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(54) **INTELLIGENT RFID INFORMATION MANAGEMENT SYSTEM**

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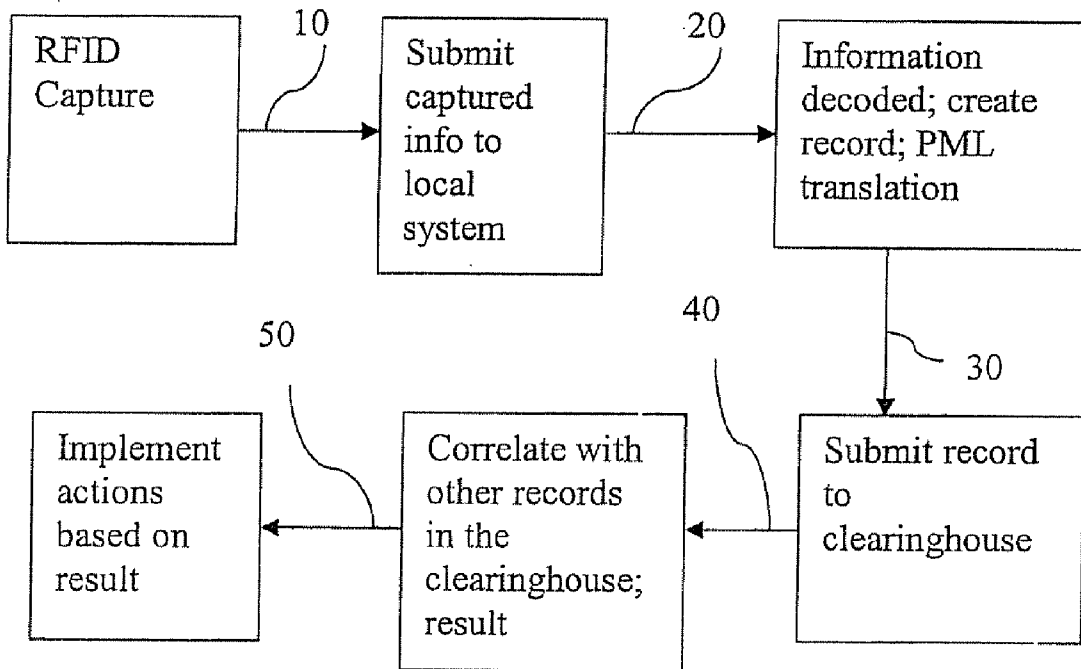
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(57) **ABSTRACT**

A system and method are disclosed. In a particular embodiment, the system includes a repository configured to store information comprising classification components. The information is received from a plurality of locations where the information is captured from one or more radio frequency identification (RFID) tags at each of the plurality of locations. Each of the one or more RFID tags is associated with at least one item. The repository is also configured to store market data comprising at least one geographic restriction associated with the at least one item.



