

FORM 2

THE PATENTS ACT 1970

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The Patent Rules 2003

COMPLETE SPECIFICATION

(See sections 10 & rule 13)

1. TITLE OF THE INVENTION

REAL TIME LOGICAL INVENTORY CREATION AND MANAGEMENT SYSTEM

2. APPLICANT (S)

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3. PREAMBLE TO THE DESCRIPTION

COMPLETE SPECIFICATION

The following specification particularly describes the invention and the manner in which it is to be performed

REAL TIME LOGICAL INVENTORY CREATION AND MANAGEMENT SYSTEM

TECHNICAL FIELD

[0001] The present invention relates to inventory management systems, in particular to a system and a method for creating real time logical inventories of an inventory capacity or a manufacturing capacity or a current holding of the manufacturing sources available at remote geographical locations.

BACKGROUND

[0002] The background description includes information that may be useful in understanding the present invention. It is not an admission that any of the information provided herein is prior art or relevant to the presently claimed invention, or that any publication specifically or implicitly referenced is prior art.

[0003] Inventory management is a discipline primarily about specifying the shape and placement of stocked goods. It is required at different locations within a facility or within many locations of a supply network to precede the regular and planned course of production and stock of materials. Computerized inventory management systems are known. A publication entitled "INFOREM Principles of Inventory Management Application Description," second edition May, 1978 copyright IBM Corporation, provides a description of general principles of inventory management and how these principles are implemented in the INFOREM application program for inventory management developed by IBM Corporation. Inventory management software is a computer-based system for tracking inventory levels, orders, sales and deliveries. It can also be used in the manufacturing industry to create a work order, bill of materials and other production-related documents.

[0004] The solution like Alibaba and Indiamart are already available in the market for user convenience, but merely lists the sources. However, such computerized inventory systems have not adequately addressed the problems of authenticity of listing has to be done for every listing in the unbiased way, the user decision making takes more time as every user has to verify the entire supplier whom he wishes to trade with, product categorization is not done precisely which is because every seller is allowed to create their own individual product specifications for a single product, turnaround time for every request is atleast 2 working days, there is no price comparison between past-present and future as it is done for

commodity, there is no proper escrow mechanism which leads to intermediates in the system and hence nearest source is not getting mapped to destination, and many more.

[0005] After retrieval of prior art discovery, as technology development and popularization of computerized inventory systems, the new approach will help the users in efficient manner to just provide a list of the suppliers/manufacturers with their price and their capacity. It would therefore be required to provide a system and a method that may ease the searching complexity of the users by enabling them to locate the sellers in the map to simply place an order and receive the order placed efficiently.

[0006] All publications herein are incorporated by reference to the same extent as if each individual publication or patent application were specifically and individually indicated to be incorporated by reference. Where a definition or use of a term in an incorporated reference is inconsistent or contrary to the definition of that term provided herein, the definition of that term provided herein applies and the definition of that term in the reference does not apply.

[0007] In some embodiments, the numbers expressing quantities or dimensions of items, and so forth, used to describe and claim certain embodiments of the invention are to be understood as being modified in some instances by the term “about.” Accordingly, in some embodiments, the numerical parameters set forth in the written description and attached claims are approximations that can vary depending upon the desired properties sought to be obtained by a particular embodiment. In some embodiments, the numerical parameters should be construed in light of the number of reported significant digits and by applying ordinary rounding techniques. Notwithstanding that the numerical ranges and parameters setting forth the broad scope of some embodiments of the invention are approximations, the numerical values set forth in the specific examples are reported as precisely as practicable. The numerical values presented in some embodiments of the invention may contain certain errors necessarily resulting from the standard deviation found in their respective testing measurements.

[0008] As used in the description herein and throughout the claims that follow, the meaning of “a,” “an,” and “the” includes plural reference unless the context clearly dictates otherwise. Also, as used in the description herein, the meaning of “in” includes “in” and “on” unless the context clearly dictates otherwise.

[0009] The recitation of ranges of values herein is merely intended to serve as a shorthand method of referring individually to each separate value falling within the range.

Unless otherwise indicated herein, each individual value is incorporated into the specification as if it were individually recited herein. All methods described herein can be performed in any suitable order unless otherwise indicated herein or otherwise clearly contradicted by context.

[00010] The use of any and all examples, or exemplary language (e.g. “such as”) provided with respect to certain embodiments herein is intended merely to better illuminate the invention and does not pose a limitation on the scope of the invention otherwise claimed. No language in the specification should be construed as indicating any non-claimed element essential to the practice of the invention.

[00011] Groupings of alternative elements or embodiments of the invention disclosed herein are not to be construed as limitations. Each group member can be referred to and claimed individually or in any combination with other members of the group or other elements found herein. One or more members of a group can be included in, or deleted from, a group for reasons of convenience and/or patentability.

SUMMARY

[00012] The present invention is mainly to solve the technical problems of the prior art existed. The present invention relates to inventory management systems, in particular to a system and a method for creating real time logical inventories of an inventory capacity or a manufacturing capacity or a current holding of the manufacturing sources available at remote geographical locations.

[00013] An aspect of the present disclosure relates to a system that creates a logical inventory with or without aggregation of physical inventories. Such logical inventory can be created using artificial intelligence (AI) and user query based on the demand in the point or region. Such logical inventories can be created with an intention to make the logical inventory persistent by making source to make stocks available in the logical inventory.

[00014] In an aspect, the logical inventories created can be marked in map for making the locations available and known to the users.

[00015] In an aspect, the capacity, price, location and other like parameters of the logical inventory can be computed based on AI.

[00016] In an aspect, the logical inventory can also be calculated and marked using demand in the region and possibility of making a product available in some other location other than physically present.

[00017] In an aspect, the logical inventory can be created to depict the lowest possible price in that space-time by leveraging logistics, high stock in manufacturing areas due to any number of factors. The system can also include and consider the public sentiments in the local market and drastic price fall. Such consideration of the public sentiments in the local market and drastic price fall enables the system to a logical inventory in some other region with best possible price keeping the both buyer and seller in consideration.

[00018] In an aspect, the logical inventory can be a dedicated to a single seller or can be a shared seller arrangement considering multiple sellers.

[00019] In an aspect, the system creates a logical or aggregated inventory in the destination (using map) where there is a demand or perceived demand.

[00020] An aspect of the present disclosure relates to a platform that enables to list the suppliers with their price and their capacity in multiple jurisdictions near to the buyers. In an aspect, the buyers can locate the sellers using/in the map. The buyer can place the order in the system, which will be sent to the seller. It can be the discretion of seller to process the order with stated specification, invoicing, payment terms and material delivery.

[00021] In an aspect, the platform enables to form a logical inventory and to pin the same logical inventory in/on the map, where the inventory need not have its physical presence.

