



[54] METHODS AND APPARATUS FOR SHARING STORED DATA OBJECTS IN A COMPUTER SYSTEM

5,619,723 4/1997 Jones et al. 395/823

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[57] ABSTRACT

[21] Appl. No.: 673,130

A method, in a computer system having a first plurality of stored data objects and capable of running multiple threads concurrently, for preventing access conflicts. The method includes the step of providing a dynamic lock structure having a plurality of dynamic lock structure members. There is also the step of mapping a second plurality of stored data objects of the first plurality of stored data objects into a first dynamic lock structure member of the plurality of dynamic lock structure members in accordance with a mapping function. Due to the mapping function, the plurality of dynamic lock structure members become fewer in number than the number of the first plurality of stored data objects. The first dynamic lock structure member is configured to store identities of a third plurality of stored data objects. The third plurality of stored data objects represent a subset of the second plurality of stored data objects that are accessed, whereby a stored data object having its identity stored in the dynamic lock structure cannot be accessed by any thread other than a thread currently accessing the stored data object.

[22] Filed: Jul. 1, 1996

[51] Int. Cl.⁶ G06F 17/30

[52] U.S. Cl. 707/8; 707/1

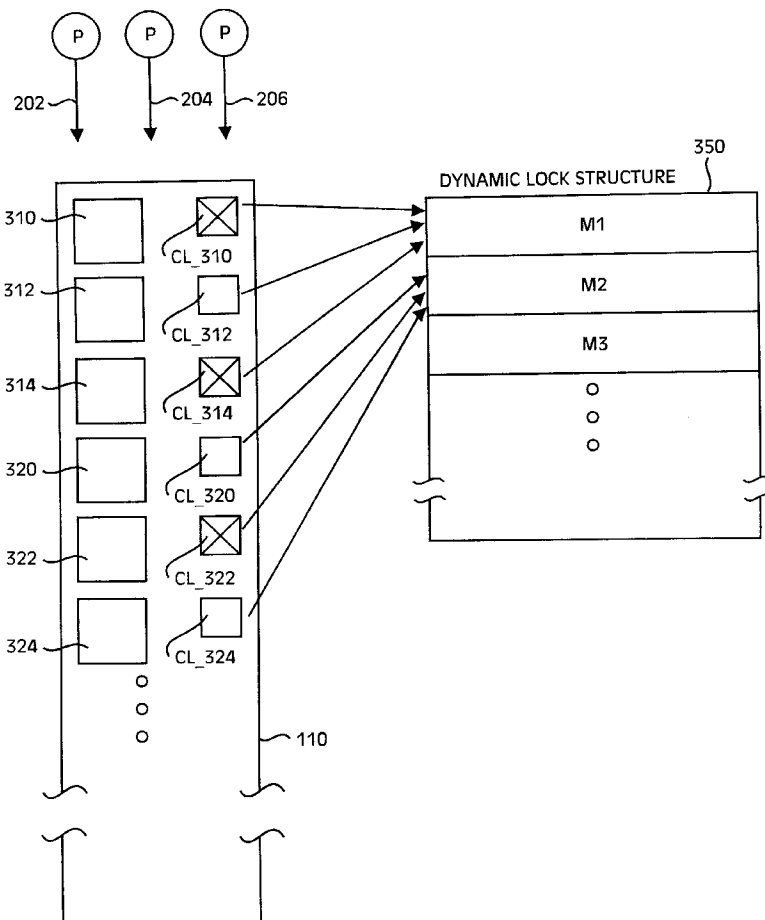
[58] Field of Search 395/601, 602, 395/603, 607, 608, 609, 610, 611, 616, 617, 618, 619, 620, 468, 823, 825, 840; 707/1, 2, 3, 7, 8, 9, 10, 100

[56] References Cited

U.S. PATENT DOCUMENTS

5,442,758	8/1995	Slingwine et al.	395/608
5,483,641	1/1996	Jones et al.	395/823
5,566,349	10/1996	Trout	395/840
5,568,639	10/1996	Wilcox et al.	395/616
5,608,893	3/1997	Slingwine et al.	395/468

