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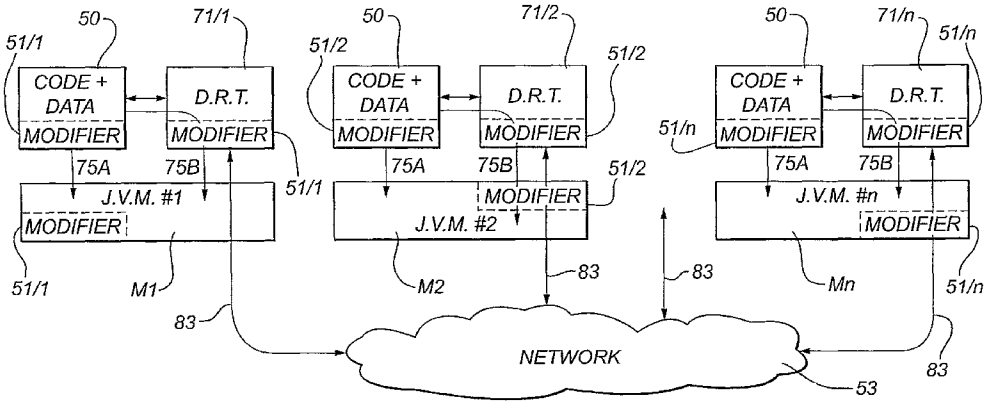
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(54) **Title:** MODIFIED COMPUTER ARCHITECTURE FOR A COMPUTER TO OPERATE IN A MULTIPLE COMPUTER SYSTEM



(57) **Abstract:** A modified computer architecture (50, 71, #1, #2, #3) which enables applications program (50) to be run simultaneously on a plurality of computers (Ml, ...Mn) and a computer for the multiple computer system are disclosed. Shared memory at each computer is updated with amendments and/or overwrites so memory read requests are satisfied locally. During initial program loading (75) instructions which result in memory being re-written/manipulated are identified. Instructions are inserted to cause equivalent memory locations at all computers to be updated. Initialization of JAVA language classes and objects is disclosed so memory locations for all computers are initialized in the same manner. Finalization of JAVA language classes and objects is disclosed. Finalization occurs when the last class/object on all machines is no longer required. During initial program loading (75) instructions which result in the program (50) acquiring/releasing a lock on an asset (synchronization) are identified. Instructions are inserted to result in a modified synchronization routine with which all computers are updated. A single computer arranged to operate in a multiple computer system is disclosed.

WO 2006/110957 A1