[00022] In an aspect, the logical inventory can also be made persistent (still logical but might have a persistent source quoting price in that space-time); if any source (manufacturer) is willing to serve at that location. In another aspect, the orders can be pre-booked from such logical inventory, which makes the logical inventory even more persistent.

[00023] An aspect of the present disclosure relates to a system that aggregates or segregates the group/single actual inventory capacity or manufacturing capacity into logical inventories and marking the same in any space time. In an aspect, the marking of such logical inventory can be done in Map/globe (2D/3D).

[00024] In an aspect, the system can calculate the price per unit of the logical inventory. The system also enables the user to make an order directly from logical inventory. Such orders might get accumulated/segregated and mapped to actual source (trader/manufacturer) of the material. In case of single order being segregated into multiple orders, those multiple orders will be collected by one/more logistics provider and delivered to destination.

[00025] An aspect of the present disclosure relates to a system for maintaining a logical inventory of materials and/or products at a location. The system includes a non-transitory

storage device having embodied therein one or more routines operable to maintain a logical inventory of the materials and/or the products, and one or more processors coupled to the non-transitory storage device and operable to execute the one or more routines. The one or more routines can include an information accumulation module, a logical inventory formation module, and a location pin pointing module.

[00026] In an aspect, the information accumulation module can retrieve information associated with the materials and/or the products at the location from one or more sources. The logical inventory formation module can store the information associated with the materials and/or the products, and form at least one logical inventory utilizing the information based on at least one query received from at least one user and one or more characteristics of the information, the at least one logical inventory is a logical space for the one or more sources to define the capacity associated with the materials and/or the products. The location pin pointing module can pinpoint at least one location of the logical inventory on a computer-implemented map of a geographic area that is of interest to a user and based on the query received from the user expressing an interest in purchasing the materials and/or the products logical inventory, using a graphical icon positioned on the computer-implemented map indicative of the location associated the logical inventory in the geographic area.

[00027] In an aspect, the system can also include a pricing module that can calculate a price of the materials and/or the products per unit of the logical inventory based on one or more factors, the factors are selected from any or combination of the quantity of the materials and/or the products and the capacity of the logical inventory.

[00028] In an aspect, the system can also include a capacity identification module that can identify the capacity of the logical inventory in terms of: the materials and/or the products, and/or manufacturing the materials and/or the products

[00029] In an aspect, the logical inventory formation module can verify the logical inventory formed, group the logical inventory into a pre-determined/pre-specified category, the logical inventory is categorized based on information having particular shared characteristics, and thereby pinpoint, utilizing the location pin pointing module, the location of the logical inventory on the computer-implemented map.

[00030] In an aspect, the system can further include a transmitting module that can transmit, to a client computing device and over the network connection, the computer-implemented map for presentment on a display of the client computing device, wherein the computer-implemented map is transmitted in response to the query received from the user

and the computer-implemented map provides the location of the materials and/or the products at the location nearest or in proximity of the user.

[00031] In an aspect, the query received from the user locates the recommended product in the logical inventory based at least in part upon purchase patterns of the user. In another aspect, the query received from the user locates the recommended product in the logical inventory based at least in part upon purchase patterns of other users. In yet another aspect, the query received from the user locates the recommended product in the logical inventory based at least in part upon products in stock at the at least one the materials and/or the products at the location that are similar to the at least one product.

[00032] In an aspect, the system can further include a demand supply module that can receive, from the user in the form of the query, at least one order or demand associated with the materials and/or the products from the logical inventory along with a location data that is indicative of the geographic area; and in response receipt of the location data that is indicative of the geographic area and the order or demand, execute a search over data in the logical repository formed based upon the geographic area of interest, wherein the location data is received from a Global Positioning System (GPS) receiver of the client computing device inferring the geographic are based upon the position data. The execution of the search can include: locate at least one logical inventory in the geographic area of interest; segregate, if the at least one single logical inventory is not able to full fill the order, the order or demand into one or more sub-orders; distribute the one or more sub-orders to one or more other logical inventories; receive the one or more sub-orders upon completion; aggregate the one or more sub-orders into a product, the product is associated with the order or demand; and deliver, using a logistic services, the product to the user.

[00033] In an aspect, the demand supply module can further enable the user to provide, from the user in the form of the query, at least one order to the logical inventory, and thereby map with the materials and/or the products at the location.

[00034] In an aspect, the one or more characteristics of the information is selected from any of combination of the lowest possible price in that space-time by leveraging logistics, high stock in a manufacturing area, people sentiment in local market, and drastic price fall.

[00035] In an aspect, the computer-implemented map causing a plurality of selectable links to be displayed, wherein selection of a first selectable link causes a driving route to be output that directs the user to the location associated the logical inventory.

[00036] An aspect of the present disclosure relates to a system having a processor, and a memory that comprises a plurality of components that are executable by the processor. The components can include a search component and a map generator component. The search component executes a search over data in at least one logical inventory based upon a query associated with the materials and/or the products transmitted to the system over a network connection between the client computing device and the system, the logical inventory is created utilizing the information associated with the materials and/or the products at the location retrieved from one or more sources, and the at least one logical inventory is a logical space for the one or more sources to define the capacity associated with the materials and/or the products, and the search component, when executing the search, retrieves information associated with the materials and/or the products to locate a recommended product that is in the logical inventory.

[00037] The map generator component is in communication with the search component, the map generator component generates a map of the geographic area of interest to the user for display on a display of the client computing device in response to receipt of the query, the map comprises a graphical icon that is representative of at least one logical inventory created utilizing the information and having the recommended product, the map generator component transmits the map of the geographic area to the client computing device over the network connection.

[00038] Other features of embodiments of the present disclosure will be apparent from accompanying drawings and from detailed description that follows.

BRIEF DESCRIPTION OF THE DRAWINGS

[00039] In the figures, similar components and/or features may have the same reference label. Further, various components of the same type may be distinguished by following the reference label with a second label that distinguishes among the similar components. If only the first reference label is used in the specification, the description is applicable to any one of the similar components having the same first reference label irrespective of the second reference label.

[00040] FIG. 1A and FIG. 1B illustrates functional modules of the proposed system.

[00041] FIG. 2 illustrates an exemplary formation of the logical inventories in accordance with an embodiment of the present invention.

[00042] FIG. 3 illustrates an exemplary system in which the proposed invention can be performed.

[00043] FIGs. 4 and 5 illustrate an exemplary mapping of a logical inventory on the map in accordance with an embodiment of the present invention.

DETAILED DESCRIPTION

[00044] Systems and methods for creating real time logical inventories of an inventory capacity or a manufacturing capacity or a current holding of the manufacturing sources available at remote geographical locations. Embodiments of the present disclosure include various steps, which will be described below. The steps may be performed by hardware components or may be embodied in machine-executable instructions, which may be used to cause a general-purpose or special-purpose processor programmed with the instructions to perform the steps. Alternatively, steps may be performed by a combination of hardware, software, firmware, and/or by human operators.