25 Claims, 10 Drawing Sheets



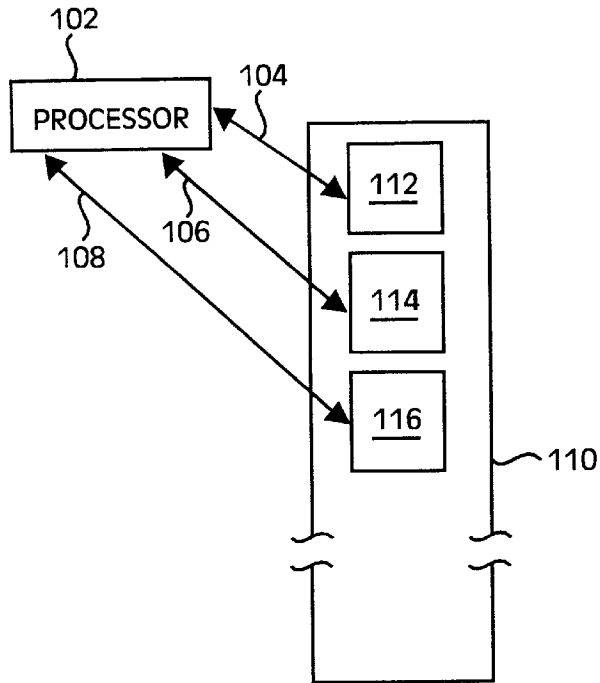


FIG. 1A

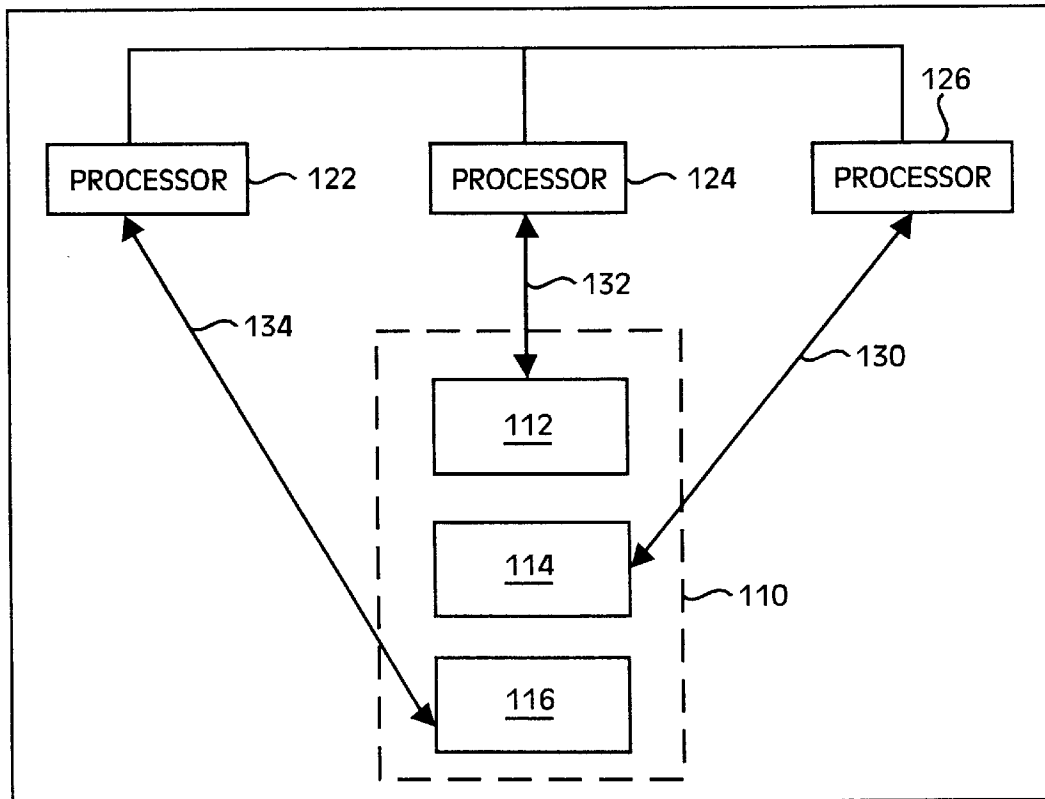


