LOCATION SERVICES GAME ENGINE

Abstract: A location services game engine (LSGE) that is concerned with the geographic location of the wireless devices used to play in the game. The operations performed by players on wireless devices inside the location services game engine have location proximity requirements on the wireless devices being played in the game, and other wireless devices they interact with. A common game experience provides a virtual game instance including a plurality of geographically remote playing wireless devices virtually gathered together within the virtual game to physically interact with one another, and traveling relative to one another within the virtual game. A location update of each of the plurality of playing wireless devices active within the virtual game is obtained, with any movement from a last reported position applied against a virtual origin point within the virtual reality game.
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LOCATION SERVICES GAME ENGINE

This application claims priority from U.S. Provisional No. 61/591,511, entitled "Location services game engine", to Lockeby et al., filed January 27, 2012, the entirety of which is explicitly incorporated herein by reference.

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates generally to wireless telecommunications, specifically cellular location services for mobile devices, and most particularly a location-based game engine component.

2. Background of Related Art

Gaming applications today allow players to interact with other players in the game space, i.e., in the virtual world created by the game engine only. Those game engines provide players in the virtual world of the game with a virtual location.

SUMMARY

In accordance with the principles of the present invention, a location services game engine comprises a virtual game instance generator to generate a virtual game including a plurality of playing wireless devices active within the virtual game. A location request module obtains a location update of each of the plurality of playing wireless devices active within the virtual game. A game user server interface applies a change in geographic position of each of the playing wireless devices against a virtual origin point within the virtual reality game. The plurality of playing wireless devices are geographically remote from one another yet appear gathered together within the virtual game, and traveling relative to one another.
A method of providing a common game experience to a plurality of geographically remote playing wireless devices in accordance with another aspect comprises generating a virtual game instance including a plurality of playing wireless devices active within the virtual game. A location update of each of the plurality of playing wireless devices active within the virtual game is obtained. A change in geographic position of each of the playing wireless devices is applied against a virtual origin point within the virtual reality game. The plurality of playing wireless devices are geographically remote from one another yet appear gathered together within the virtual game, and traveling relative to one another.

BRIEF DESCRIPTION OF THE DRAWINGS
Features and advantages of the present invention will become apparent to those skilled in the art from the following description with reference to the drawings, in which:

Fig. 1 shows exemplary architecture of a location services game engine (LSGE), in accordance with the principles of the present invention.

Fig. 2 shows details of the structure of an exemplary location services game engine (LSGE) as shown in Fig. 1.

Fig. 3 shows an exemplary mock-up screen shot of the application map interface when a player is about to initiate an operation against another player, in accordance with the principles of the present invention.

Fig. 4 shows an exemplary mock-up screen shot of the application map interface when a player is not close enough in proximity to any other player to initiate an operation, in accordance with the principles of the present invention.

Fig. 5 shows an exemplary mock-up screen shot of check in interface when a player has traveled to a location where an item can be acquired or an item left to trigger an operation against the next player to visit the same location point, in accordance with the principles of the present invention.

Fig. 6 shows an exemplary mock-up screen shot of the item inventory interface, in accordance with the principles of the present invention.
DETAILED DESCRIPTION OF ILLUSTRATIVE EMBODIMENTS

Conventional game engines do not include location of a wireless device used to play the game as part of the game engine.

The present invention provides a location services game engine (LSGE) that is concerned with the geographic location of the wireless devices used to play the game. The operations performed by players on wireless devices inside the location services game engine have location proximity requirements on the wireless devices being played in the game, and other wireless devices they interact with. No other gaming application in the world has in-game mechanics affected by the geographic location of where the game is being played and the location of the wireless devices in the game relative to each other.

Fig. 1 shows exemplary architecture of a location services game engine (LSGE), in accordance with the principles of the present invention.

In particular, as shown in Fig. 1, a location services game engine 100 resides typically on a server in communication with the Internet 160 and a given wireless carrier network 170. The location services game engine 100 communicates with a location based service (LBS) via, e.g., the Internet 160.

The location based service (LBS) 150 fulfills requests for location of each active player in a given game facilitated by the location services game engine 100. Returned current location of players may be stored in the players database 110 or other suitable location. Frequently updated location data points of each playing wireless device 181 in a given game are required by the location services game engine 100.