[00045] Embodiments of the present disclosure may be provided as a computer program product, which may include a machine-readable storage medium tangibly embodying thereon instructions, which may be used to program a computer (or other electronic devices) to perform a process. The machine-readable medium may include, but is not limited to, fixed (hard) drives, magnetic tape, floppy diskettes, optical disks, compact disc read-only memories (CD-ROMs), and magneto-optical disks, semiconductor memories, such as ROMs, PROMs, random access memories (RAMs), programmable read-only memories (PROMs), erasable PROMs (EPROMs), electrically erasable PROMs (EEPROMs), flash memory, magnetic or optical cards, or other type of media/machine-readable medium suitable for storing electronic instructions (e.g., computer programming code, such as software or firmware).

[00046] Various methods described herein may be practiced by combining one or more machine-readable storage media containing the code according to the present disclosure with appropriate standard computer hardware to execute the code contained therein. An apparatus for practicing various embodiments of the present disclosure may involve one or more computers (or one or more processors within a single computer) and storage systems containing or having network access to computer program(s) coded in accordance with various methods described herein, and the method steps of the disclosure could be accomplished by modules, routines, subroutines, or subparts of a computer program product.

[00047] If the specification states a component or feature “may”, “can”, “could”, or “might” be included or have a characteristic, that particular component or feature is not required to be included or have the characteristic.

[00048] Although the present disclosure has been described with the purpose of creating real time logical inventories of an inventory capacity or a manufacturing capacity or a current holding of the manufacturing sources available at remote geographical locations, it should be appreciated that the same has been done merely to illustrate the invention in an exemplary manner and any other purpose or function for which explained structures or configurations can be used, is covered within the scope of the present disclosure.

[00049] Exemplary embodiments will now be described more fully hereinafter with reference to the accompanying drawings, in which exemplary embodiments are shown. This invention may, however, be embodied in many different forms and should not be construed as limited to the embodiments set forth herein. These embodiments are provided so that this disclosure will be thorough and complete and will fully convey the scope of the invention to those of ordinary skill in the art. Moreover, all statements herein reciting embodiments of the invention, as well as specific examples thereof, are intended to encompass both structural and functional equivalents thereof. Additionally, it is intended that such equivalents include both currently known equivalents as well as equivalents developed in the future (i.e., any elements developed that perform the same function, regardless of structure).

[00050] Thus, for example, it will be appreciated by those of ordinary skill in the art that the diagrams, schematics, illustrations, and the like represent conceptual views or processes illustrating systems and methods embodying this invention. The functions of the various elements shown in the figures may be provided through the use of dedicated hardware as well as hardware capable of executing associated software. Similarly, any switches shown in the figures are conceptual only. Their function may be carried out through the operation of program logic, through dedicated logic, through the interaction of program control and dedicated logic, or even manually, the particular technique being selectable by the entity implementing this invention. Those of ordinary skill in the art further understand that the exemplary hardware, software, processes, methods, and/or operating systems described herein are for illustrative purposes and, thus, are not intended to be limited to any particular named.

[00051] The ensuing description provides exemplary embodiments only, and is not intended to limit the scope, applicability, or configuration of the disclosure. Rather, the

ensuing description of the exemplary embodiments will provide those skilled in the art with an enabling description for implementing an exemplary embodiment. It should be understood that various changes may be made in the function and arrangement of elements without departing from the spirit and scope of the invention as set forth in the appended claims.

[00052] Specific details are given in the following description to provide a thorough understanding of the embodiments. However, it will be understood by one of ordinary skill in the art that the embodiments may be practiced without these specific details. For example, circuits, systems, networks, processes, and other components may be shown as components in block diagram form in order not to obscure the embodiments in unnecessary detail. In other instances, well-known circuits, processes, algorithms, structures, and techniques may be shown without unnecessary detail in order to avoid obscuring the embodiments.

[00053] The term “machine-readable storage medium” or “computer-readable storage medium” includes, but is not limited to, portable or non-portable storage devices, optical storage devices, and various other mediums capable of storing, containing, or carrying instruction(s) and/or data. A machine-readable medium may include a non-transitory medium in which data can be stored and that does not include carrier waves and/or transitory electronic signals propagating wirelessly or over wired connections. Examples of a non-transitory medium may include, but are not limited to, a magnetic disk or tape, optical storage media such as compact disk (CD) or digital versatile disk (DVD), flash memory, memory or memory devices. A computer-program product may include code and/or machine-executable instructions that may represent a procedure, a function, a subprogram, a program, a routine, a subroutine, a module, a software package, a class, or any combination of instructions, data structures, or program statements. A code segment may be coupled to another code segment or a hardware circuit by passing and/or receiving information, data, arguments, parameters, or memory contents. Information, arguments, parameters, data, etc. may be passed, forwarded, or transmitted via any suitable means including memory sharing, message passing, token passing, network transmission, etc.

[00054] Furthermore, embodiments may be implemented by hardware, software, firmware, middleware, microcode, hardware description languages, or any combination thereof. When implemented in software, firmware, middleware or microcode, the program code or code segments to perform the necessary tasks (e.g., a computer-program product) may be stored in a machine-readable medium. A processor(s) may perform the necessary tasks.

[00055] Systems depicted in some of the figures may be provided in various configurations. In some embodiments, the systems may be configured as a distributed system where one or more components of the system are distributed across one or more networks in a cloud computing system.

[00056] The present invention is mainly to solve the technical problems of the prior art existed. The present invention relates to inventory management systems, in particular to a system and a method for creating real time logical inventories of an inventory capacity or a manufacturing capacity or a current holding of the manufacturing sources available at remote geographical locations.

[00057] An aspect of the present disclosure relates to a system that creates a logical inventory with or without aggregation of physical inventories. Such logical inventory can be created using artificial intelligence (AI) and user query based on the demand in the point or region. Such logical inventories can be created with an intention to make the logical inventory persistent by making source to make stocks available in the logical inventory.

[00058] In an aspect, the logical inventories created can be marked in map for making the locations available and known to the users.

[00059] In an aspect, the capacity, price, location and other like parameters of the logical inventory can be computed based on AI.

[00060] In an aspect, the logical inventory can also be calculated and marked using demand in the region and possibility of making a product available in some other location other than physically present.

[00061] In an aspect, the logical inventory can be created to depict the lowest possible price in that space-time by leveraging logistics, high stock in manufacturing areas due to any number of factors. The system can also include and consider the public sentiments in the local market and drastic price fall. Such consideration of the public sentiments in the local market and drastic price fall enables the system to a logical inventory in some other region with best possible price keeping the both buyer and seller in consideration.

[00062] In an aspect, the logical inventory can be a dedicated to a single seller or can be a shared seller arrangement considering multiple sellers.

[00063] In an aspect, the system creates a logical or aggregated inventory in the destination (using map) where there is a demand or perceived demand.