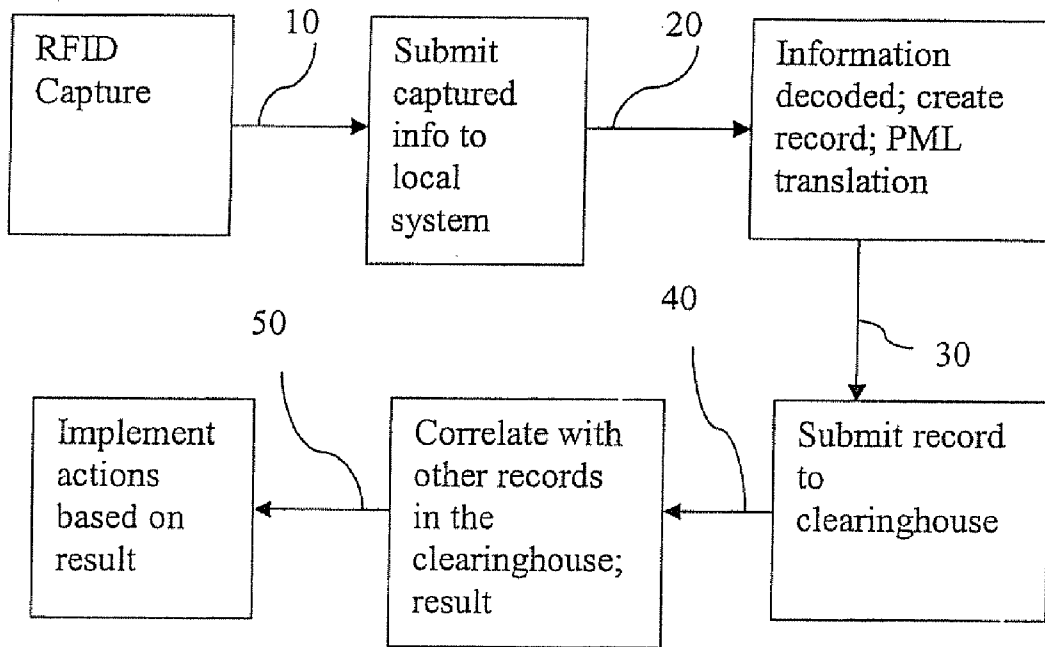


FIGURE 1

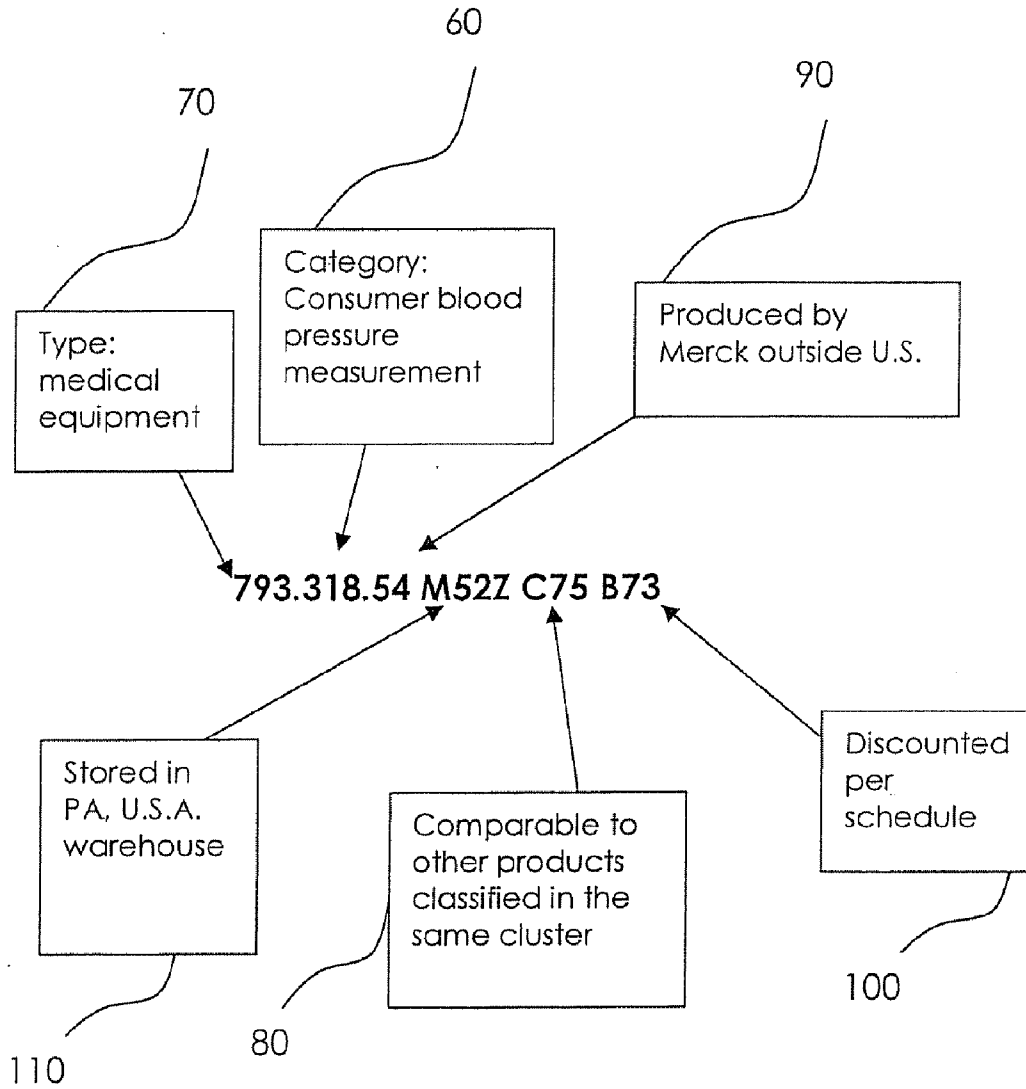


FIGURE 2

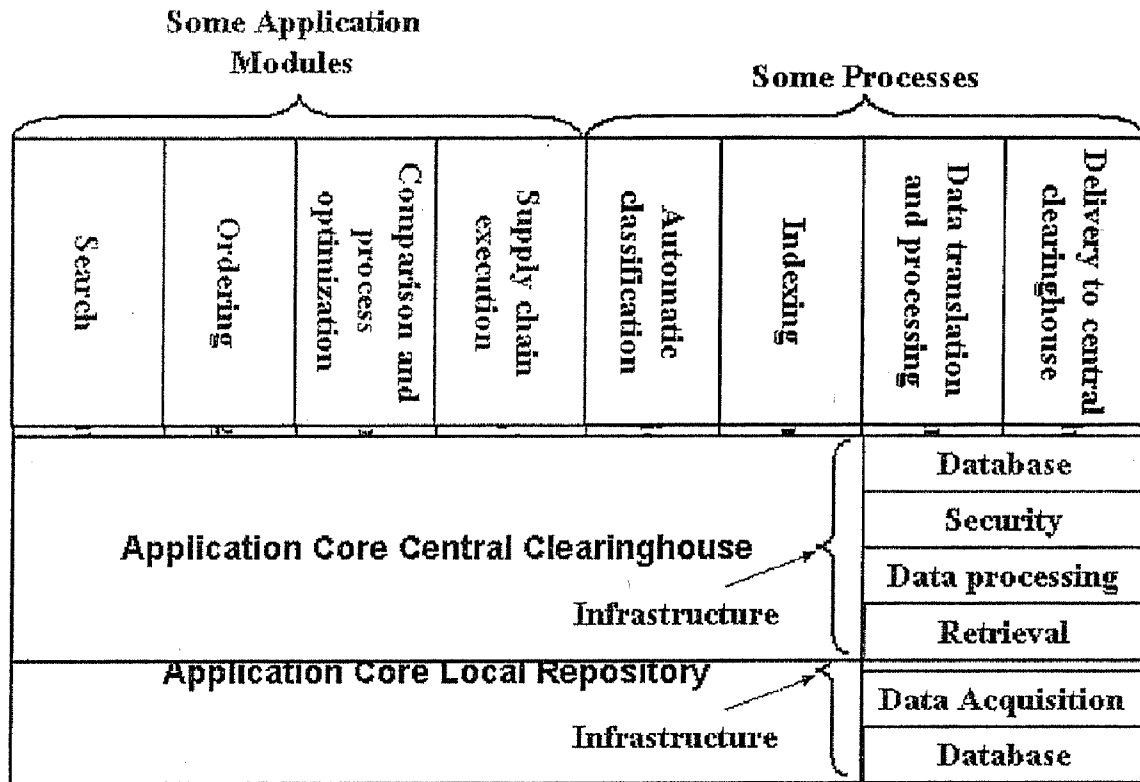


FIGURE 3

INTELLIGENT RFID INFORMATION MANAGEMENT SYSTEM

CLAIM OF PRIORITY

[0001] The present application claims priority from and is a continuation of patent application Ser. No. 11/026,531 filed on Dec. 30, 2004 and entitled "INTELLIGENT RFID INFORMATION MANAGEMENT SYSTEM," the contents of which are expressly incorporated herein by reference in their entirety.