An item location point (ILP) is a fixed, physical location where a virtual item can be acquired by a playing wireless device 181. The location services game engine 100 additionally requires the location of item location points in each given game as well, though the location of virtual items may be artificially generated by the location services game engine 100 itself without the need for a request to the location based service 150. A virtual item can be "left"
by the location services game engine 100 to trigger an operation against the next
playing wireless device 181 that subsequently visits that physical item location
point (or within a predetermined proximity thereto.)

The location services game engine (LSGE) 100 uses databases or
data sets to manage the configurable content of the game: a virtual item matrix
in an items matrix database 116; the identities of playing wireless devices in a
players database 110; a game transaction history database 112; and an item
location point (ILP) database 114.

The item location point (ILP) data set maintained in the item
location point (ILP) database 114 is a list (or lists) that may be provided by a
game administrator, of item location points for a given game. The item location
points may include, e.g., retail locations, points of interest, places of business,
etc. The game administrator may determine which location types are valid item
location points, and how many item location points are part of a given game
facilitated by the location services game engine 100.

The item location point (ILP) data set may also include a cool down
or reset time based parameter. For instance, when a playing wireless device 181
visits an item location point, perhaps due to game rules it cannot acquire another
virtual item at that same item location point until a predetermined reset time has
passed. This is to incentivize movement within the game. There may be no limit
to how many different playing wireless devices 181 can acquire a given virtual
item at the same item location point, but preferably the same playing wireless
device 181 cannot acquire a virtual item more than once per reset period at the
same item location point.

The virtual items matrix database 116 preferably contains all of the
virtual items that exist in a given game. For instance, each virtual item entry in
the virtual items matrix database 116 may contain an item type (e.g., for Initiating
operations, countering operations, or triggering operations); attributes of the
virtual item that establishes its geographic proximity requirement, if any, for use
of that virtual item; a magnitude of impact attribute of the virtual item; and
whether or not the virtual item will be countered when it is used and what virtual
item(s) are required in the inventory of the targeted playing wireless device 181 for the counter to occur.

The list of playing wireless devices in the players database 110 includes the identity (and perhaps latest reported location) of all registered and playing wireless devices 181 which voluntary preregistered or otherwise agreed (via opt-in) to be located by other playing wireless devices 181 within a given game instance in the location services game engine 100. The list of playing wireless devices includes the identity of each playing wireless device 181 that the location services game engine 100 must track at all times within a given game, e.g., using network-initiated location requests that occur at regular, periodic and/or frequent time intervals.

The location services game engine 100 may optionally include a transactional database in a game transaction history database 112 to record every transaction of a given type or types that occurs in a given game. Exemplary transaction types that may be recorded are, e.g., another playing wireless device 181 joining the game; a playing wireless device 181 acquiring a virtual item; and a playing wireless device initiating an operation against another playing wireless device 181 using a target virtual item, the result of that operation, (e.g., determined by the virtual item used, the geographic proximity, and the virtual items in the inventory of the targeted playing wireless device 181.) Additional exemplary transaction types may include a playing wireless device 181 constructing a new virtual item from previously acquired virtual items; a playing wireless device 181 leaving a virtual item at an item location point; the outcome of triggered initiated operations; and the virtual item inventory of each playing wireless device 181, i.e., the net result of virtual item acquisition and virtual item use history for each playing wireless device 181.

The present invention combines location-based communication services with a location service 150 to provide a location-based game engine component 100 that is tightly coupled to wireless devices 181. In accordance with the principles of the present invention, as mobile devices 181 are driven by a software game application, a location-based services game engine component
within each playing wireless device 181 communicates with a game engine server including the location services game engine 100 that makes frequent location service requests. The results of these location requests control the game.

In accordance with the principles of the present invention, the physical geographic location of participating wireless devices 181, assumed to be one and the same with the operator of the wireless device 181 he or she is carrying, is what controls the game.

The location services game engine 100 processes personal geographic proximity when evaluating interactions between the player wireless devices 181, as well as interactions between playing wireless devices 181 and fixed locations.

A goal of the invention is to provide, as a service, top notch game playing entertainment, to groups of voluntary playing mobile devices 181 that are willing and able to move location or otherwise travel to play a given location-based game. Another goal of the invention is to provide retail opportunities and means to motivate players of a game to physically travel to desired retail premises.

When playing, wireless devices 181 carried by participating players travel in accordance with a given game to various fixed physical locations where they can "check-in" with the facilitating location services game engine 100 to acquire virtual items.

