
100
200
Data

FIG. 1

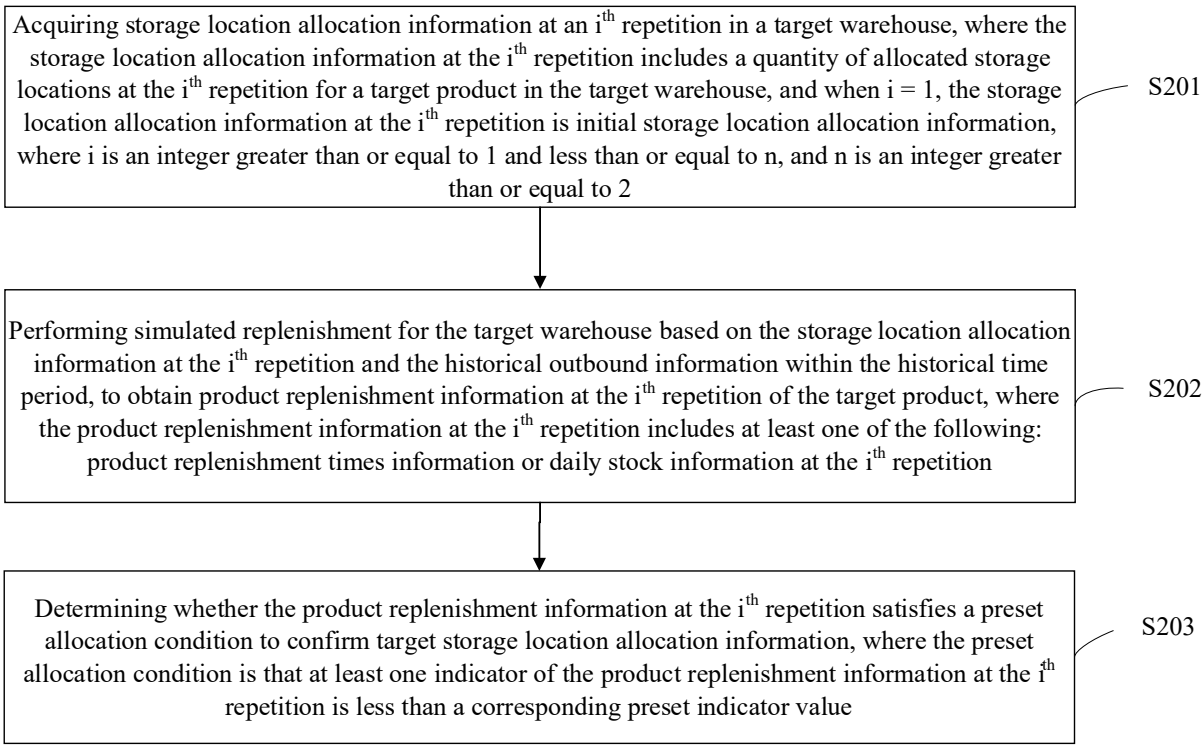
Acquiring storage location allocation information at an ith repetition in a target warehouse, where the storage location allocation information at the ith repetition includes a quantity of allocated storage locations at the ith repetition for a target product in the target warehouse, and when i = 1, the storage location allocation information at the ith repetition is initial storage location allocation information, where i is an integer greater than or equal to 1 and less than or equal to n, and n is an integer greater than or equal to 2
S201
Performing simulated replenishment for the target warehouse based on the storage location allocation information at the ith repetition and the historical outbound information within the historical time period, to obtain product replenishment information at the ith repetition of the target product, where the product replenishment information at the ith repetition includes at least one of the following: product replenishment times information or daily stock information at the ith repetition
S202
Determining whether the product replenishment information at the ith repetition satisfies a preset allocation condition to confirm target storage location allocation information, where the preset allocation condition is that at least one indicator of the product replenishment information at the ith repetition is less than a corresponding preset indicator value
S203

