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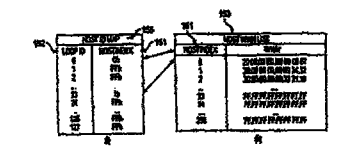
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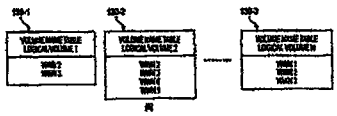
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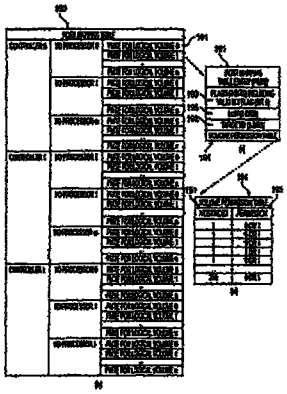
(54) Title: SYSTEM AND METHOD FOR HOST VOLUME MAPPING FOR SHARED STORAGE VOLUMES IN A MULTI-HOST COMPUTING ENVIRONMENT



B-1



B-2



B-3

(57) Abstract: The invention provides structure and method for controlling access to a shared storage device (108), such as a disk drive storage array, in computer systems and networks having a plurality of host computers (101). A method for controlling access to a hardware device in a computer system having a plurality of computers and at least one hardware device (106) connected to the plurality of computers. The method includes the steps of associating a locally unique identifier (130) with each the plurality of computers, defining a data structure in a memory identifying which particular ones of the computers based on the locally unique identifier may be granted access to the device (190); and querying the data structure to determine if a requesting one of the computers should be granted access to the hardware device. In one embodiment, the procedure for defining the data structure in memory includes defining a host computer ID map data structure in the memory; defining a port mapping table data structure comprising a plurality of port mapping table entries in the memory; defining a host identifier list data structure in the memory; defining a volume permission table data structure in the memory; and defining a volume number table data structure in the memory.

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