one data object that contextually related to another object to latter data object. Ex. 1003 at ¶ 148. Ex. 1005 is directed to manipulating data in a database and elsewhere in order to direct and record the actions of a moving object. Ex. 1003 at ¶ 88-89. It also indicates that the system will involve a user storing "checkpoint" information to use in the system – which is user-generated information. Ex. 1003 at ¶ 150. A person of ordinary skill in the art would have been motivated to combine his or her knowledge of conventional techniques for manipulating data to implement the systems described in Ex. 1005, in particular, by including a "user created" register to hold data generated by a user during operation of the location system and vehicle (e.g., checkpoint data). Ex. 1003 at ¶ 151. Thus, a person of ordinary skill in the art would have considered the inclusion of a "user-created register" as specified in claim 6 to have been an obvious variation of the systems described in

Ex. 1005 based on that person's general knowledge of conventional programming techniques. Ex. 1003 at ¶¶ 151.

F. Claim 7 Would Have Been Obvious Based on Ex. 1005 (Anderson) in View of General Knowledge in the Field

Ex. 1005 describes an apparatus having all of the elements specified in claim 7, as explained in § A.6, above. Patent Owner may contend that Ex. 1005 does not describe an apparatus "*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. Such a contention would be contradicted by the teachings of Ex. 1005.

Appending one data object to another related data object was a well known programming technique in January of 1998. Ex. 1003 at ¶ 148. As Ex. 1005 is directed to manipulating related data elements to direct and record the actions of a moving object, one of skill in the art would be motivated implement the systems shown in Ex. 1005 by appending various related data to other data elements. Ex. 1003 at ¶ 151. Thus a person of ordinary skill in the art would have considered implementing the systems described in Ex. 1005 in a manner specified in claim 7 to have been obvious based on that person's general understanding of conventional programming techniques. Ex. 1003 at ¶ 157.

G. Claim 8 Would Have Been Obvious Based on Ex. 1005 (Anderson) in View of General Knowledge in the Field

Ex. 1005 describes an apparatus having all of the elements specified in claim 8, as explained in § A.7, above. Patent Owner may contend that Ex. 1005 does not describe an apparatus "*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. Such a contention would be contradicted by the teachings of Ex. 1005.

Ex. 1005 explains that data from operation of a vehicle in conjunction with the location system will capture data and store it during operation of the vehicle, and that position information will be used as an index to records in the GIS database. Appending one data object to another related data object was a well known programming technique in January of 1998. Ex. 1003 at ¶ 148. A person of ordinary skill in the art would be motivated to combine this knowledge of conventional techniques for manipulating and storing data to implement the systems described in Ex. 1005. For example, that person would have recognized that location data stored in the GIS database was to be used in conjunction with location data collected during operation of the vehicle (e.g., to make "dead reckoning" position corrections during operation of the vehicle). Ex. 1003 at ¶ 94. Thus, a person of ordinary skill would have considered the additional element

specified in claim 8 to have been an obvious variation of the systems described in Ex. 1005 based on that person's general knowledge of conventional programming techniques. Ex. 1003 at ¶¶ 161.

H. Claim 13 Would Have Been Obvious Based on Ex. 1005 (Anderson) in View of General Knowledge in the Field

Ex. 1005 describes an apparatus having all of the elements specified in claim 13, as explained in § A.12, above. Patent Owner may contend that Ex. 1005 does not describe an apparatus "*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. Such a contention would be contradicted by the teachings of Ex. 1005.

The use of expert systems to determine how to apply to data to cause or record actions was well known to those of skill in the art in January of 1998. Ex. 1003 at ¶ 184. A person of ordinary skill in the art would have recognized the systems described in Ex. 1005 involve conditional actions to be taken based on comparison of multiple related location information elements (e.g., location of the vehicle, destination for vehicle action, obstacle location, vehicle operator variances). This is the precise situation where expert systems were conventionally used. *Id.* Thus, a person of ordinary skill in the art would have considered it obvious to implement the systems described in Ex. 1005 by using expert systems

comprised of rules governing interaction of data, processes, and components of those system. Ex. 1003 at ¶¶ 184.

I. Claim 16 Would Have Been Obvious Based on Ex. 1005 (Anderson) in View of General Knowledge in the Field

Ex. 1005 describes a system having all of the elements recited in claim 16. See § IV.A.14, above. Patent Owner may contend that Ex. 1005 does not describe systems that include "*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.*" For the same reasons set forth in § G above, regarding claim 8, the inclusion of this element when implementing the systems described in Ex. 1005 would have been obvious to a person of ordinary skill in the art based on Ex. 1005 and that person's knowledge of conventional programming techniques. Ex. 1003 at ¶¶ 159-162, 193.

