Eminent Global Research Solutions

Sample Report - Patentability

Table of Content

Objective and Scope

Objective and Scope:

The scope of the project is to identify the relevant patent/non-patent literature related to subject matter presented in invention disclosure.

Jurisdiction: Global

Types of documents: Patents and Other literature

Date restriction: None

Key features identified from invention disclosure

A method for overlaying real world with virtual objects having the following features:

- Creating virtual spheres or virtual objects at real world locations by users via their mobile devices.
- The users who create the virtual objects decide how other users can interact with the virtual objects.
- The virtual objects can be tied to a time window for future visibility.
- The virtual objects are based on the user's specifications - the virtual objects can be fixed to a location or moving.

#This is a 'hypothetical' invention with a invention disclosure containing sample elements of the invention. Please note that this is a sample report that does not include a complete analysis. It does, however, represent the format of the deliverables and a sample view of the results of a patentability search.

Results

Results: Summary

WO 2012155179 A1 : This patent reference from *IGOBUBBLE* relates to a method for a computing system. The method involves identifying an interaction between a virtual object and a user and modifying object behavior according to the user interaction.

US 20120324018 A1 : This patent reference from *ATLABA* discloses about a system for creating and maintaining a location based social networking space or “Bubbles” based on augmented reality. A first user sends a first request to create the “Bubble” and a second user sends a second request to log in to the “Bubble”.

Results: Relevancy Table

Key Features	WO 2012155179 A1	US 20120324018 A1
A method for overlaying real world with virtual objects having the following features:		
Creating virtual spheres or virtual objects at real world locations by users via their mobile devices	✓	✓
The users who create the virtual objects decide how other users can interact with the virtual objects.	✓*	✓*
The virtual objects can be tied to a time window for future visibility.	✓	✓
The virtual objects are based on the user's specifications - the virtual objects can be fixed to a location or moving.	✓	✓

✓ : Mapped ✗ : No Excerpts found
✓*: Inferentially Mapped

Result Categorization	
Category X	Documents disclosing all the features of the subject matter and considered a prior art under section 102 of U.S.C 35
Category Y	Documents disclosing some of the features of the subject matter and considered a prior art under section 103 of U.S.C 35

Results: #1 WO 2012155179 A1 (Bibliographic)

Title	Publication Date	Filing Date	Priority Date	Assignee	Inventor(s)
Method in a computing system	November 22, 2012	May 09, 2012	May 13, 2011	IGOBUBBLE LIMITED	Jade Wood BURTON et al.

Abstract

The present invention relates to methods in a computing system, a computing system (122) and clients (212) for communicating with a computing system. The system includes a data storage system (200) storing data representing at least one virtual object; and a data processing system. The method includes identifying an interaction between a virtual object and a user; and updating virtual object behaviour data relating to one or more virtual objects in response to the identified interaction.

Relevant Image

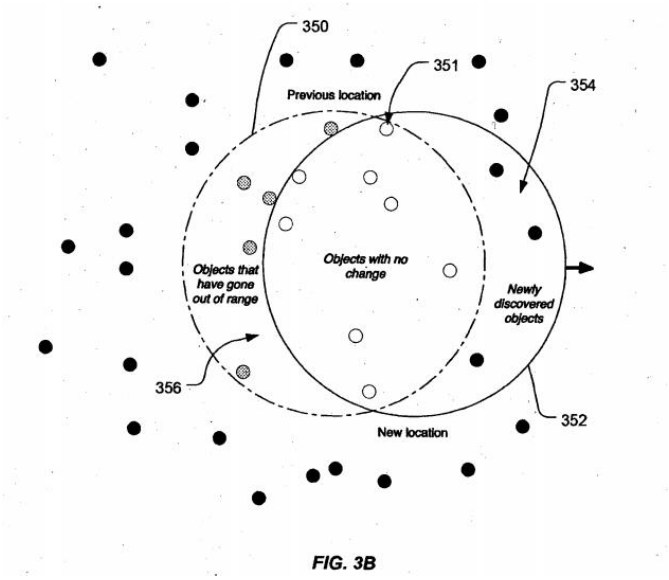


FIG. 3B

Analyst Comment

A user can create a new virtual object from the user device which is a portable device. The user can access and modify the virtual objects but it is not specifically mentioned that the creator can decide how other users interact with the object. The user can increase or decrease the duration of an object being live. Data related to location of the virtual object is also used to modulate object behaviour.