[00064] An aspect of the present disclosure relates to a platform that enables to list the suppliers with their price and their capacity in multiple jurisdictions near to the buyers. In an

aspect, the buyers can locate the sellers using/in the map. The buyer can place the order in the system, which will be sent to the seller. It can be the discretion of seller to process the order with stated specification, invoicing, payment terms and material delivery.

[00065] In an aspect, the platform enables to form a logical inventory and to pin the same logical inventory in/on the map, where the inventory need not have its physical presence.

[00066] In an aspect, the logical inventory can also be made persistent (still logical but might have a persistent source quoting price in that space-time); if any source (manufacturer) is willing to serve at that location. In another aspect, the orders can be pre-booked from such logical inventory, which makes the logical inventory even more persistent.

[00067] An aspect of the present disclosure relates to a system that aggregates or segregates the group/single actual inventory capacity or manufacturing capacity into logical inventories and marking the same in any space time. In an aspect, the marking of such logical inventory can be done in Map/globe (2D/3D).

[00068] In an aspect, the system can calculate the price per unit of the logical inventory. The system also enables the user to make an order directly from logical inventory. Such orders might get accumulated/segregated and mapped to actual source (trader/manufacturer) of the material. In case of single order being segregated into multiple orders, those multiple orders will be collected by one/more logistics provider and delivered to destination.

[00069] An aspect of the present disclosure relates to a system for maintaining a logical inventory of materials and/or products at a location. The system includes a non-transitory storage device having embodied therein one or more routines operable to maintain a logical inventory of the materials and/or the products, and one or more processors coupled to the non-transitory storage device and operable to execute the one or more routines. The one or more routines can include an information accumulation module, a logical inventory formation module, and a location pin pointing module.

[00070] In an aspect, the information accumulation module can retrieve information associated with the materials and/or the products at the location from one or more sources. The logical inventory formation module can store the information associated with the materials and/or the products, and form at least one logical inventory utilizing the information based on at least one query received from at least one user and one or more characteristics of the information, the at least one logical inventory is a logical space for the one or more sources to define the capacity associated with the materials and/or the products. The location

pin pointing module can pinpoint at least one location of the logical inventory on a computer-implemented map of a geographic area that is of interest to a user and based on the query received from the user expressing an interest in purchasing the materials and/or the products logical inventory, using a graphical icon positioned on the computer-implemented map indicative of the location associated the logical inventory in the geographic area.

[00071] In an aspect, the system can also include a pricing module that can calculate a price of the materials and/or the products per unit of the logical inventory based on one or more factors, the factors are selected from any or combination of the quantity of the materials and/or the products and the capacity of the logical inventory.

[00072] In an aspect, the system can also include a capacity identification module that can identify the capacity of the logical inventory in terms of: the materials and/or the products, and/or manufacturing the materials and/or the products.

[00073] In an aspect, the logical inventory formation module can verify the logical inventory formed, group the logical inventory into a pre-determined/pre-specified category, the logical inventory is categorized based on information having particular shared characteristics, and thereby pinpoint, utilizing the location pin pointing module, the location of the logical inventory on the computer-implemented map.

[00074] In an aspect, the system can further include a transmitting module that can transmit, to a client computing device and over the network connection, the computer-implemented map for presentment on a display of the client computing device, wherein the computer-implemented map is transmitted in response to the query received from the user and the computer-implemented map provides the location of the materials and/or the products at the location nearest or in proximity of the user.

[00075] In an aspect, the query received from the user locates the recommended product in the logical inventory based at least in part upon purchase patterns of the user. In another aspect, the query received from the user locates the recommended product in the logical inventory based at least in part upon purchase patterns of other users. In yet another aspect, the query received from the user locates the recommended product in the logical inventory based at least in part upon products in stock at the at least one the materials and/or the products at the location that are similar to the at least one product.

[00076] In an aspect, the system can further include a demand supply module that can receive, from the user in the form of the query, at least one order or demand associated with the materials and/or the products from the logical inventory along with a location data that is

indicative of the geographic area; and in response receipt of the location data that is indicative of the geographic area and the order or demand, execute a search over data in the logical repository formed based upon the geographic area of interest, wherein the location data is received from a Global Positioning System (GPS) receiver of the client computing device inferring the geographic are based upon the position data. The execution of the search can include: locate at least one logical inventory in the geographic area of interest; segregate, if the at least one single logical inventory is not able to full fill the order, the order or demand into one or more sub-orders; distribute the one or more sub-orders to one or more other logical inventories; receive the one or more sub-orders upon completion; aggregate the one or more sub-orders into a product, the product is associated with the order or demand; and deliver, using a logistic services, the product to the user.

[00077] In an aspect, the demand supply module can further enable the user to provide, from the user in the form of the query, at least one order to the logical inventory, and thereby map with the materials and/or the products at the location.

[00078] In an aspect, the one or more characteristics of the information is selected from any of combination of the lowest possible price in that space-time by leveraging logistics, high stock in a manufacturing area, people sentiment in local market, and drastic price fall.

[00079] In an aspect, the computer-implemented map causing a plurality of selectable links to be displayed, wherein selection of a first selectable link causes a driving route to be output that directs the user to the location associated the logical inventory.

[00080] An aspect of the present disclosure relates to a system having a processor, and a memory that comprises a plurality of components that are executable by the processor. The components can include a search component and a map generator component. The search component executes a search over data in at least one logical inventory based upon a query associated with the materials and/or the products transmitted to the system over a network connection between the client computing device and the system, the logical inventory is created utilizing the information associated with the materials and/or the products at the location retrieved from one or more sources, and the at least one logical inventory is a logical space for the one or more sources to define the capacity associated with the materials and/or the products, and the search component, when executing the search, retrieves information associated with the materials and/or the products to locate a recommended product that is in the logical inventory.

[00081] The map generator component is in communication with the search component, the map generator component generates a map of the geographic area of interest to the user for display on a display of the client computing device in response to receipt of the query, the map comprises a graphical icon that is representative of at least one logical inventory created utilizing the information and having the recommended product, the map generator component transmits the map of the geographic area to the client computing device over the network connection.

[00082] FIG. 1A and FIG. 1B illustrates functional modules of the proposed system. As illustrated in FIG. 1A and 1B, the proposed system can be configured in a computing device that is accessible by other computing devices using any network technology known in the art such as LAN, WAN, Bluetooth, Internet etc. In an exemplary embodiment elaborated herein, proposed system can be operatively coupled with a website to enable features as elaborated.

[00083] In an embodiment, as shown in FIG. 1A, the functional modules of a system for maintaining a logical inventory of materials and/or products at a location are provided.

[00084] FIG. 2 illustrates a proposed client server communication in accordance with an embodiment of the present invention. The system includes a non-transitory storage device having embodied therein one or more modules operable to maintain a logical inventory of the materials and/or the products, and one or more processors coupled to the non-transitory storage device and operable to execute the one or more modules. The one or more modules can include an information accumulation module 102, a logical inventory formation module 104, and a location pin pointing module 106.

