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(54) **TRACKING INTERMIX OF WRITES AND UN-MAP COMMANDS ACROSS POWER CYCLES**

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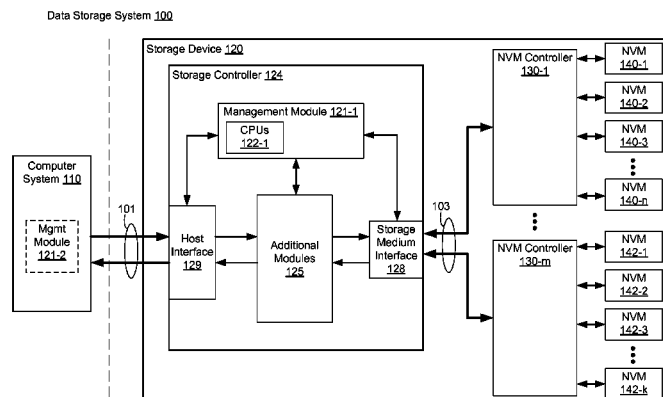(51) **Int. Cl.**
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See application file for complete search history.

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(57) **ABSTRACT**

Systems, methods and/or devices are used to enable tracking intermix of writes and un-map commands across power cycles. In one aspect, the method includes (1) receiving, at a storage device, a plurality of commands from a host, the storage device including non-volatile memory, (2) maintaining a log corresponding to write commands and un-map commands from the host, (3) maintaining a mapping table in volatile memory, the mapping table used to translate logical addresses to physical addresses, (4) saving the mapping table, on a scheduled basis that is independent of the un-map commands, to the non-volatile memory of the storage device, (5) saving the log to the non-volatile memory, and (6) upon power up of the storage device, rebuilding the mapping table from the saved mapping table in the non-
(Continued)

Data Storage System 100

volatile memory of the storage device and from the saved log in the non-volatile memory of the storage device.

23 Claims, 6 Drawing Sheets

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   G06F 11/14   (2006.01)
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