FIG. 2

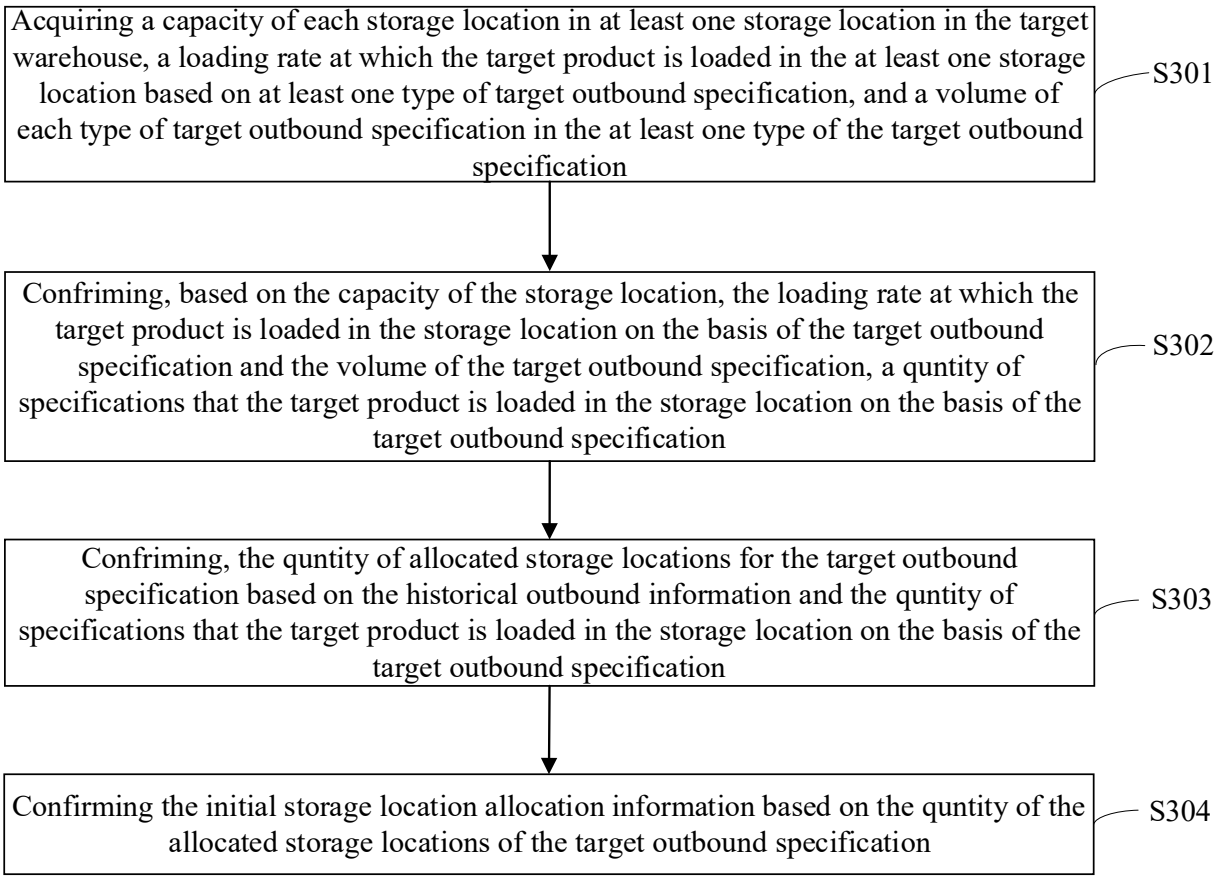
Acquiring a capacity of each storage location in at least one storage location in the target warehouse, a loading rate at which the target product is loaded in the at least one storage location based on at least one type of target outbound specification, and a volume of each type of target outbound specification in the at least one type of the target outbound specification
S301
Confriming, based on the capacity of the storage location, the loading rate at which the target product is loaded in the storage location on the basis of the target outbound specification and the volume of the target outbound specification, a quntity of specifications that the target product is loaded in the storage location on the basis of the target outbound specification
S302
Confriming, the quntity of allocated storage locations for the target outbound specification based on the historical outbound information and the quntity of specifications that the target product is loaded in the storage location on the basis of the target outbound specification
S303
Confirming the initial storage location allocation information based on the quntity of the allocated storage locations of the target outbound specification
S304