FIG. 1B

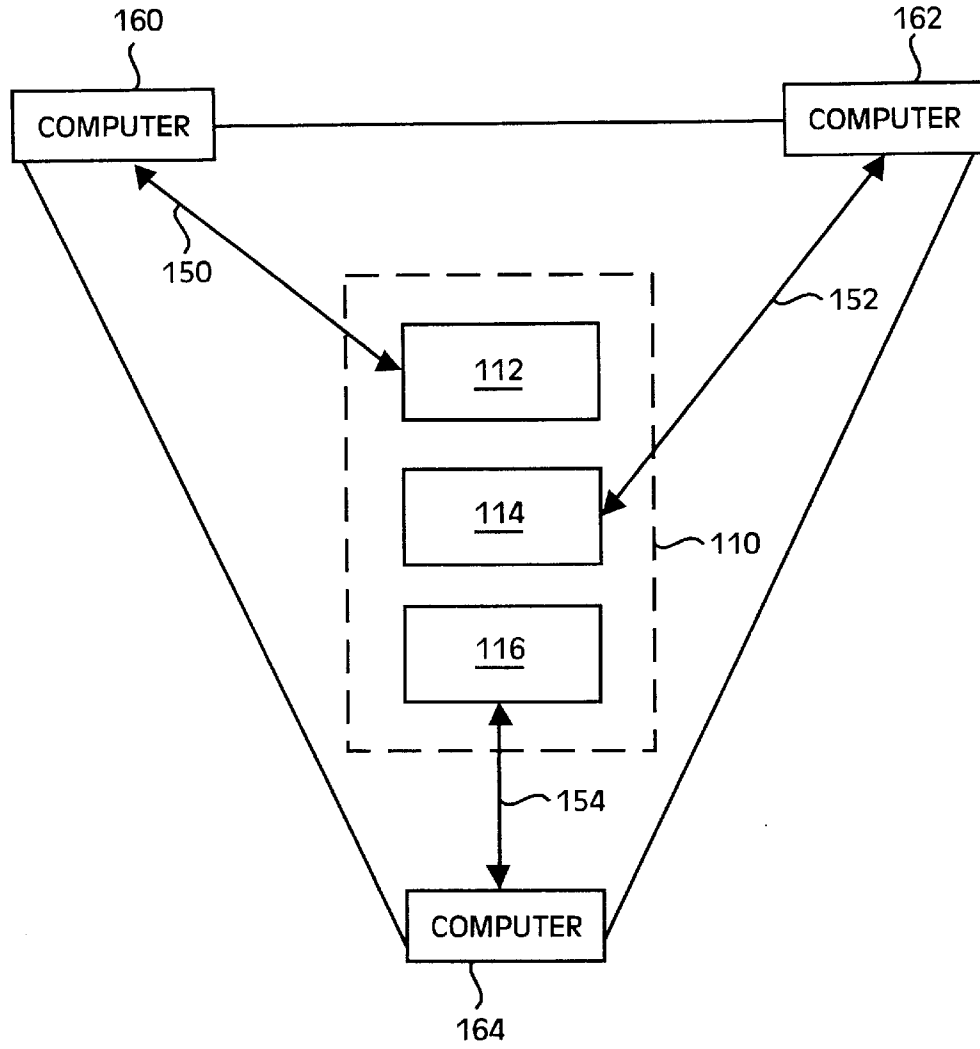


FIG. 1C

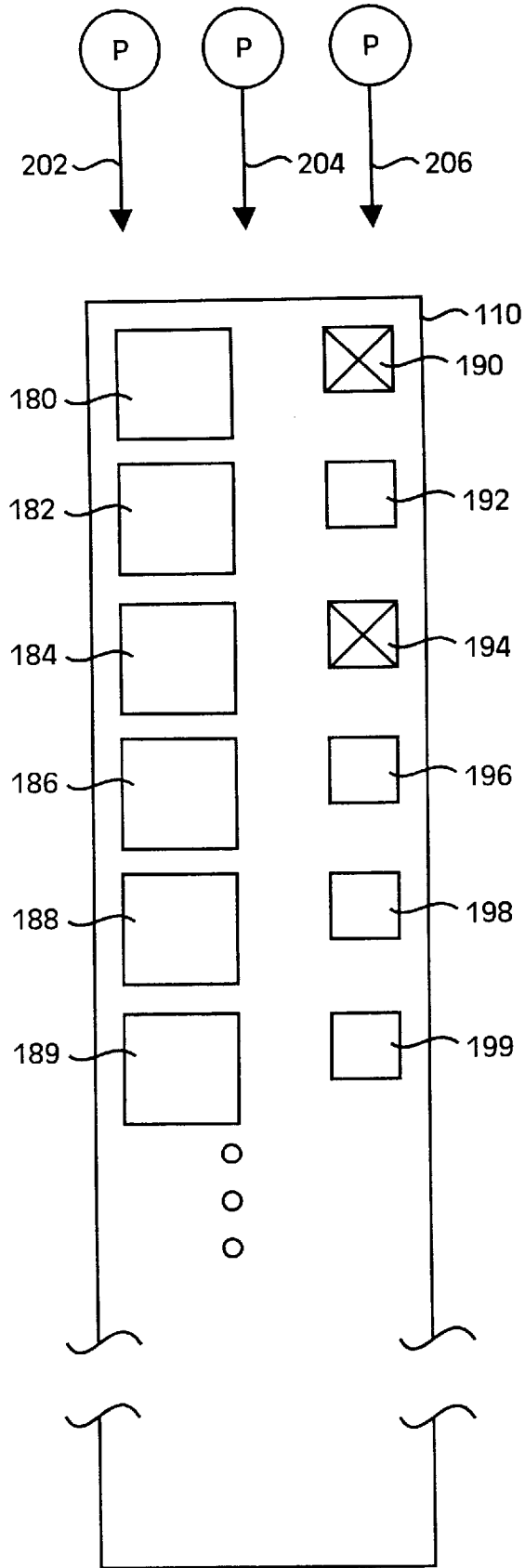


FIG. 2
(PRIOR ART)

