

CLAIMS

1. An operation method of an electronic apparatus for inventory management, the method comprising:

receiving a consolidation task request, wherein the consolidation task request includes information on a plurality of locations in which the consolidation task is required;

generating, in response to the received consolidation task request, information on at least one item based on a comparison of an item space usage rate related to the plurality of locations calculated in real time with a predetermined value, wherein the information on the at least one item includes information for at least one item which is a target on which a picking task is to be performed for a consolidation task;

transmitting the information on the at least one item to a terminal;

receiving a result of the picking task of the at least one item from the terminal; and

updating information on inventory based on the result of the picking task.

2. The operation method of claim 1, wherein the information on the at least one item includes at least one of identification information and quantity information of an item on which the picking task is to be performed.

3. The operation method of claim 1, wherein the terminal is configured to output the information on the at least one item and verify whether the at least one item is picked by a quantity corresponding to a target quantity.

4. The operation method of claim 1, wherein a space usage rate of the at least one item is a ratio of a volume of a space in which an item is placed in a zone to a volume of a space capable of receiving an item in the zone, and is changed in accordance with a picking task being performed in a consolidation task on the item in the zone.

5. The operation method of claim 1, wherein the generating comprises comparing an item space usage rate for each of the plurality of locations to the predetermined value, respectively, and generating information on at least one item on which a picking task is to be performed.

6. The operation method of claim 1, wherein the receiving of the consolidation task request comprises receiving a target value of the item space usage rate for each zone, and
the generating comprises comparing the item space usage rate for each zone to the target value, which includes the target value, and generating information on at least one item on which the picking task is to be performed.

7. An operation method of electronic apparatus for inventory management, the method comprising:

receiving a consolidation task request, wherein the consolidation task request includes information on a plurality of locations in which the consolidation task is required;

generating, in response to the received consolidation task request, information on at least one item based on a comparison of an item space usage rate related to the plurality of locations calculated in real time with a predetermined value, wherein the at least one item is a target on which a picking task is to be performed for a consolidation task;

transmitting the information on the at least one item to a terminal;

receiving a result of the picking task of the at least one item from the terminal; and

updating information on inventory based on the result of the picking task, and

wherein the terminal is configured to:

request to input identification information of a first location in which a first item among the at least one item is placed; and

request, when an input indicating that the identification information of the first location is

not to be input is received, to input identification information of a second location in which the first item is placed, the second location being different from the first location.

8. An operation method of electronic apparatus for inventory management, the method comprising:

receiving a consolidation task request, wherein the consolidation task request includes information on a plurality of locations in which the consolidation task is required;

generating, in response to the received consolidation task request, information on at least one item based on a comparison of an item space usage rate related to the plurality of locations calculated in real time with a predetermined value, wherein the at least one item is a target on which a picking task is to be performed for a consolidation task;

transmitting the information on the at least one item to a terminal;

receiving a result of the picking task of the at least one item from the terminal; and

updating information on inventory based on the result of the picking task, and

wherein the terminal is configured to:

request to input identification information of a first item among the at least one item at a first location in which the first item is placed; and

request, when an input indicating that the identification information of the first item is not to be input is received, to input identification information of a second location in which the first item is placed, the second location being different from the first location.

9. An operation method of electronic apparatus for inventory management, the method comprising:

receiving a consolidation task request, wherein the consolidation task request includes information on a plurality of locations in which the consolidation task is required;

generating, in response to the received consolidation task request, information on at least

one item based on a comparison of an item space usage rate related to the plurality of locations calculated in real time with a predetermined value, wherein the at least one item is a target on which a picking task is to be performed for a consolidation task;

transmitting the information on the at least one item to a terminal;

receiving a result of the picking task of the at least one item from the terminal; and

updating information on inventory based on the result of the picking task, and

wherein the terminal is configured to:

request to input a picking quantity of a first item among the at least one item at a first location in which the first item is placed; and

request, when an input indicating that the picking quantity of the first item does not correspond to a target quantity is received, an input of terminating a consolidation task or request to input identification information of a second location in which the first item is placed, the second location being different from the first location.

10. An operation method of electronic apparatus for inventory management, the method comprising:

receiving a consolidation task request, wherein the consolidation task request includes information on a plurality of locations in which the consolidation task is required;

generating, in response to the received consolidation task request, information on at least one item based on a comparison of an item space usage rate related to the plurality of locations calculated in real time with a predetermined value, wherein the at least one item is a target on which a picking task is to be performed for a consolidation task;

transmitting the information on the at least one item to a terminal;

receiving a result of the picking task of the at least one item from the terminal; and

updating information on inventory based on the result of the picking task, and

wherein the terminal is configured to:

request to input a picking quantity of a first item among the at least one item at a first location in which the first item is placed; and

request, when an input indicating that the picking quantity of the first item corresponds to a target quantity is received, an input of terminating a consolidation task or request to input identification information of a second item that belongs to the at least one item and differs from the first item.

11. A non-transitory computer readable recording medium comprising a computer program for performing the operation method of claim 1.

12. An electronic apparatus for inventory management, the apparatus comprising:

a communication device; and

a controller configured to control the communication device,

wherein the controller is configured to:

receive a consolidation task request through the communication device, wherein the consolidation task request includes information on a plurality of locations in which the consolidation task is required;

generate, in response to the received consolidation task request, information on the at least one item based on a comparison of an item space usage rate related to the plurality of locations calculated in real time with a predetermined value, wherein the information on the at least one item includes the location information;

transmit the information on the at least one item to a terminal through the communication device;

receive a result of the picking task of the at least one item from the terminal through the communication device; and

update information on inventory based on the result of the picking task.

13. An operation method of a terminal for inventory management, the method comprising:

- receiving a consolidation task request, wherein the consolidation task request includes location information for at least one item which is a target on which a picking task is to be performed for a consolidation task;
- transmitting the consolidation task request to an electronic apparatus;
- receiving information on the at least one item based on an item space usage rate for each zone calculated in real time from the electronic apparatus in accordance with the consolidation task request;
- receiving input of a result of the picking task of the at least one item based on the received information on the at least one item; and
- transmitting the received input of the result of the picking task of the at least one item to the electronic apparatus.

14. A terminal for inventory management, the terminal comprising:

- a communication device;
- an input device; and
- a processor operably coupled with the communication device and the input device, wherein the processor is configured to:
 - receive, via the input device, a consolidation task request, wherein the consolidation task request includes location information for at least one item which is a target on which a picking task is to be performed for a consolidation task;
 - transmit, via the communication device, the consolidation task request to an electronic apparatus;
 - receive, via the communication device, information on the at least one item based on an item space usage rate for each zone calculated in real time from the electronic apparatus in accordance

with the consolidation task request;

receive, via the input device, input of a result of the picking task of the at least one item based on the received information on the at least one item; and

transmit, via the communication device, the received input of the result of the picking task of the at least one item to the electronic apparatus.