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(56) Documents Cited:  
**US 7667602 B2** **US 6883710 B2**  
**US 20120109842 A1**  
**YU, K et al., "Implementation of an RFID-Based Virtual Signal Mechanism for an Indoor Location Sensing System", Journal of Internet Technology, vol. 14, no. 4, (20130701), page 12, URL: https://pdfs.semanticscholar.org/81ed/dce5b340942092dc3cca07c853b5e7b08cb4.pdf, XP055596535 [Y] 8, 16**  
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(54) Title of the Invention: **System and method for identifying transition points in a retail facility**  
Abstract Title: **System and method for identifying transition points in a retail facility**

(57) In some embodiments, apparatuses and methods are provided herein useful to updating an inventory database. In some embodiments, a system for updating an inventory database comprises an array of RFID readers positioned at different locations about the retail facility, where the RFID readers are configured to read RFID tags associated with products, and a control circuit, the control circuit configured to receive, from one or more RFID readers, identifiers, wherein the identifiers are associated with the RFID tags, determine, based on the identifiers, a flow of RFID tags, identify, without reference to a structural map of the retail facility, a transition point from the stockroom to the sales floor, determine, based on an RFID read, that a product has passed through the transition point from the stockroom to the sales floor, and update the inventory database to indicate that the product is located on the sales floor.

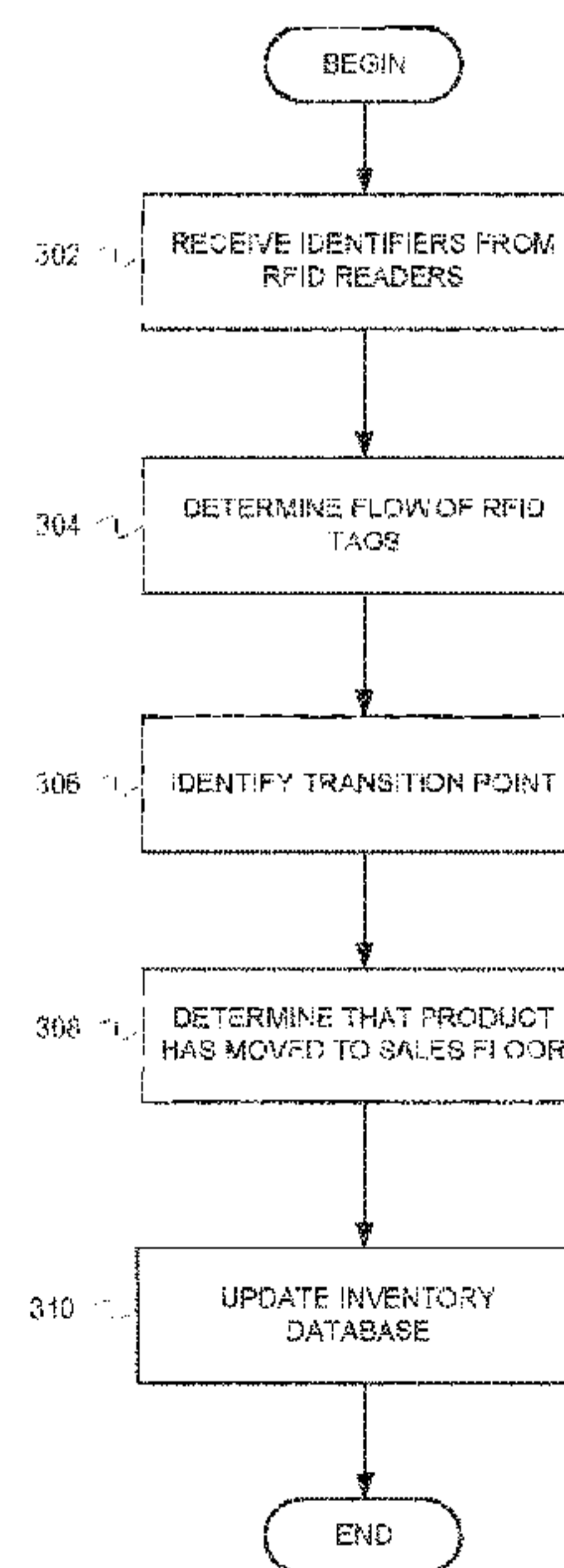


FIG. 3

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