Results: #1 WO 2012155179 A1 (Mapping)

Key Features	Excerpts from **WO 2012155179 A1**
A method for overlaying real world with virtual objects having the following features: **Creating virtual spheres or virtual objects at real world locations by users via their mobile devices** **The users who create the virtual objects decide how other users can interact with the virtual objects.** **The virtual objects can be tied to a time window for future visibility.** **The virtual objects are based on the user's specifications - the virtual objects can be fixed to a location or moving.**	**(Column 19, Lines 18-23):** The client application 212 provides an interface for stimulating the user and allowing the user to interact with virtual objects as part of the augmented reality service in real time**. The client application possesses interfaces that can allow a user to interact with virtual objects, for instance by allowing the user to view, hear, access, copy, modify, capture, accept, retain, move, release or share the virtual object. The client application can also be adapted to allow the user to create, clone or edit virtual objects.** **(Column 2, Lines 28-Column 3 line 11):** The step of identifying an interaction can comprise a step of receiving data representing a user input signifying a user initiated interaction with a virtual object. **The user initiated interaction can include any one of: the user using the virtual object; the user copying the virtual object; the user retaining the virtual object; the user viewing the virtual object; the user accessing the virtual object; the user accepting the virtual object; the user capturing the virtual object; the user moving the virtual object; the user modifying the virtual object; and the user releasing the virtual object.** **(Column 5, Lines 7-10): The step of updating virtual object behaviour data can include updating data that indirectly moderates a behaviour of the virtual object. The method can include incrementing, decrementing or re-setting a time to live of a virtual object in response to a user interaction with a virtual object.** **(Column 16, Lines 13-17): Location and movement data - an important aspect of many virtual objects is their position and ability to move. Thus each virtual object will have at least one item of location data associated with it. Location data can include, but is not limited to: Current position. Movement status, e.g. whether the virtual objection is fixed, mobile, autonomous etc.**

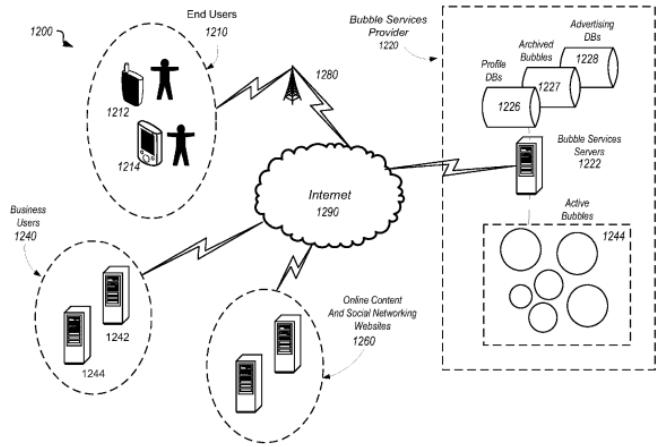
Results: #2 US 20120324018 A1 (Bibliographic)

Title	Publication Date	Filing Date	Priority Date	Assignee	Inventor(s)
SYSTEMS AND METHODS FOR LOCATION BASED SOCIAL NETWORK	December 20, 2012	June 16, 2011	June 16, 2011	Altaba Inc	Michael Metcalf et al.

Abstract

A first request for a creation of a social networking space is received, over a network, from a first user. The first request comprises a geospatial location, a start time, and an end time. A social networking space is creating, using a computing device, based on the request. The social networking space comprises facilities for posting messages visible to users signed into the social networking space. A second request is received, over the network, from second user to sign into the social networking space. The second request is transmitted from a mobile device associated with the second user. It is verified, using the computing device, that a first current time falls between the start time and the end time. It is further verified, using the computing device, that a first current geospatial position of the mobile device is within the geospatial location. In response to verifying the first current time and the first current geospatial position, the second user is signed into the social networking space.

Relevant Image



Analyst Comment

A social networking space or a bubble is created by the users dynamically based on the location of the mobile devices. But it is not specifically mentioned that the creator decides how a user interacts with the virtual object. The creator can set a start and end time for the bubble. The bubbles can be bounded to a fixed location.

