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(54) Title: AN ORDER BOOK MANAGEMENT DEVICE IN A HARDWARE PLATFORM

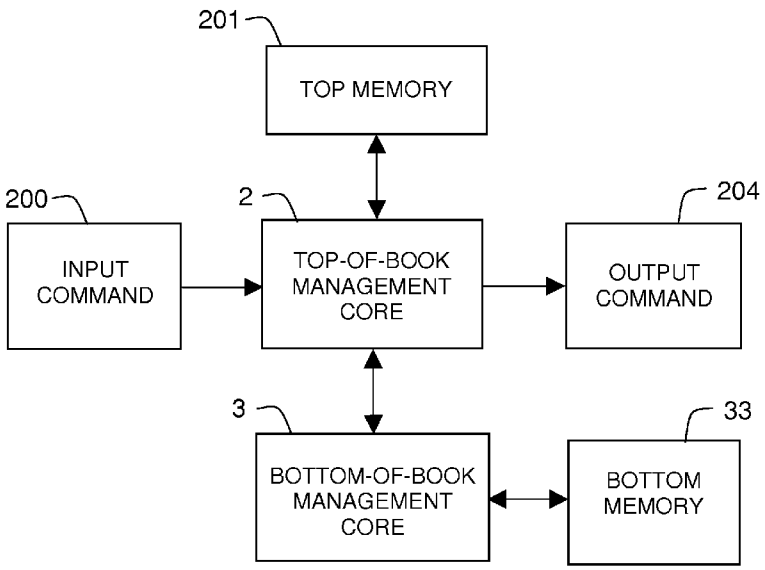


FIG.3

(57) Abstract: The invention provides an order book management device (10), implemented on an integrated circuit, for aggregating orders identified in input data streams into at least one order book, each order comprising a price and a quantity information, each order book being associated with a tradable object and comprising a sell side and a buy side, each order book side storing a list of limits, each limit being associated with a given price and a quantity, the quantity associated with a limit corresponding to the sum of the quantities of the received orders comprising the given price. Each side of the order book comprises : - a first data structure for maintaining a selected number P of limits corresponding to the P limits having the highest prices among the N limits maintained in the buy side of the book, or the lowest prices among the N limits maintained in the sell side of the order book, the orders in the first data structure being sorted by price depending on the order book side, and - a second data structure arranged in the form of a tree and comprising the N-P limits having the lowest prices among the N limits in the buy side of the book, or the highest prices among the N limits in the sell side of the book. The order book management device further comprises a first management core (2) for processing each received limit related command comprising a price information, updating the first data structure in response to the processing of the command and/or generating at least one update command to a second management core (3), the second management core (3) being configured to update the second data structure based on the update commands.

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