FIELD OF THE DISCLOSURE

[0002] The present disclosure relates to information management and in particular to methods, systems, and devices for the automatic capture and management of RFID tag information.

BACKGROUND

[0003] Automatic identification (auto ID), or automatic information capture, is the broad term that refers to a cluster of technologies that help machines identify objects. Auto identification is often coupled with automatic data capture. That is, to identify items, one has to capture information about them and somehow get the data into a computer database or other digital form without anyone having to type the information in manually.

[0004] The aim of most auto-ID systems is to increase efficiency, reduce data entry errors, and to liberate people to perform more value-added functions, such as providing customer service. There are a host of technologies related to auto-identification. These include bar codes, smart cards, voice recognition, certain biometric technologies (retinal scans, for example), optical character recognition, and radio frequency identification (RFID).

[0005] Radio frequency identification (RFID) is a generic term for technologies that use radio waves to automatically identify people or objects. There are several methods of identification, but the most common is to store a serial number that identifies a person or object, and perhaps other information, on a microchip that is attached to an antenna. The microchip and the antenna together are called an RFID transponder or an RFID tag. The antenna enables the microchip to transmit the identification information to a reader. The reader converts the radio waves reflected back from the RFID tag into digital information that can then be passed on to computers that can make use of it.

[0006] Radio frequency identification first appeared in tracking and access applications during the 1980s. These wireless systems allow for non-contact reading. RFID is used for everything from tracking cows and pets to triggering equipment down oil wells. The most common applications are tracking goods in the supply chain, reusable containers, high value tools and other assets, and parts moving to a manufacturing production line or tracking moving targets such as registered cars on toll roads. RFID is also used for security, such as controlling access to buildings and networks. It is also used in payment systems based on contactless smart cards that let customers pay for items without using cash.

[0007] RFID has become an important technology with applications in many areas, from inventory control to distribution of controlled goods (e.g. medication) and access to toll

however, are for the capture rather than management of information. RFID information management systems under development typically don't take advantage of near real-time access to up-to-date information and context.

[0008] RFID applications may not bring significant improvement in the product management, supply chain, and inventory systems. For example, RFID capture and management systems used to govern the distribution of medicines merely capture the number in the RFID tag and are capable of blocking that number for confidentiality and privacy reasons. However, RFID offers an opportunity to take almost real-time snapshots of the inventory, movement, shipping, distribution, replacement, and other uses of products, describing a concrete market in minute detail and permitting vendors to react immediately and effectively to changes in demand.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] The present invention is further described in the detailed description that follows, by reference to the noted drawings, by way of non-limiting examples of embodiments of the present invention, in which like reference numerals represent similar elements throughout several views of the drawings, and in which:

[0010] FIG. 1 is a flow diagram of a method of an exemplary specific embodiment;

[0011] FIG. 2 is an annotated illustration of an ontological code of an exemplary specific embodiment, and

[0012] FIG. 3 is schematic diagram of a system of an exemplary specific embodiment.

DETAILED DESCRIPTION

[0013] In a particular embodiment, a system is disclosed that includes a repository configured to store information comprising classification components. The information is received from a plurality of locations including a first site and a second site. The information is captured from one or more radio frequency identification (RFID) tags at each of the plurality of locations. Each of the one or more RFID tags is associated with at least one item. The repository is also configured to store market data comprising at least one geographic restriction associated with the at least one item.

[0014] In another particular embodiment, an interface to a repository is disclosed. The interface may be executable by a computer. The interface may include logic to display information stored in the repository. The repository may receive the information from a plurality of locations including a first site and a second site. The information is captured from one or more radio frequency identification (RFID) tags at each of the sites. Each of the one or more RFID tags may be associated with at least one item. The information may include transactional data comprising substitute information.

[0015] In another particular embodiment, a computer-readable storage medium is disclosed. The computer-readable storage medium includes computer-executable instructions that, when executed by a computer, cause the computer to receive information. The repository may store the information received from a plurality of locations including a first site and a second site where the information is captured from one or more radio frequency identification (RFID) tags at each of the sites. Each of the one or more RFID tags may be associated with at least one item. The information may include first

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