Results: #2 US 20120324018 A1 (Mapping)

Key Features	Excerpts from **WO 2012155179 A1**
A method for overlaying real world with virtual objects having the following features: **Creating virtual spheres or virtual objects at real world locations by users via their mobile devices** **The users who create the virtual objects decide how other users can interact with the virtual objects.** **The virtual objects can be tied to a time window for future visibility.** **The virtual objects are based on the user's specifications - the virtual objects can be fixed to a location or moving.**	**(Paragraph [0035]):** In an embodiment, bubbles can be created dynamically by users via their location aware mobile devices. FIG. 4 illustrates an embodiment of a bubble creation dialog 400. **The bubble creation dialog 400 provides a freeform text entry box 410 that allows users to enter a title for the bubble. The bubble creation dialog 400 additionally provides a text entry box 420 that allows users to enter a type for the bubble. The bubble type 420 generally reflects the purpose of the or the content of the bubble.** **(Paragraph [0106]):In block 1350, it is then verified that the second user's mobile device is within spatial boundaries assigned to the social networking space. In an embodiment, it is verified that the current geospatial position of the mobile device is within the geospatial location associated with the social networking space.** **(Paragraph [0050]):** Referring back to FIG. 4, **the bubble creation dialog 400 additionally provides a controls for providing a start time 440 and an end time 450 for the bubble. In an embodiment, before the start time 450 messages and other types of content can only be posted to the bubble by the bubble creator and other users can sign into the bubble, but cannot post content or messages.** **(Paragraph [0035]):** In an embodiment, the bubble creation dialog 400 additionally provides a control 470 to determine if a user must ask the bubble creator for permission to enter the bubble. **The various embodiments of bubbles illustrated in FIGS. 1 and 7 are shown and described as being bounded located at a fixed location. In other embodiments, a bubble could be defined as having a dynamic location that varies over time (e.g. under advanced options) . For example, a bubble could be defined as having a location that tracks a moving person, vehicle or mobile device, such as, for example, passengers on a bus or subway train.**

Search Approach

Methodology

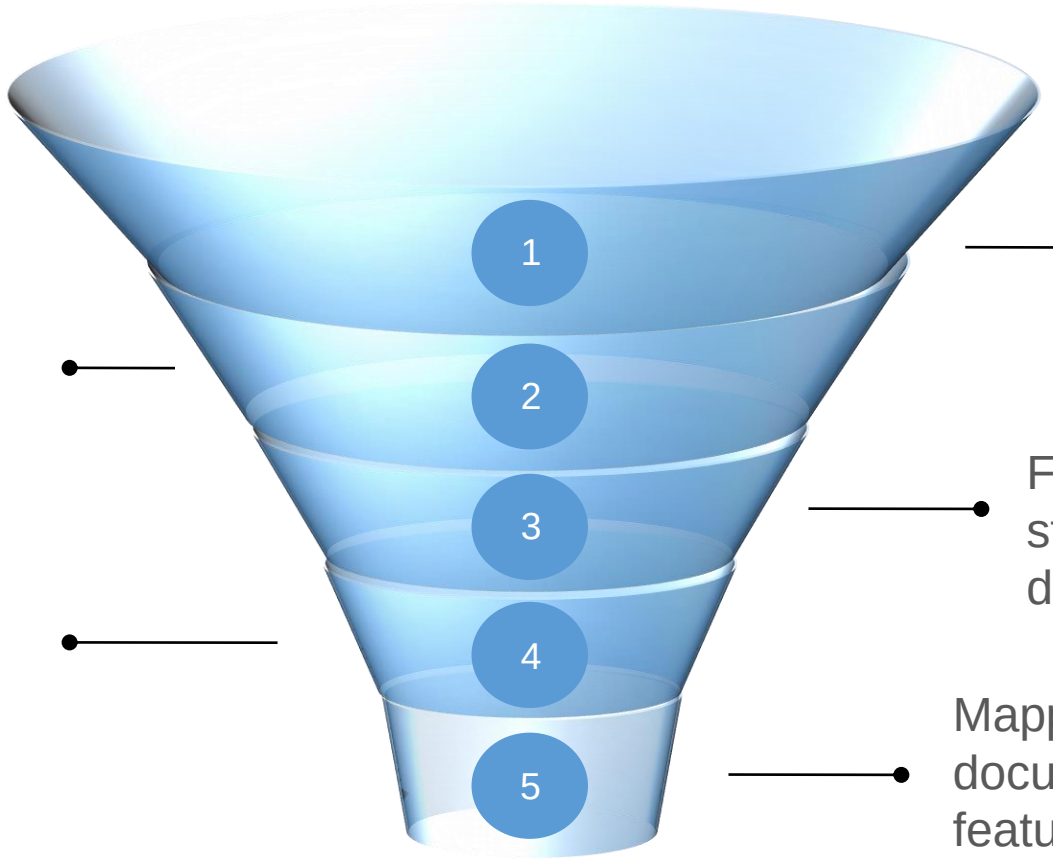
Keywords

Classifications

Strings

Search Approach: Methodology

Following search approach was implemented during the execution of the search:



1. Analyzing the subject matter of invention disclosure.
2. Identifying relevant keywords and classifications pertaining to the subject matter.
3. Framing indicative search strategies for searching in the databases
4. Analysis of retrieved patent/non-patent documents
5. Mapping excerpts from relevant documents against the claim features of target patent.