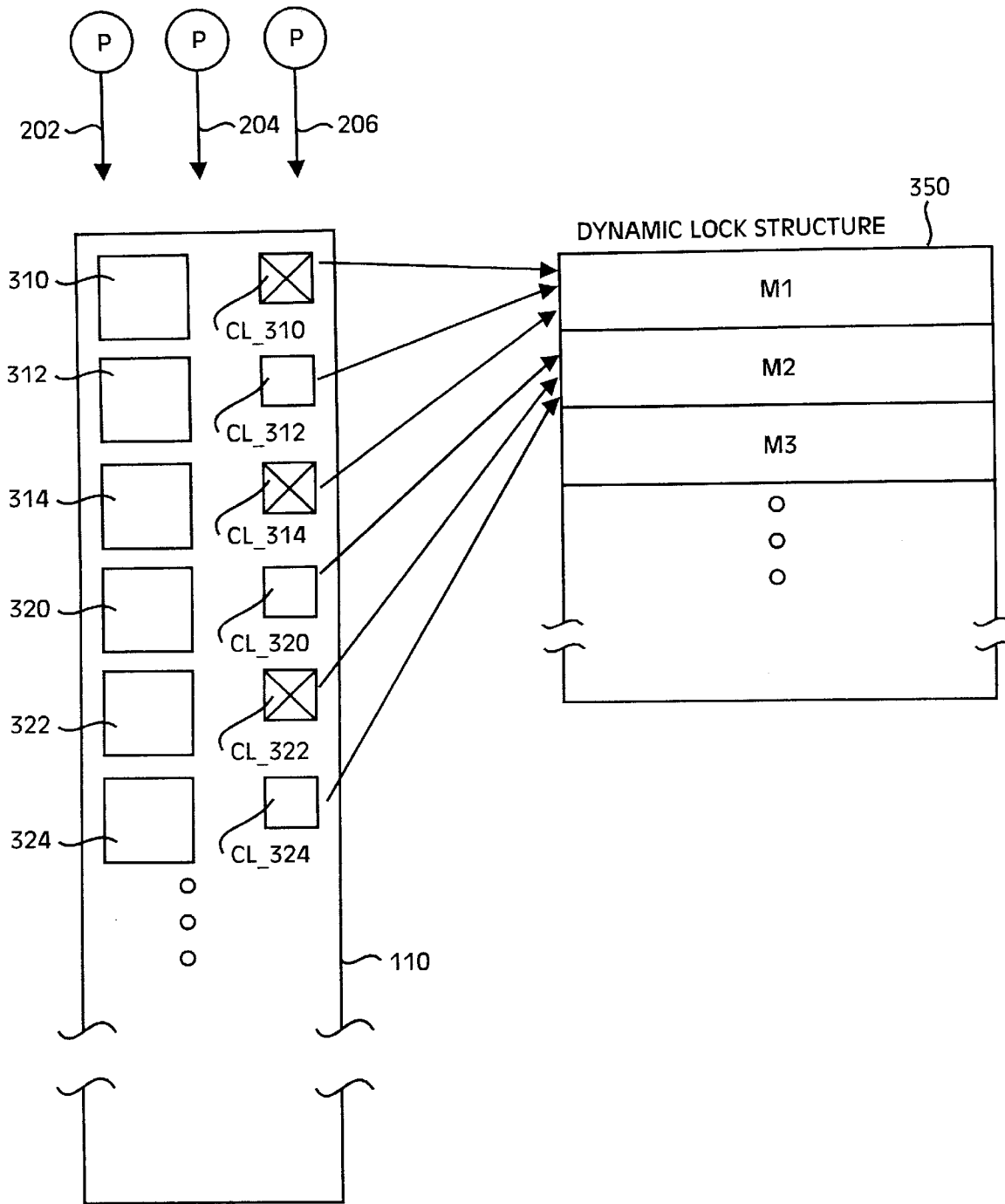


FIG. 3

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