[00085] In an embodiment, the information accumulation module 102 can retrieve information associated with the materials and/or the products at the location from one or more sources. The logical inventory formation module 104 can store the information associated with the materials and/or the products, and form at least one logical inventory utilizing the information based on at least one query received from at least one user and one or more characteristics of the information, the at least one logical inventory is a logical space for the one or more sources to define the capacity associated with the materials and/or the products. The location pin pointing module 106 can pinpoint at least one location of the logical inventory on a computer-implemented map of a geographic area that is of interest to a user and based on the query received from the user expressing an interest in purchasing the materials and/or the products logical inventory, using a graphical icon positioned on the

computer-implemented map indicative of the location associated the logical inventory in the geographic area.

[00086] In an exemplary implementation, the system can also include a pricing module 108 that can calculate a price of the materials and/or the products per unit of the logical inventory based on one or more factors, the factors are selected from any or combination of the quantity of the materials and/or the products and the capacity of the logical inventory.

[00087] In an exemplary implementation, the system can also include a capacity identification module 110 that can identify the capacity of the logical inventory in terms of: the materials and/or the products, and/or manufacturing the materials and/or the products

[00088] In an exemplary implementation, the logical inventory formation module 104 can verify the logical inventory formed, group the logical inventory into a pre-determined/pre-specified category, the logical inventory is categorized based on information having particular shared characteristics, and thereby pinpoint, utilizing the location pin pointing module, the location of the logical inventory on the computer-implemented map.

[00089] In an exemplary implementation, the system can further include a transmitting module 112 that can transmit, to a client computing device and over the network connection, the computer-implemented map for presentment on a display of the client computing device, wherein the computer-implemented map is transmitted in response to the query received from the user and the computer-implemented map provides the location of the materials and/or the products at the location nearest or in proximity of the user.

[00090] In an exemplary implementation, the query received from the user locates the recommended product in the logical inventory based at least in part upon purchase patterns of the user. In another aspect, the query received from the user locates the recommended product in the logical inventory based at least in part upon purchase patterns of other users. In yet another aspect, the query received from the user locates the recommended product in the logical inventory based at least in part upon products in stock at the at least one the materials and/or the products at the location that are similar to the at least one product.

[00091] In an exemplary implementation, the system can further include a demand supply module 114 that can receive, from the user in the form of the query, at least one order or demand associated with the materials and/or the products from the logical inventory along with a location data that is indicative of the geographic area; and in response receipt of the location data that is indicative of the geographic area and the order or demand, execute a search over data in the logical repository formed based upon the geographic area of interest,

wherein the location data is received from a Global Positioning System (GPS) receiver of the client computing device inferring the geographic are based upon the position data. The execution of the search can include: locate at least one logical inventory in the geographic area of interest; segregate, if the at least one single logical inventory is not able to full fill the order, the order or demand into one or more sub-orders; distribute the one or more sub-orders to one or more other logical inventories; receive the one or more sub-orders upon completion; aggregate the one or more sub-orders into a product, the product is associated with the order or demand; and deliver, using a logistic services, the product to the user.

[00092] In an example, the demand supply module 114 can further enable the user to provide, from the user in the form of the query, at least one order to the logical inventory, and thereby map with the materials and/or the products at the location.

[00093] In an exemplary implementation, the one or more characteristics of the information is selected from any of combination of the lowest possible price in that space-time by leveraging logistics, high stock in a manufacturing area, people sentiment in local market, and drastic price fall.

[00094] In an exemplary implementation, the computer-implemented map causing a plurality of selectable links to be displayed, wherein selection of a first selectable link causes a driving route to be output that directs the user to the location associated the logical inventory.

[00095] Referring now to FIG. 1B, a system having a processor, and a memory that comprises a plurality of components those are executable by the processor is disclosed. The components can include a search component 152 and a map generator component 154.

[00096] In an embodiment, the search component 152 executes a search over data in at least one logical inventory based upon a query associated with the materials and/or the products transmitted to the system over a network connection between the client computing device and the system, the logical inventory is created utilizing the information associated with the materials and/or the products at the location retrieved from one or more sources, and the at least one logical inventory is a logical space for the one or more sources to define the capacity associated with the materials and/or the products, and the search component, when executing the search, retrieves information associated with the materials and/or the products to locate a recommended product that is in the logical inventory.

[00097] In an embodiment, the map generator component 154 is in communication with the search component 152, the map generator component generates a map of the geographic

area of interest to the user for display on a display of the client computing device in response to receipt of the query, the map comprises a graphical icon that is representative of at least one logical inventory created utilizing the information and having the recommended product, the map generator component transmits the map of the geographic area to the client computing device over the network connection.

[00098] Conventionally, a computer system is utilized to provide an inventory management system for a store which is able to handle large numbers of orders per minute for sustained periods of time. The computer system includes a transactional database (such as an order database or an inventory database) along with necessary database management items such as a server, and/or router. The transactional database interacts with an application layer such as order management application layer or an inventory management application layer.

[00099] A store may sell goods to a customer in various different venues. The store may make sales at a physical location. The store may also provide an online storefront where a customer may order items from the store using a customer computer. These items may be picked up at the store by the customer, or may be shipped to the customer. The store may also provide an online marketplace where items which are not sold in the store retail locations or which are offered by different retailers are offered to customers. In order to support these sales, the store includes an order management system which may include multiple different components as discussed herein.

[000100] For example, the available solutions like Alibaba and Indiamart are already available in the market for user convenience, but merely list the sources. However, such computerized inventory systems have not adequately addressed the problems of authenticity of listing has to be done for every listing in the unbiased way, the user decision making takes more time as every user has to verify the entire supplier whom he wishes to trade with, product categorization is not done precisely which is because every seller is allowed to create their own individual product specifications for a single product, turnaround time for every request is at least 2 working days, there is no price comparison between past-present and future as it is done for commodity, there is no proper escrow mechanism which leads to intermediates in the system and hence nearest source is not getting mapped to destination, and many more.

[000101] In order to solve the above drawbacks and to ease the buying experience of the user, in an embodiment, the present invention provides a system that creates a logical inventory with or without aggregation of physical inventories. Such logical inventory can be

created using artificial intelligence (AI) and user query based on the demand in the point or region. Such logical inventories can be created with an intention to make the logical inventory persistent by making source to make stocks available in the logical inventory. Further, the logical inventories created can be marked in map for making the locations available and known to the users. Also, the capacity, price, location and other like parameters of the logical inventory can be computed based on AI.

[000102] Further, the logical inventory can also be calculated and marked using demand in the region and possibility of making a product available in some other location other than physically present.

[000103] In an embodiment, the In an aspect, the logical inventory can be created to depict the lowest possible price in that space-time by leveraging logistics, high stock in manufacturing areas due to any number of factors. The system can also include and consider the public sentiments in the local market and drastic price fall. Such consideration of the public sentiments in the local market and drastic price fall enables the system to a logical inventory in some other region with best possible price keeping the both buyer and seller in consideration.