Physical locations containing virtual items are referred to herein as item location points (ILPs). Virtual items are used to initiate operations between a given wireless device 181 and other playing wireless devices 181 that meet predetermined geographic proximity requirement(s). Specific geographic proximity requirement(s) to use any given virtual item against another playing wireless device 181 varies from item to item. The result of an operation initiated against another playing wireless device 181 depends on the virtual item used, the geographic proximity between the playing wireless devices 181, and the virtual items in the inventory of the targeted playing wireless device 181.
Certain virtual items can be left by a playing wireless device 181 (or the location services game engine 100) at an item location point. In play, this action initiates a triggered response operation against the next playing wireless device 181 that attempts to acquire a virtual item at that point of interest (POI), preferably regardless of the geographic proximity of the playing wireless device 181 that left the virtual item, that is, the playing wireless device 181 that put the triggered response in place. The triggered response fires when a playing wireless device 181 performs a check-in at an item location point to acquire a virtual item where another playing wireless device 181 previously left a virtual item.

The locations acquired and processed by the location services game engine 100 can be applied to any game instance in relative or absolute terms. For instance, a relative game location option gathers the true physical geographic location of many different playing wireless devices 100, that are all at different locations, and maps them to a single common, virtual, origin point for all playing wireless devices 181 at the start of a game. In this way the location services game engine 100 can form a virtual gathering of playing movable wireless devices 181 that may each be in a location entirely remote from all others, yet appear within aspects of the game being played to be in a common virtual location and traveling relative to one another. Simply put, each playing wireless device 181 is placed at a virtual coordinate position, e.g., "0,0" on a given game map for all playing wireless devices 181 at the beginning of a given "relative location" game. Then, once the "relative location" game has been started, and after a virtual origin point established for all players in that game at a common or otherwise pre-established starting point, the location updates of each playing wireless device 181 over time will move with respect to one another from their real origin point as applied against the virtual origin point in the game space.

For instance, if all relevant wireless devices 181 participating in a given relative location-based game initialize their starting positions to be at a same virtual location within that game, then walk at the same pace in a direction
north, the location services game engine will place all relevant wireless devices in a virtual game as if they are all walking side-by-side.

Using the virtual coordinate position capability of the location services game engine 100, e.g., ten wireless devices 181 actually respectively located in ten different countries can play tag against one another within the same virtual game space - and appear within the game to be proximate to one another - without ever leaving their different countries. Moreover, and particularly important with respect to young players, the playing wireless devices 181 need not ever expose to any other playing wireless device 181 its true location. Rather, the true location delta, or relative movement, of each playing wireless device 181 is captured, and the resulting vector applied to the common virtual origin point within a given game instance. This actual location anonymity provides an important level of safety - particularly to minor aged players, or even to celebrities or other high-profile individuals who may not want to disclose their actual location at any given time.

Fig. 2 shows details of the structure of an exemplary location services game engine (LSGE) as shown in Fig. 1.

In particular, as shown in Fig. 2, the location services game engine 100 interfaces to the subscriber wireless devices (participants in the game) on their respective wireless carrier network with two components: a Request Broker 210 and a Response Broker 212. Each component listens on its own respective thread for incoming requests to pass on to the Instance Manager 200 or for updates from a Game Instance within the location services game engine 100 to pass on to the subscriber wireless device 181. The Instance Manager 200 determines the correct game instance for the request and sends the request to the appropriate Game Instance Interface 230 within the game instance 100 depending on the request type. The game instance processes the request, which may be an actual game operation (transaction) or a simple update to the GUI with nothing else having changed other than one or more of the player wireless device's location. In all cases the GUI Server delivers the outbound message back to the subscriber 181, sending updated location information, plus
recent game engine transactions, if any, back to the subscriber 181. The Instance Manager 200 makes requests and receives responses, over the Internet, to Location Based Services (LBS) 150. The Instance Manager 200 tracks the location of all subscribers regardless of their activity in one or more game instances. Game instances receive the Location of players from the Instance Manager 200, which sends the location information to the Game Instance within the location services game engine 100 using the Administrative Interface. Each of the Game Instance Interfaces 230 listens on its own thread. The Game Operation Interface 230 and Administrative Interface 240 process requests that affect the internal data state of the Game Instance, that is, these interfaces will always execute (pending failure or error condition) transactions against one of the data stores contained with the Game Instance. Both the Game Operation Interface 230 and Administrative Interface 240, upon completion of their processing and transaction, send a notification to the GUI server, which in turn prepares and sends a response to the subscriber to be rendered on their mobile device 181.