FIG. 3

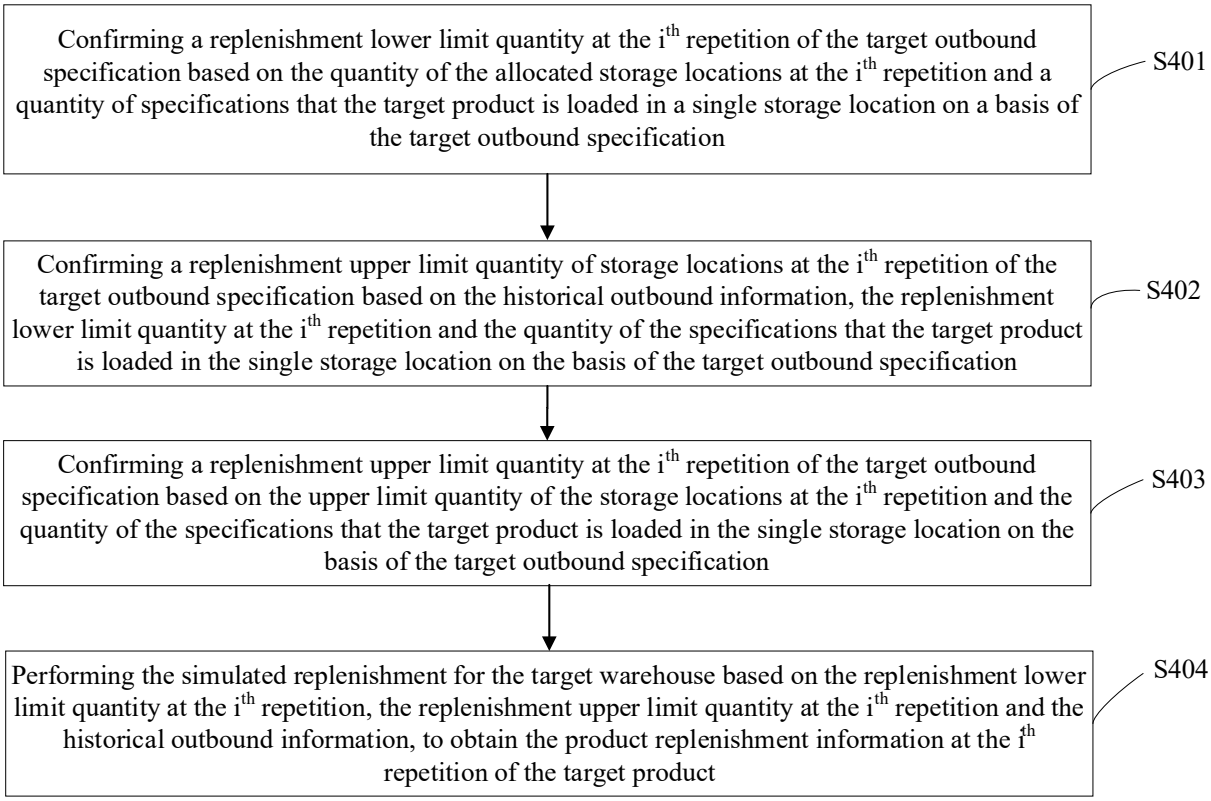
Confirming a replenishment lower limit quantity at the ith repetition of the target outbound specification based on the quantity of the allocated storage locations at the ith repetition and a quantity of specifications that the target product is loaded in a single storage location on a basis of the target outbound specification
S401
Confirming a replenishment upper limit quantity of storage locations at the ith repetition of the target outbound specification based on the historical outbound information, the replenishment lower limit quantity at the ith repetition and the quantity of the specifications that the target product is loaded in the single storage location on the basis of the target outbound specification
S402
Confirming a replenishment upper limit quantity at the ith repetition of the target outbound specification based on the upper limit quantity of the storage locations at the ith repetition and the quantity of the specifications that the target product is loaded in the single storage location on the basis of the target outbound specification
S403
Performing the simulated replenishment for the target warehouse based on the replenishment lower limit quantity at the ith repetition, the replenishment upper limit quantity at the ith repetition and the historical outbound information, to obtain the product replenishment information at the ith repetition of the target product
S404