Search Approach: Keywords

Terms	Keywords
VIRTUAL REALITY	(VIRTUAL OR AUGMENT*2 OR ARTIFICIAL) NEAR3 REALIT*3
VIRTUAL OBJECT	VIRTUAL 3D (SPHERE*1 OR BUBBLE*1 OR ELEMENT*1 OR OBJECT*1)
TIME	TIME OR DURATION OR PERIOD OR SPAN OR (FUTURE ADJ AVAILAB*)
CREATE	CREAT*3 OR ADD*3 OR FORM*3 OR USER OR OWNER OR CREATOR
ACCESS	ACCESS*2 OR PERMISSION*1 OR RIGHT*1
LOCATION	LOCATION*1 OR (GEO ADJ (CENTER*2 OR CODE*1 OR COORDINATE*1))
CONFIGURE	CONFIG* OR SPECIFIC*
OVERLAY	(OVER ADJ LAY*2) OR OVERLA*
TOUCH	TOUCH OR HAPTIC OR MOBILE

Search Approach: Classifications

US classification	Definition
345633	Computer Graphics Processing And Selective Visual Display Systems >> Computer Graphics Processing >> Graphic Manipulation (Object Processing Or Display Attributes) >> Merge Or Overlay >> Placing Generated Data In Real Scene >> Augmented Reality (Real-Time)
455566	Telecommunications >> Transmitter And Receiver At Same Station (E.G., Transceiver) >> Radiotelephone Equipment Detail >> Having Display
455456.1	Telecommunications >> Radiotelephone System >> Zoned Or Cellular Telephone System >> Location Monitoring
IPC classification	**Definition**
G06T001740	Manipulating 3D images, e.g. using CAD graphics workstations
G06T001700	Three dimensional (3D) modelling, e.g. data description of 3D objects
CPC classification	**Definition**
G06T001900	Manipulating 3D models or images for computer graphics
G06T001500	3D [Three Dimensional] image rendering
DWPI classification	**Definition**
T01-J40C	Augmented reality systems
W04-W07E	Virtual and augmented reality

Search Approach: Strings

S.No	String
1	Title, abstract and claims: (VIRTUAL OBJECT) *NEAR6* (OVERLAY) *AND* (VIRTUAL REALITY)
2	Full Specifications: (VIRTUAL REALITY) *AND* (VIRTUAL OBJECT *NEAR4* OVERLAY) *AND* (LOCATION) *AND* (TIME)
3	Title, abstract and claims: (VIRTUAL REALITY) *AND* (VIRTUAL OBJECT *NEAR4* OVERLAY) *AND* (TIME) *AND* (VIRTUAL OBJECT) *NEAR5* (LOCATION)
4	Full Specifications: (VIRTUAL REALITY) *AND* (VIRTUAL OBJECT *NEAR4* OVERLAY) *AND* (TIME) *AND* (VIRTUAL OBJECT) *NEAR5* (LOCATION) *AND* RELEVANT CLASSIFICATION
5	Title, abstract and claims: (CREATE) *AND* (VIRTUAL OBJECT)

Search Approach: Databases used

Patent databases

- Thomson innovation
- Questel orbit
- LexisNexis
- PatBase
- Free Patents Online
- USTO
- Espacenet
- InPass
- J-PlatPat
- KIPRIS
- CNIPA
- CIPO
- CAS REGISTRY/DGENE/PCTGEN/USGENE hosted by STN
- GENSEQ
- Patome
- Patentscope

Non-Patent database

- Google Scholar
- Science Direct
- CiteseerX
- Scopus
- Web of Science, Thomson Innovation
- LexisNexis
- Springer link
- JournalSeek
- Embase
- Ei Compendex
- INSPEC
- Non-Patent Conference proceedings
- ACM digital library
- IOP
- 99 Resources
- Open Thesis
- Dissertation Abstract Online

Disclaimer

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