Major operations/concepts in the game and how these elements relate to the physical location of the player wireless devices in the game is now discussed in more detail.

Travel

Players in the game travel by moving or traveling with their wireless devices 181 in reality. There is no explicit in game action to be taken using the game application software in order to travel. Travel simply changes location. Location determines if the player can:

1) Check-in to an ILP to acquire an item -or- leave an item (already acquired or constructed previously) at the ILP.

2) Perform an operation against another player (has proximity requirements)

Relative Location
The game engine can also operate using relative location instead of fixed location. For relative location mode all player wireless devices within the game must calibrate their true location to a common virtual origin point, e.g., at the beginning of the game. That player wireless device's location within the game becomes virtual and relative to the origin point. The Item Location Points are visited by players by means of traveling in the correct vector, relative to the origin point.

**Location Visibility**

Players can view of a map of their location, the location of the other players in the same game, and any ILPs denoted on the map, at any time. ILPs are always visible based on mapped locations but not specially denoted by the LSGE 100. All players in the game are also visible at all times unless a player wireless device 181 acquires an item that hides their location from other player wireless devices 181 for a limited amount of time once they chose to use the item. Likewise, players 181 may acquire an item that allows them to see hidden players, if any, for a limited amount of time once they choose to use that item.

**Check-in to an ILP**

A player wireless device 181 with a location that matches the location of an ILP can check-in to the ILP to acquire a virtual item. The player 181 may use a simple menu or button in the Graphical User Interface of the game to check-in to the ILP. If they are not within the ILP's acceptable radius (e.g., if its location does not match) the player wireless device 181 receives a message explaining that the wireless device 181 is not within the appropriate proximity and no item has been received. If the player wireless device 181 has already acquired an item from the same ILP and the reset time parameter has not yet passed, the player wireless device 181 receives a similar message stating that they have already checked-in to the ILP and received the available item for that day.
When a player checks-in to an eligible ILP to acquire an item, the player either receives the item contained at the ILP, or the player becomes the target of a triggered response from an item explicitly placed at the ILP previously by another player.

Leave an Item at an ILP

Only certain items can be left at an ILP to trigger an operation against the next player wireless device 181 to check-in to that ILP. Items that are candidates to be left at an ILP have visual indicators in the Graphical User Interface. These items can be left at an ILP if the player is at an eligible ILP and has the item available in their inventory.

Triggered Operation

When a triggered operation fires, the targeted player's inventory is evaluated against the item that fired the triggered operation. If the target player's inventory contains item(s) with a counter measure relationship to the item operating against the target player, the result of the operation will be affected accordingly, possibly, nulling out the affect all together or diminishing the score effect of the operation. The score effect result of a triggered operation is not influenced by geographic proximity between the player wireless devices 181. The end result score effect of a triggered operation can preferably only be assigned to the player wireless device 181 that left the item that fired the triggered operation.

Player Operations

Fig. 3 shows an exemplary mock-up screen shot of the application map interface when a player is about to initiate an operation against another player, in accordance with the principles of the present invention.

Player wireless devices 181 within the required geographic proximity to other player wireless devices 181 may initiate an operation against another player. The geographic proximity requirement between the initiating and
target player wireless device 181 depends on the item being used in the operation. The end result of the operation will be a score effect, awarding the initiating player a numeric score. The score effect is calculated based on the magnitude of impact attribute of the item being used, the geographic proximity between the players, and the target player's item inventory. To use the item in an operation against a target player, the two player wireless devices 181 must be under the geographic proximity minimum for the item being used. A threshold distance may also work, as you can be too far away, but never too close. In addition, the magnitude of impact increases as the geographic proximity decreases. In other words, the closer two players are together, the higher the stakes of the interaction. The score effect end result is also determined by the target player's inventory. The targeted player wireless device may have, in its inventory, items with a counter measure relationship to the item being used in the operation that is targeting them. The counter measure items may decrease, void all together, or even oppositely reverse the score effect, in which case the score effect is assigned to the target player instead of the initiating player.

Fig. 4 shows an exemplary mock-up screen shot of the application map interface when a player wireless device 181 is not close enough in proximity to any other player wireless device 181 to initiate an operation, in accordance with the principles of the present invention.

**Item Use**

Fig. 5 shows an exemplary mock-up screen shot of check in interface when a player wireless device 181 has traveled to a location where an item can be acquired or an item left to trigger an operation against the next player wireless device 181 to visit the same location point, in accordance with the principles of the present invention.