FIG. 4

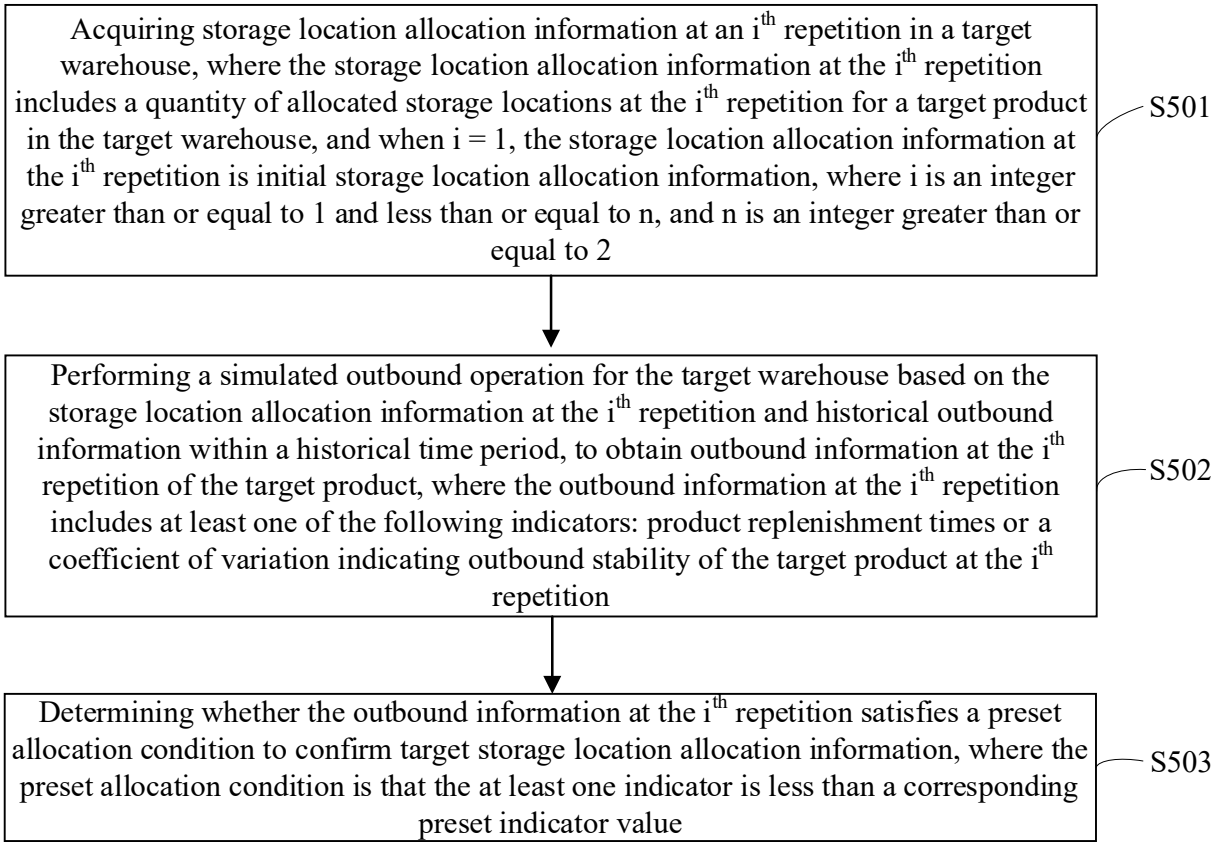
Acquiring storage location allocation information at an ith repetition in a target warehouse, where the storage location allocation information at the ith repetition includes a quantity of allocated storage locations at the ith repetition for a target product in the target warehouse, and when i = 1, the storage location allocation information at the ith repetition is initial storage location allocation information, where i is an integer greater than or equal to 1 and less than or equal to n, and n is an integer greater than or equal to 2
S501
Performing a simulated outbound operation for the target warehouse based on the storage location allocation information at the ith repetition and historical outbound information within a historical time period, to obtain outbound information at the ith repetition of the target product, where the outbound information at the ith repetition includes at least one of the following indicators: product replenishment times or a coefficient of variation indicating outbound stability of the target product at the ith repetition
S502
Determining whether the outbound information at the ith repetition satisfies a preset allocation condition to confirm target storage location allocation information, where the preset allocation condition is that the at least one indicator is less than a corresponding preset indicator value
S503

