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Park Plaza, Suite 550, Irvine, CA 92614 (US).(72) Inventors: **MURPHY, Thomas, Eugene**; 1 Park Plaza,
Suite 550, Irvine, CA 92614 (US). **WINTZ, Daniel,**
Thomas; 1 Park Plaza, Suite 550, Irvine, CA 92614 (US).(74) Agent: **HOFF, Christopher, C.** et al.; Fish & Richardson
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(54) Title: DETERMINING PICK PALLET BUILD OPERATIONS AND PICK SEQUENCING

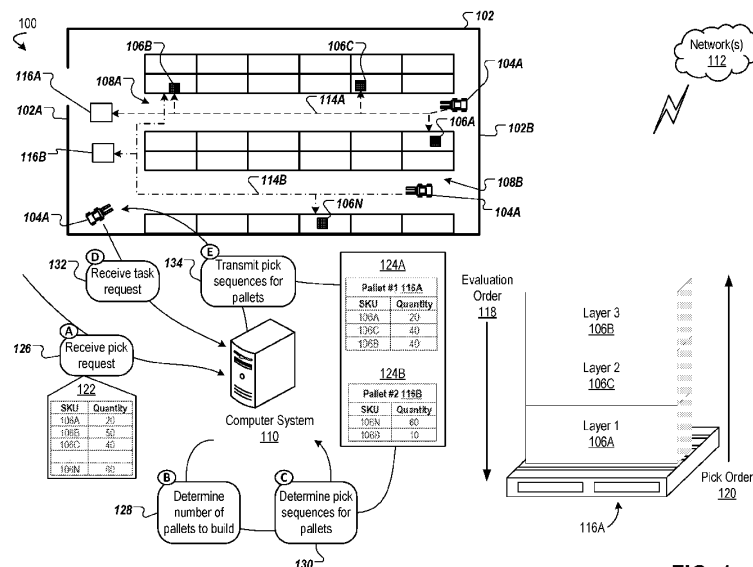


FIG. 1

(57) **Abstract:** Methods and systems for determining a pallet build sequence include receiving a pick order request, identifying candidate pick items in a warehouse to fulfill the request, grouping the items based on aisles and generating aisle-based lists per group, and sorting each list based on location of each of the items per group from front to back of the warehouse. For each list, the method includes selecting a first item at a top of the list, adding the first item to a bottom layer of a pallet, determining an amount of weight of items from the list that can be layered on top of the first item and determining whether the first item can support the determined amount of weight. If the first item can support the determined weight, the first item can be kept in a pick sequence as the pallet's bottom layer and removed from the list.

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