Items in a player's inventory may be: used to initiate an operation against a target player, left at an ILP for a triggered operation, used to counter an operation initiated by another player wireless device 181 or a triggered operation, or combined to form a new, composite item. When a player uses an item in an
operation against a target player or leaves an item at an ILP, the item is "consumed" or used, and the item is no longer in the player's inventory of items. This requires action by the initiating player. When an item is used to counter an operation initiated by another player or to counter a triggered operation, the item is also consumed or used in the same way. This requires no action by the targeted player, only that it have the required countering item available in its inventory. When items are combined to form a composite item, the individual items are each consumed and their attributes changed or removed. The new composite item that is created will have its own item type, attributes, effective radius (if any) and magnitude of impact as well as a possible new counter item.

Score Effect

The use of items, triggered or player initiated, results in a score effect, a numeric value that is assigned to a player. In player to player operations, the score effect can be assigned to either player. In triggered operations, the score effect can only be assigned to the player wireless device 181 that left the item that fired the triggered operation or possibly made null by a target player's counter operation.

Magnitude of Impact

Each item acquired through movement and action of a player wireless device 181 has a Magnitude of Impact attribute that determines how high the score effect of a triggered or player initiated operation will be. Items with higher Magnitude of Impact values are more desirable as they enable players to achieve higher score affects. The Magnitude of Impact attribute is also affected in the case of a player initiated operation by the initiating player's proximity to the target player.

Default Items

Fig. 6 shows an exemplary mock-up screen shot of the item inventory interface, in accordance with the principles of the present invention.
Game instances within the location services game engine 100 can be configured so that every player wireless device 181 in the game will start with a default inventory of items before it travels to any given item location point to acquire a virtual item.

Counter Measure

Items in the virtual items database 116 have relationships to other items. One of the relationship types is a counter measure effect, which alters the outcome of a player initiated operation or a trigger initiated operation. Counter measures can reduce points awarded to the initiating player, nullify the point award completely, or reverse the points awarded from initiating player to the target player.

Cumulative Scoring

The outcome of each player initiated and trigger initiated operation, which are recorded in the Game Transaction History database 112, may be totaled so that the player's total scores can be viewed in-game. One possible scoring aggregation scheme is that total scores are calculated each day with the oldest day's score within a predetermined period dropped and replaced by the newest day's score. For example, if a player was awarded no points on a given day, its cumulative score would decrease by virtue that its oldest score, in a seven day period, was replaced with a zero score for the newest day, and the total recalculated. Historical scores and individual transactions are also viewable in the transaction history. Scoring is preferably highly configurable since it need be nothing more than reporting of historical data already recorded.

The location services game engine 100 by design may be used as a configurable marketing tool for retailers, and also a fun way for wireless carriers to get customers to make a high number of location requests.

The location services game engine 100 in accordance with the principles of the present invention may also be implemented in partnership with retailers. For instance, retailers may be established as item location points (ILP)
in a given game. The game mechanics provide incentive for players of the game to travel to the retailers to check-in to the ILP to acquire game items. Players of the game are required to enter retailer locations frequently to play the game effectively. In addition, retailers can provide, possibly even pay to provide, content to the game administrators so that game themes, including game items that can be acquired and used in the game, coordinate with current retail promotions or other current news and events highly relevant to the target demographic of users of the player wireless devices 181 that play the game, such as the release of certain movies, books, other video games, conventions, etc. The location services game engine 100 is preferably implemented generic enough that any theme of content can be provisioned in, based on popular current events, seasons, holidays, or other market trends.

Retailers are enabled to partner with the location services game engine 100 system in a micro-transaction model. For instance, players 181 can be offered special game items, highly desirable game items with above average attributes and game utilization, such as less strict geographic proximity requirements (higher range items), higher magnitude of impact values, items with no counter measure relationship to other items, in exchange for fulfilling purchases at the retailer per the terms of the promotion. The general idea is that retailers offer game advantages to players in exchange for players giving retailers business.

While the invention has been described with reference to the exemplary embodiments thereof, those skilled in the art will be able to make various modifications to the described embodiments of the invention without departing from the true spirit and scope of the invention.
What is claimed is:

1. A location services game engine, comprising:
   - a virtual game instance generator to generate a virtual game including a plurality of playing wireless devices active within said virtual game;
   - a location request module to obtain a location update of each of said plurality of playing wireless devices active within said virtual game; and
   - a game user server interface to apply a change in geographic position of each of said playing wireless devices against a virtual origin point within said virtual reality game;
   wherein said plurality of playing wireless devices geographically remote from one another appear gathered together within said virtual game and traveling relative to one another.