FIG. 5

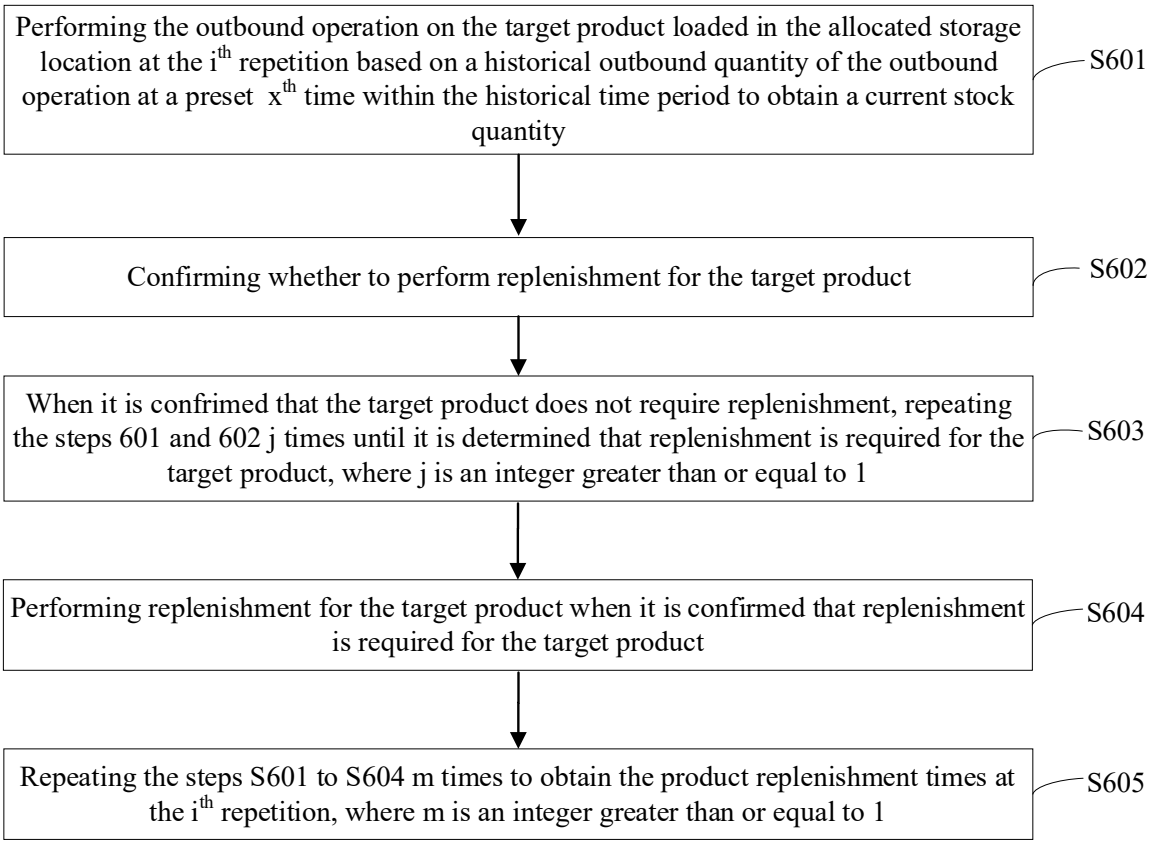
Performing the outbound operation on the target product loaded in the allocated storage location at the ith repetition based on a historical outbound quantity of the outbound operation at a preset x^{th} time within the historical time period to obtain a current stock quantity
S601
Confirming whether to perform replenishment for the target product
S602
When it is confrimed that the target product does not require replenishment, repeating the steps 601 and 602 j times until it is determined that replenishment is required for the target product, where j is an integer greater than or equal to 1
S603
Performing replenishment for the target product when it is confirmed that replenishment is required for the target product
S604
Repeating the steps S601 to S604 m times to obtain the product replenishment times at the ith repetition, where m is an integer greater than or equal to 1
S605