[000104] For example, a person/buyer from South might look for 'n' quantity of 'x' material which might physically be present only in North East in the time frame the person/buyer is looking for. Thus, according to the present invention, the system tries to find a logical inventory as close as possible from which person/buyer can place the order and displays the same to the person/buyer on map location. Same logical inventory might not exist for different time frame or different quantity.

[000105] In an embodiment, logical inventory can also be made persistent (still logical but might have a persistent source quoting price in that space-time), if any source (manufacturer) is willing to serve at that location. Further, the orders can be pre-booked from such logical inventories, which make a logical inventory even more persistent.

[000106] FIG. 2 illustrates an exemplary formation of the logical inventories in accordance with an embodiment of the present invention. In an embodiment, the present invention may enable the system 210 (represented as server) to scan through all the available sources or manufacturer available in various locations to collect the information associated with their storage or manufacturing capacities. Such information may be provided by the various manufacturers to the system or the system may automatically retrieves such

information from various sources such as internet or global stock market database and the like sources.

[000107] In an embodiment, once the information associated with the sources is collected, the system may group the sources in respective or particular categories. For example, all the automobile manufacturers can be categorized into a single category of automobiles. Such categorization of the sources and the criteria for sourcing is configurable and re-configurable and would be decided based on the requirements of the system.

[000108] In an embodiment, upon collecting the information associated with the sources and/or upon categorization of the manufacturers/sources, a price per unit and a capacity of production or manufacturing associated with the sources are determined.

[000109] In an exemplary implementation, the details associated with the manufacturer or sources along with the price per unit data and the capacity of production or manufacturing associated with the sources can be stored in a database.

[000110] In an embodiment, when any user/buyer places an order to buy any product and/or material, the system based on the user/buyer query can retrieve the information associated with the sources and aggregates or segregates the group/single actual inventory capacity or manufacturing capacity into a logical inventory. Such logical inventory can be mark in any space time. For example, such logical inventory can be marked in Map/globe (2D/3D) and displayed to the user/buyer.

[000111] In an exemplary implementation, the system enables the user to make an order directly from logical inventory. Such orders might get accumulated/segregated and mapped to actual source (trader/manufacturer) of the material. Further, such orders can be fully mapped or mapped on splitting to make the system efficiently. In case of single order being segregated into multiple orders, those multiple orders will be collected by one/more logistics provider and delivered to destination.

[000112] In an embodiment, the system, upon receiving an order, enables splitting of the actual order to 'n' orders based on the source capacity in-order to make the system thrive effectively. Further, once the order is completed, the system enables to aggregate 'n' actual order to '1' order based on the actual source capacity in-order to make the system thrive effectively, and thereby estimates best logistics cost to actual inventory to destination and delivers the product.

[000113] Referring again to FIG. 2, an exemplary formation of the logical inventories in accordance with an embodiment of the present invention is provided. When user provides a

query as intent to buy a product or material from a particular location or jurisdiction, the server 210 forms at least one logical inventory 230-1, 230-2, 230-3..... 230-N (hereinafter referred to as logical inventory 230) utilizing the information associated the materials and/or the products stored in the database and based on the query received from the user.

[000114] In an embodiment, the server 210 can utilize a logical inventory formation module 220 which when receives the query, determines the type of order or the category of the order and then dynamically forms one or more logical inventories 230 utilizing the information of the sources or manufacturers pre-stored. In an exemplary implementation, the logic for identifying the categories of the product or queries can be pre-store and can be configured as and when required by the system.

[000115] In an embodiment, once the logical inventories are formed, the location of the logical inventories can be displayed to the user for its selection. In an exemplary implementation, marking of such logical inventory can be done in Map/globe (2D/3D).

[000116] In an embodiment, before displaying the logical inventories on map, the module 220 can also calculates the price per unit of the logical inventories and/or the capacity of the logical inventories can also be determined. Thus, while displaying the logical inventory to the user, the price and the capacity of the the logical inventory is also displayed to the user so that the user can easily compare the price difference as well as check the capacity of a particular inventory.

[000117] In an embodiment, the server 210 can enables user to make an order directly from logical inventory. In this case, the orders might get accumulated/segregated and mapped to actual source (trader/manufacturer) of the material.

[000118] In an embodiment, in case of single order being segregated into multiple orders, those multiple orders will be collected my one/more logistics provider and delivered to destination.

[000119] Below mentioned steps are provided in order to summarize the FIG. 2:

- i. The system/server 210 accumulates all inventory capacity or manufacturing capacity or current holding into one or many logical inventories 230 utilizing a logical inventory formation module 220.
- ii. The system/server 210 then determines capacity and price per unit of that logical inventory 230.
- iii. The system/server 210 can mark such logical inventory 230 in any space time in map or globe as shown in FIGs. 4 and 5 respectively.

- iv. The system/server 210 enables the order placed in that logical inventory will be mapped to source in that inventory. Such orders can be fully mapped or mapped on splitting to make the system
- v. The system 210 also enables the orders in logical inventory to be purchased by one or more sources.

[000120] In an embodiment, the system enables to identify and verify the manufacturer and group them to a specific logical space and marking them in the map. Further, the system also enables to assigning price per unit to it.

[000121] In an exemplary implementation, products will be created globally and no supplier will be allowed to add specification directly to system. If required such specification will listed under different product or as a new variant. This avoids different listing created for same product. For example, if X wants to buy from Y, X would look for sample. Similarly X1 also looks for sample incase he is interested. According to the system such duplication will be reduced.

[000122] FIG. 3 illustrates an exemplary system in which the proposed invention can be performed. This example system is merely illustrative, and other modules or functional partitioning may therefore be substituted as would be understood by those skilled in the art. Further, this system may be modified by adding, deleting, or modifying modules and operations without departing from the scope of the inventive concept.

[000123] In an aspect, computer system 300 includes a server 302 that may involve an I/O unit 312, storage 314, and a processor 304 operable to execute one or more units as known to one skilled in the art. The term “computer-readable medium” as used herein refers to any medium that participates in providing instructions to processor 304 for execution, which may come in the form of computer-readable storage mediums, such as, but not limited to optical disks, magnetic disks, read-only memories, random access memories, solid state devices and drives, or any other types of tangible media suitable for storing electronic information, or computer-readable signal mediums, which can include transitory media such as carrier waves. The I/O unit processes input from user interfaces 316 and operator interfaces 318 which may utilize input devices such as a keyboard, mouse, touch device, or verbal command

[000124] The server 302 may also be connected to an external storage 320, which can contain removable storage such as a portable hard drive, optical media (CD or DVD), disk media or any other medium from which a computer can read executable code. The server may also be connected an output device 322, such as a display to output data and other

information to a user, as well as request additional information from a user. The connections from the server 302 to the user interface 316, the operator interface 318, the external storage 320, and the output device 322 may via wireless protocols, such as the 802.11 standards, Bluetooth® or cellular protocols, or via physical transmission media, such as cables or fiber optics. The output device 322 may therefore further act as an input device for interacting with a user.