J. Claims 2-14 and 16 Are Anticipated by Ex. 1006 (Dussell)

U.S. Patent No. 5,938,721 (Dussell) is prior art under 35 U.S.C. § 102(e) to the claims of the '536 patent. A summary of Ex. 1006 is provided at Ex. 1003 at ¶¶ 198-221.

1. Claim 2 is Anticipated by Ex. 1006 (Dussell)

Ex. 1006 describes a system for setting and alerting a user to tasks based on the user's location using a mobile computer system. Central to this system is a database which contains records containing task descriptions and other

information. Ex. 1003 at ¶¶ 198-205. Each of these records, along with the database itself, is a logically defined data enclosure. A location device, such as a GPS, is used to determine the current location of the mobile computer system, which may be a PDA. Ex. 1003 at ¶¶ 204-205. The current location is then passed from the PDA to the mobile computer system. Ex. 1003 at ¶ 207. If the database is not on the mobile system, the location information can be transmitted to the database via a wireless network. Ex. 1003 at ¶¶ 204-207. Once the database receives the location information, it determines whether a task alert should be sent to the mobile computer system. Ex. 1003 at ¶ 211. The mobile computer system can also enter new tasks and locations into the database based on user or system input. Ex. 1003 at ¶¶ 210-211. 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 ¶¶ 222-225.

Ex. 1006 describes a database record containing a task description. Ex. 1003 at ¶ 200. This task description can contain "textual, voice or other messages which can be displayed and/or played back to the user." Ex. 1006 (Dussell) at 2:5-7. Ex. 1003 at ¶ 203. The records can also contain information such as the type of store that is located at a particular location, such as a grocery store or a hardware store.

Ex. 1003 at ¶¶ 202, 213, 216-217, 220. Ex. 1006 thus shows "*an information element having information*" as specified in claim 2. Ex. 1003 at ¶¶ 226-228.

Ex. 1006 describes a database containing many records which themselves contain information on task descriptions and the corresponding locations associated with those task descriptions. Ex. 1003 at ¶¶ 198-204, 217-219. 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 ¶¶ 229-230.

The database described by Ex. 1006 stores a "geocode" along with each record. This geocode corresponds to a unique physical location. Ex. 1003 at ¶¶ 200-202. Ex. 1006 thus shows "*a first register for storing a unique container identification value*" as specified in claim 2. Ex. 1003 at ¶¶ 231-232.

The database described by Ex. 1006 contains multiple records which each contain information on a task description that should take a place at a specific location in the physical world. Ex. 1003 at ¶¶ 198, 200-203. Whenever a user travels near to a specific location which has an associated task, the user will be alerted to that task. Ex. 1003 at ¶¶ 211-214. The mobile computer system described in Ex. 1005 can also display a map illuminating the user's current location and task location. Ex. 1003 at ¶ 215. The system described by Ex. 1006 can also record locations that have been visited by the user in database records. Ex. 1003 at ¶¶ 210, 216, 218-219. The user can also set a delivery route which can

specify pickup and drop off locations on a map. Ex. 1003 at ¶ 221. Additionally, Ex. 1006 describes using the mobile computer system to search for nearby stores based on the user's current location. Ex. 1003 at ¶ 220. 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 ¶¶ 233-237.

Ex. 1006 describes a database containing task descriptions that are associated with a particular geographic area. Ex. 1003 at ¶¶ 198, 200-203, 210. Whenever a user travels near to a specific location, which has an associated task, the user will be alerted to that task. Ex. 1003 at ¶¶ 211-214. The mobile computer system described in Ex. 1005 can also display a map illuminating the user's current location and task location. Ex. 1003 at ¶ 215. 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 ¶¶ 238-240.

Ex. 1006 describes a database containing task descriptions that are associated with a particular geographic area. Ex. 1003 at ¶¶ 198, 200-203, 210. The system described by Ex. 1006 can also record locations that have been visited

by the user in database records. Ex. 1003 at ¶¶ 210, 216, 218-219. The user can also set a delivery route which can specify pickup and drop off locations on a map. Ex. 1003 at ¶ 221. The mobile computer system can also search for nearby stores based on the user's current location. Ex. 1003 at ¶ 220. The system can also automatically analyze a user's spending habits and enter task descriptions based on that analysis in the appropriate records for each location at which the task should take place. As an example, if a user buys milk at the grocery store often, the system can place a reminder to buy milk in the record associated with the location of the grocery store. Ex. 1003 at ¶ 219. 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 ¶¶ 241-245.