FIG. 6

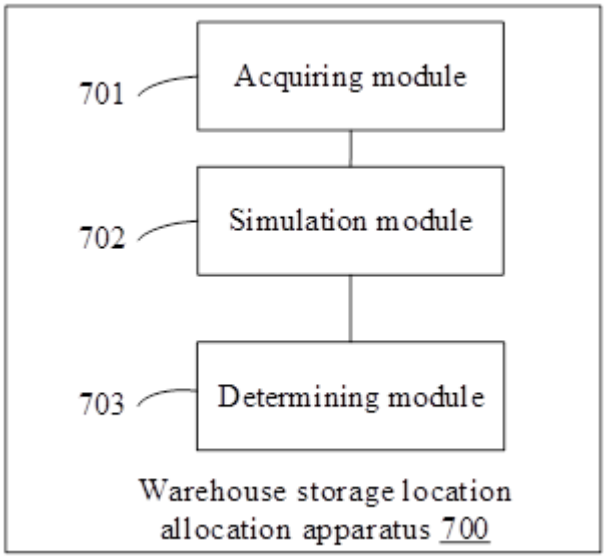
701
Acquiring module
702
Simulation module
703
Determining module
Warehouse storage location allocation apparatus 700

FIG. 7

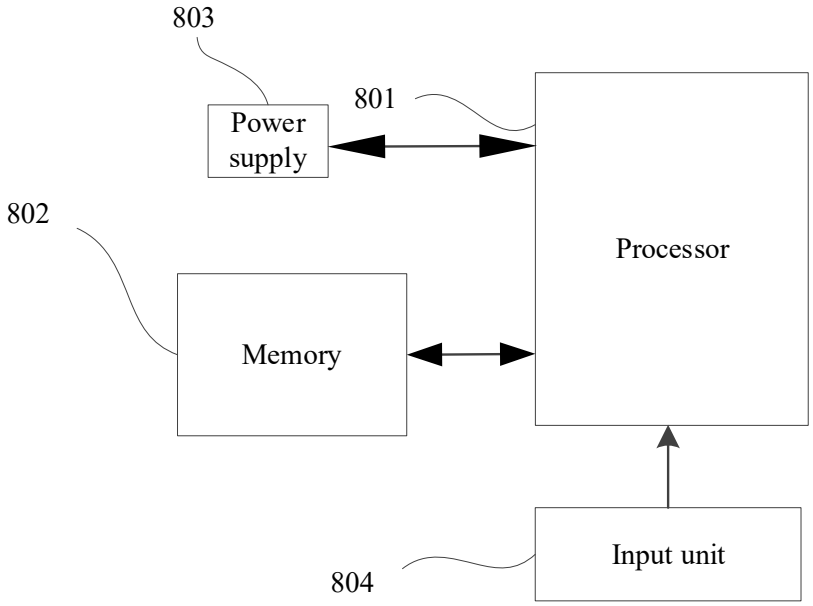
803
Power supply
801
802
Memory
Processor
Input unit
804

FIG. 8

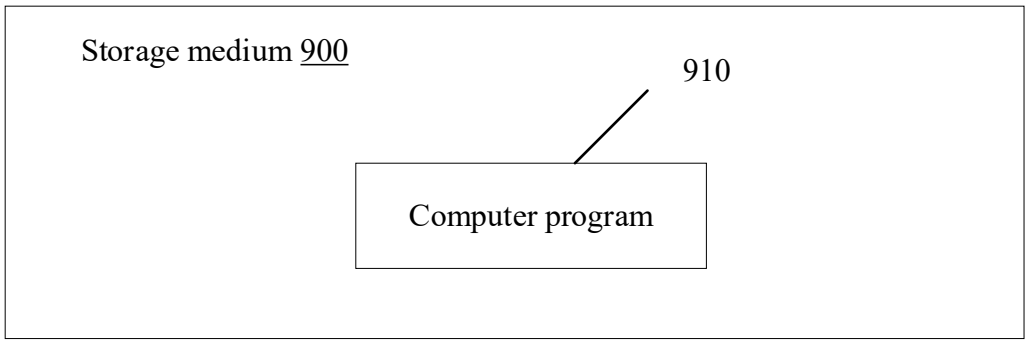

FIG. 9