[000125] The processor 304 can include an information accumulation module 306, a logical inventory formation module 308, and a location pin pointing module 310, wherein the information accumulation module 306 can retrieve information associated with the materials and/or the products at the location from one or more sources. The logical inventory formation module 308 can store the information associated with the materials and/or the products, and form at least one logical inventory utilizing the information based on at least one query received from at least one user and one or more characteristics of the information, the at least one logical inventory is a logical space for the one or more sources to define the capacity associated with the materials and/or the products. The location pin pointing module 310 can pinpoint at least one location of the logical inventory on a computer-implemented map of a geographic area that is of interest to a user and based on the query received from the user expressing an interest in purchasing the materials and/or the products logical inventory, using a graphical icon positioned on the computer-implemented map indicative of the location associated the logical inventory in the geographic area.

[000126] FIGs. 4 and 5 illustrate an exemplary mapping of a logical inventory on the map in accordance with an embodiment of the present invention.

[000127] Apart from what is discussed above, the present invention also include below mentioned advantages:

- i. Every manufacturing company, would have procurement team specialized in one or more supply chain. One of their primary roles includes identifying the source for the material they are looking for in right time and right price. They try to achieve this through friendly relationship, preferential trading, credit relationship, supplier size etc. In every case, there has to be a trade off. The system according to the present invention tries to emulate right product at right time and at right cost through optimal manufacturing capacity utilization.

- ii. The system enables to aggregate physical inventories to one logical inventory.
- iii. The system enables to aggregate manufacturing capacity to one logical inventory.
- iv. The system enables to assign price to aggregation may not be original price of trader/manufacturer.
- v. The system enables to split actual order to 'n' orders based on the actual source capacity in-order to make the system thrive effectively
- vi. The system enables to aggregate 'n' actual order to '1' order based on the actual source capacity in-order to make the system thrive efficiency.
- vii. The system enables to estimate best logistics cost to actual inventory to destination.
- viii. The system creates a platform to merely list the supplier with their price and their capacity.
- ix. The system enables the buyers to locate the sellers in the map.
- x. The system enables the buyer to place the order, which will be sent to the seller. It may be discretion of seller to process the order with stated specification, invoicing, payment terms and material delivery.
- xi. The system enables to create logical inventory and pinning the same logical inventory in the map, where the inventory need not have a physical presence.
- xii. The system marks the logical inventory which is generated out of AI based on the demand in the point or region.
- xiii. The system enables creation of the logical inventory and marking of the same assuming demand in a region and a possibility of making a product available in some other location other than physically present.
- xiv. The system enables creation of the logical inventory to depict the lowest possible price in that space-time by leveraging logistics, high stock in manufacturing areas due to any number of factors. It may also include people's sentiment in local market and drastic price fall, which encourages a logical inventory in some other region with best possible price keeping the both buyer and seller in mind.

[000128] As used herein, and unless the context dictates otherwise, the term “coupled to” is intended to include both direct coupling (in which two elements that are coupled to each other contact each other) and indirect coupling (in which at least one additional element is located between the two elements). Therefore, the terms “coupled to” and “coupled with” are used synonymously. Within the context of this document terms “coupled to” and “coupled with” are also used euphemistically to mean “communicatively coupled with” over a network, where two or more devices are able to exchange data with each other over the network, possibly via one or more intermediary device.

[000129] It should be apparent to those skilled in the art that many more modifications besides those already described are possible without departing from the inventive concepts herein. The inventive subject matter, therefore, is not to be restricted except in the spirit of the appended claims. Moreover, in interpreting both the specification and the claims, all terms should be interpreted in the broadest possible manner consistent with the context. In particular, the terms “comprises” and “comprising” should be interpreted as referring to elements, components, or steps in a non-exclusive manner, indicating that the referenced elements, components, or steps may be present, or utilized, or combined with other elements, components, or steps that are not expressly referenced. Where the specification claims refers to at least one of something selected from the group consisting of A, B, C ... and N, the text should be interpreted as requiring only one element from the group, not A plus N, or B plus N, etc. The foregoing description of the specific embodiments will so fully reveal the general nature of the embodiments herein that others can, by applying current knowledge, readily modify and/or adapt for various applications such specific embodiments without departing from the generic concept, and, therefore, such adaptations and modifications should and are intended to be comprehended within the meaning and range of equivalents of the disclosed embodiments. It is to be understood that the phraseology or terminology employed herein is for the purpose of description and not of limitation. Therefore, while the embodiments herein have been described in terms of preferred embodiments, those skilled in the art will recognize that the embodiments herein can be practiced with modification within the spirit and scope of the appended claims.

[000130] While embodiments of the present disclosure have been illustrated and described, it will be clear that the disclosure is not limited to these embodiments only. Numerous modifications, changes, variations, substitutions, and equivalents will be apparent

to those skilled in the art, without departing from the spirit and scope of the disclosure, as described in the claims.

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Dated: 18th April, 2017

We Claim:

1. A system for maintaining a logical inventory of materials and/or products at a location, the system comprising:

a non-transitory storage device having embodied therein one or more routines operable to maintain a logical inventory of the materials and/or the products; and

one or more processors coupled to the non-transitory storage device and operable to execute the one or more routines, wherein the one or more routines include:

an information accumulation module adapted to retrieve an information associated with the materials and/or the products at the location from one or more sources;

a logical inventory formation module adapted to:

store the information associated with the materials and/or the products;

form at least one logical inventory utilizing the information based on at least one query received from at least one user and one or more characteristics of the information, the at least one logical inventory is a logical space for the one or more sources to define the capacity associated with the materials and/or the products;

a location pin pointing module adapted to pinpoint at least one location of the logical inventory on a computer-implemented map of a geographic area that is of interest to a user and based on the query received from the user expressing an interest in purchasing the materials and/or the products logical inventory, using a graphical icon positioned on the computer-implemented map indicative of the location associated the logical inventory in the geographic area.

2. The system as claimed in claim 1, further comprises a pricing module adapted to calculate a price of the materials and/or the products per unit of the logical inventory based on one or more factors, the factors are selected from any or combination of the quantity of the materials and/or the products and the capacity of the logical inventory.

3. The system as claimed in claim 1, further comprises a capacity identification module adapted to identify the capacity of the logical inventory in terms of: the materials and/or the products, and/or manufacturing the materials and/or the products.

4. The system as claimed in claim 1, wherein the logical inventory formation module is further adapted to:

verify the logical inventory formed;

group the logical inventory into a pre-determined/pre-specified category, the logical inventory is categorized based on information having particular shared characteristics; and thereby

pinpoint, utilizing the location pin pointing module, the location of the logical inventory on the computer-implemented map.