The description above of the "active register," which identifies where a container can act, and the "passive register," which identifies where a container can be acted upon, also describe where a container may "interact." Ex. 1003 at ¶¶ 238-245. 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 ¶¶ 246-247.

Ex. 1006 describes a physical user interface which the user can use to interact with the mobile computer system. Ex. 1003 at ¶ 209. Additionally, Ex. 1006 describes the user of applications on the mobile computer to access and

interact with the database. Ex. 1003 at ¶ 208. The mobile computer system, database, and GPS unit must also all interact with each other to make the system function. Ex. 1003 at ¶ 207. 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 ¶¶ 248-251. Because Ex. 1006 shows an apparatus having each element recited in claim 2, it anticipates that claim under 35 U.S.C. § 102(e).

2. Claim 2 is Anticipated by Ex. 1006 (Dussell)

The system described by Ex. 1006 can record locations that have been visited by the user in database records. Ex. 1003 at ¶¶ 210, 216, 218-219. The user can also set a delivery route which can specify pickup and drop off locations on a map. Ex. 1003 at ¶ 221. The system can also automatically analyze a user's spending habits and enter task descriptions based on that analysis in the appropriate records for each location at which the task should take place. Ex. 1003 at ¶ 219. As an example, if a user buys milk at the grocery store often, the system can place a reminder to buy milk in the record associated with the location of the grocery store. Ex. 1003 at ¶ 219. 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 ¶¶ 252-254.

3. Claim 4 is Anticipated by Ex. 1006 (Dussell)

The system described by Ex. 1006 can record locations that have been visited by the user in database records. Ex. 1003 at ¶¶ 210, 216, 218-219. The user can also set a delivery route which can specify pickup and drop off locations on a map. Ex. 1003 at ¶ 221. Further, the system can automatically analyze a user's spending habits and enter task descriptions based on that analysis in the appropriate records for each location at which the task should take place. As an example, if a user buys milk at the grocery store often, the system can place a reminder to buy milk in the record associated with the location of the grocery store. Ex. 1003 at ¶ 219. 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 ¶¶ 255-257.

4. Claim 5 is Anticipated by Ex. 1006 (Dussell)

Ex. 1006 describes the use of a predefined commercial database that can be edited by the user. Ex. 1003 at ¶¶ 217-219. 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 ¶¶ 258-259.

5. Claim 6 is Anticipated by Ex. 1006 (Dussell)

Ex. 1006 describes a system in which a user can create a record in the database that will be associated with a specific location, and that the user can add a task description to this record. Ex. 1003 at ¶¶ 201, 210, 216, 217. Ex. 1006 thus shows "*[t]he apparatus of claim 1 or 2, wherein the plurality of registers includes a user-created register, the user-created register being generated by the user, and being appendable to any container*" per claim 6. Ex. 1003 at ¶¶ 260-261.

6. Claim 7 is Anticipated by Ex. 1006 (Dussell)

Ex. 1006 describes a database record that can contain a geocode and which corresponds to a physical location. The geocode is initially appended to a database record when a user adds a location to the system. Ex. 1003 at ¶¶ 200, 202, 210. 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 ¶¶ 262-263.

7. Claim 8 is Anticipated by Ex. 1006 (Dussell)

Ex. 1006 describes adding a task description to a record associated with particular locations in a database. Ex. 1003 at ¶¶ 210, 216, 218-219. The user or system can also set or remove pickup and drop off locations on a delivery route.

Ex. 1003 at ¶ 221. Ex. 1006 describes that mobile devices may request GPS data from a central server when needed, which requires control information to determine whether or not the information is needed. If needed, this data may be appended to records in the database. Ex. 1003 at ¶¶ 206-207. 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 ¶¶ 264-266.

8. Claim 9 is Anticipated by Ex. 1006 (Dussell)

Ex. 1006 describes a database containing task descriptions that are associated with a particular geographic area. Ex. 1003 at ¶¶ 198, 200-203, 210. Whenever a user travels near to a specific location that has an associated task, the user will be alerted to that task. Ex. 1003 at ¶¶ 211-214. The mobile computer system described in Ex. 1005 can also display a map illuminating the user's current location and task location. Ex. 1003 at ¶ 215. 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 ¶¶ 267-269.