2. The location services game engine according to claim 1, further comprising:
   - a virtual coordinate position module to virtually locate a plurality of geographically disparate player wireless devices virtually proximate to one another at a virtual coordinate starting position within said virtual game.

3. The location services game engine according to claim 2, wherein:
   virtual movement of said plurality of geographically disparate player wireless devices within said virtual reality game with respect to respective virtual coordinate starting positions, mirrors real geographical movement of said plurality of geographically disparate player wireless devices.

4. The location services game engine according to claim 1, further comprising:
   - a game transaction history database in communication with said virtual game.
5. The location services game engine according to claim 1, further comprising:
   an item location point database.

6. The location services game engine according to claim 1, further comprising:
   a virtual items matrix database.

7. The location services game engine according to claim 1, further comprising:
   a player wireless devices database.

8. A method of providing a common game experience to a plurality of geographically remote playing wireless devices, comprising:
   generating a virtual game instance including a plurality of playing wireless devices active within said virtual game;
   obtaining a location update of each of said plurality of playing wireless devices active within said virtual game; and
   applying a change in geographic position of each of said playing wireless devices against a virtual origin point within said virtual reality game;
   wherein said plurality of playing wireless devices geographically remote from one another appear gathered together within said virtual game and traveling relative to one another.

9. The method of providing a common game experience to a plurality of geographically remote playing wireless devices according to claim 8, further comprising:
   virtually locating a plurality of geographically disparate player wireless devices virtually proximate to one another at a virtual coordinate starting position within said virtual game.
10. The method of providing a common game experience to a plurality of geographically remote playing wireless devices according to claim 8, wherein:
mirroring virtual movement of said plurality of geographically disparate player wireless devices within said virtual reality game with respect to respective virtual coordinate starting positions, to real geographical movement of said plurality of geographically disparate player wireless devices.

11. Apparatus for providing a common game experience to a plurality of geographically remote playing wireless devices, comprising:
means for generating a virtual game instance including a plurality of geographically disparate playing wireless devices active within said virtual game;
means for obtaining a location update of each of said plurality of playing wireless devices active within said virtual game; and
means for applying a change in geographic position of each of said playing wireless devices against a virtual origin point within said virtual reality game;
wherein said plurality of playing wireless devices geographically remote from one another appear gathered together within said virtual game and traveling relative to one another.

12. The apparatus for providing a common game experience to a plurality of geographically remote playing wireless devices according to claim 11, further comprising:
means for virtually locating a plurality of geographically disparate player wireless devices virtually proximate to one another at a virtual coordinate starting position within said virtual game.
13. The apparatus for providing a common game experience to a plurality of geographically remote playing wireless devices according to claim 11, wherein:

said means for applying a change in geographic position mirrors virtual movement of said plurality of geographically disparate player wireless devices within said virtual reality game with respect to respective virtual coordinate starting positions, to real geographical movement of said plurality of geographically disparate player wireless devices.

14. The apparatus for providing a common game experience to a plurality of geographically remote playing wireless devices according to claim 11, further comprising:

a game transaction history database in communication with said virtual game.

15. The apparatus for providing a common game experience to a plurality of geographically remote playing wireless devices according to claim 11, further comprising:

an item location point database.

16. The apparatus for providing a common game experience to a plurality of geographically remote playing wireless devices according to claim 11, further comprising:

a virtual items matrix database.

17. The apparatus for providing a common game experience to a plurality of geographically remote playing wireless devices according to claim 11, further comprising:

a player wireless devices database.
FIG. 3
ITEM INVENTORY

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<td>IMAGE</td>
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<td>IMAGE</td>
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<tr>
<td>IMAGE</td>
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<td>Cancel Operation</td>
<td>Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper.</td>
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FIG. 6

SUBSTITUTE SHEET (RULE 26)
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A63F 9/24 (2012.01)
USPC - 463/42

According to International Patent Classification (IPC) or to both national classification and IPC.

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC(8) - A63F 9/24 (2012.01)
USPC - 463/9, 15, 36, 39, 40, 41, 42, 43

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Orbit.com, Google Patents, Google

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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<td>US 2010/0125622 A1 (WHITE) 20 May 2010 (20.05.2010) entire document</td>
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</tr>
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Further documents are listed in the continuation of Box C.

Date of the actual completion of the international search: 13 December 2012

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