5. The system as claimed in claim 1, further comprises a transmitting module adapted to transmit, to a client computing device and over the network connection, the computer-implemented map for presentment on a display of the client computing device, wherein the computer-implemented map is transmitted in response to the query received from the user and the computer-implemented map provides the location of the materials and/or the products at the location nearest or in proximity of the user.

6. The system as claimed in claim 1, wherein the query received from the user locates the recommended product in the logical inventory based at least in part upon purchase patterns of the user.

7. The system as claimed in claim 1, wherein the query received from the user locates the recommended product in the logical inventory based at least in part upon purchase patterns of other users.

8. The system as claimed in claim 1, wherein the query received from the user locates the recommended product in the logical inventory based at least in part upon products in stock at the at least one the materials and/or the products at the location that are similar to the at least one product.

9. The system as claimed in claim 1, further comprises a demand supply module adapted to:

receive, from the user in the form of the query, at least one order or demand associated with the materials and/or the products from the logical inventory along with a location data that is indicative of the geographic area;

in response receipt of the location data that is indicative of the geographic area and the order or demand, execute a search over data in the logical repository formed based upon the geographic area of interest, wherein the location data is received from a Global Positioning System (GPS) receiver of the client computing device inferring the geographic area based upon the position data; and wherein execution of the search comprises:

- locate at least one logical inventory in the geographic area of interest;
- segregate, if the at least one single logical inventory is not able to full fill the order, the order or demand into one or more sub-orders;
- distribute the one or more sub-orders to one or more other logical inventories;
- receive the one or more sub-orders upon completion;
- aggregate the one or more sub-orders into a product, the product is associated with the order or demand; and
- deliver, using a logistic services, the product to the user.

10. The system as claimed in claim 9, wherein the demand supply module is further adapted to enable the user to provide, from the user in the form of the query, at least one order to the logical inventory, and thereby map with the materials and/or the products at the location.

11. The system as claimed in claim 1, wherein the one or more characteristics of the information is selected from any of combination of the lowest possible price in that space-time by leveraging logistics, high stock in a manufacturing area, people sentiment in local market, and drastic price fall.

12. The system as claimed in claim 1, wherein the computer-implemented map causing a plurality of selectable links to be displayed, wherein selection of a first selectable link causes a driving route to be output that directs the user to the location associated the logical inventory.

13. A system comprising:
a processor; and
a memory that comprises a plurality of components that are executable by the processor, the components comprising:

a search component that executes a search over data in at least one logical inventory based upon a query associated with the materials and/or the products transmitted to the system over a network connection between the client computing device and the system, the logical inventory is created utilizing the information associated with the materials and/or the products at the location retrieved from one or more sources, and the at least one logical inventory is a logical space for the one or more sources to define the capacity associated with the materials and/or the products, and the search component, when executing the search, retrieves information associated with the materials and/or the products to locate a recommended product that is in the logical inventory;

a map generator component that is in communication with the search component, the map generator component generates a map of the geographic area of interest to the user for display on a display of the client computing device in response to receipt of the query, the map comprises a graphical icon that is representative of at least one logical inventory created utilizing the information and having the recommended product, the map generator component transmits the map of the geographic area to the client computing device over the network connection.

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ABSTRACT

REAL TIME LOGICAL INVENTORY CREATION AND MANAGEMENT SYSTEM

The present invention provides a system having an information accumulation module 102 to retrieve information associated with the materials and/or the products at a location from the sources. The logical inventory formation module 104 forms a logical inventory utilizing the information based on a query received from a user and one or more characteristics of the information, the logical inventory is a logical space for the sources to define the capacity associated with the materials and/or the products. The location pin pointing module 106 pinpoints a location of the logical inventory on a computer-implemented map of a geographic area that is of interest to a user and based on the query received from the user expressing an interest in purchasing the materials and/or the products logical inventory, using a graphical icon positioned on the computer-implemented map indicative of the location associated the logical inventory in the geographic area.

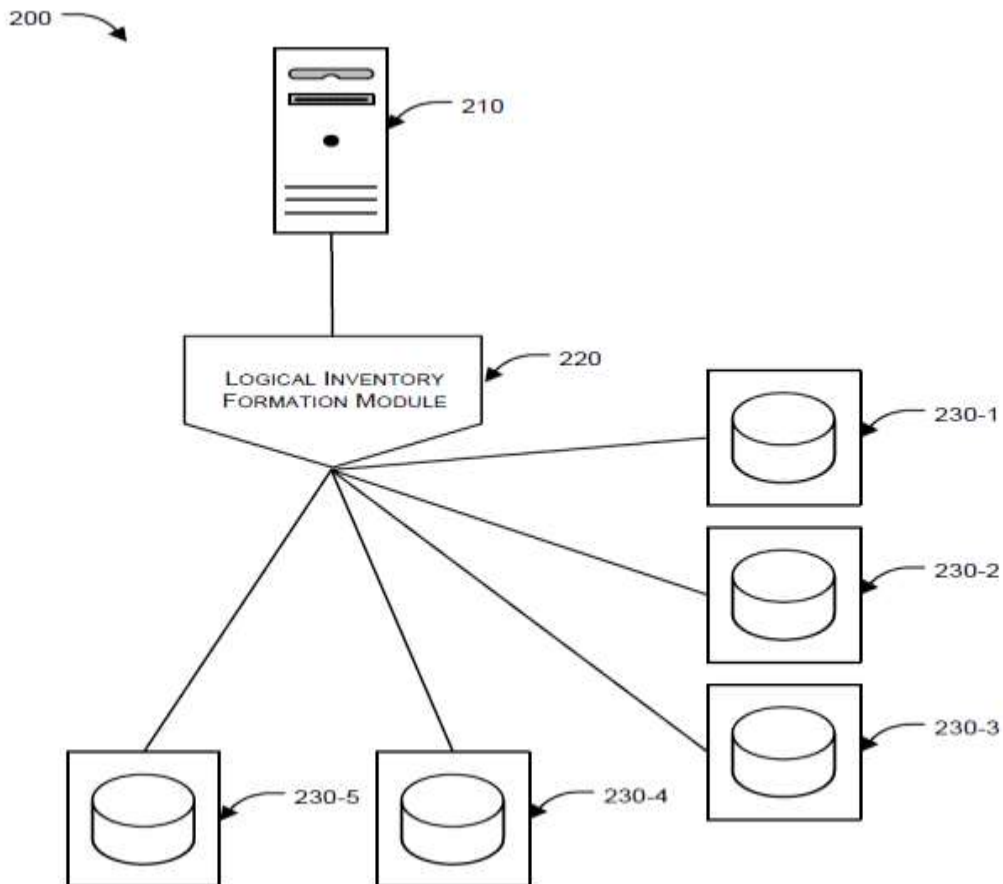


FIG. 2

400



FIG. 4

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