9. Claim 10 is Anticipated by Ex. 1006 (Dussell)

Ex. 1006 describes a database containing task descriptions that are associated with a particular geographic area. Ex. 1003 at ¶¶ 198, 200-203, 210. Whenever a user travels near to a specific location which has an associated task, the user will be alerted to that task. Ex. 1003 at ¶¶ 211-214. The mobile computer system described in Ex. 1005 can also display a map illuminating the user's current location and task location. Ex. 1003 at ¶ 215. Further, the system described by Ex. 1006 can record locations that have been visited by the user in database records. Ex. 1003 at ¶¶ 210, 216, 218-219. The user can also set a delivery route which can specify pickup and drop off locations on a map. Ex. 1003 at ¶ 221.

Ex. 1006 also describes using the mobile computer system to search for nearby stores based on the user's current location. Ex. 1003 at ¶ 220. Further, the system can automatically analyze a user's spending habits and enter task descriptions based on that analysis in the appropriate records for each location at which the task should take place. As an example, if a user buys milk at the grocery store often, the system can place a reminder to buy milk in the record associated with the location of the grocery store. Ex. 1003 at ¶ 219.

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 ¶¶ 270-275.

10. Claim 11 is Anticipated by Ex. 1006 (Dussell)

Ex. 1006 describes a database containing task descriptions that are associated with a particular geographic area. Ex. 1003 at ¶¶ 198, 200-203, 210. Ex. 1006 shows that the system can record locations that have been visited by the user in database records. Ex. 1003 at ¶¶ 210, 216, 218-219. The user can also set a delivery route which can specify pickup and drop off locations on a map. Ex. 1003 at ¶ 221. Additionally, Ex. 1006 describes using the mobile computer system to search for nearby stores based on the user's current location. Ex. 1003 at ¶ 220. Further, the system can automatically analyze a user's spending habits and enter task descriptions based on that analysis in the appropriate records for each location at which the task should take place. As an example, if a user buys milk at the grocery store often, the system can place a reminder to buy milk in the record associated with the location of the grocery store. Ex. 1003 at ¶ 219. 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 ¶¶ 276-280.

11. Claim 12 is Anticipated by Ex. 1006 (Dussell)

Whenever a user travels near to a specific location which has an associated task, the user will be alerted to that task. Ex. 1003 at ¶¶ 211-214. The mobile computer system described in Ex. 1005 can also display a map illuminating the user's current location and task location. Ex. 1003 at ¶ 215. The user interface can display information through a screen or through speakers. Ex. 1003 at ¶ 209. 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 ¶¶ 281-282.

12. Claim 13 is Anticipated by Ex. 1006 (Dussell)

Ex. 1006 describes a system that can analyze a user's spending habits using a set of rules, by which it automatically assigns task descriptions to the appropriate location records. Ex. 1003 at ¶ 219. This capability described in Ex. 1006 is an "expert system" within the broadest reasonable construction of this term as used in 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 ¶¶ 284-285.

13. Claim 14 is Anticipated by Ex. 1006 (Dussell)

Ex. 1006 describes task descriptions that include "textual, voice or other messages which can be displayed back to the user." Ex. 1006 (Dussell) at 2:5-7. Ex. 1003 at ¶ 203. 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 ¶¶ 286-287.

14. Claim 16 is Anticipated by Ex. 1006 (Dussell)

As explained in § IV.J.1 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…*" as specified in claim 16. Ex. 1003 at ¶¶ 198-205. Ex. 1006 also shows "*an information element having information*" as specified in claim 16. Ex. 1003 at ¶¶ 226-228; see also § IV.J.1, 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 ¶¶ 229-230; see also § IV.J.1, above. Ex. 1006 shows "a first register for storing a unique container identification value" as specified in claim 16. Ex. 1003 at ¶¶ 231-232; see also § IV.J.1, above. Ex. 1006 further 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 ¶¶ 233-237; see also § IV.J.1, above. Ex. 1006 further 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 ¶¶ 264-266; see also § IV.J.7, above. Finally, 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 ¶¶ 248-251; see also § IV.J.1.

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 23, 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 23rd day of October, 2013, a copy of this Corrected Petition has been served in its entirety by Federal Express on the following counsel of record for patent owner:

Orrick, Herrington & Sutcliffe, LLP
IP Prosecution Department
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Dated: October 23, 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	U.S. Patent No. 5,684,476 to Anderson
1006	U.S. Patent No. 5,938,721 to Dussell
1007	Evolutionary Intelligence Infringement Contentions re 7,010,536
1008	Return of Service for 6:12-cv-00783 (E.D. Tex.)