

United States Patent [19]

Hathorn et al.

[54] REMOTE DATA SHADOWING USING A MULTIMODE INTERFACE TO DYNAMICALLY RECONFIGURE CONTROL LINK-LEVEL AND COMMUNICATION LINK-LEVEL

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- [21] Appl. No.: 203,248
- [22] Filed: Mar. 1, 1994
- [51] Int. Cl.⁶ G06F 15/02

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[11] **Patent Number: 5,574,950**

[45] **Date of Patent:** Nov. 12, 1996

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Primary Examiner-Thomas C. Lee

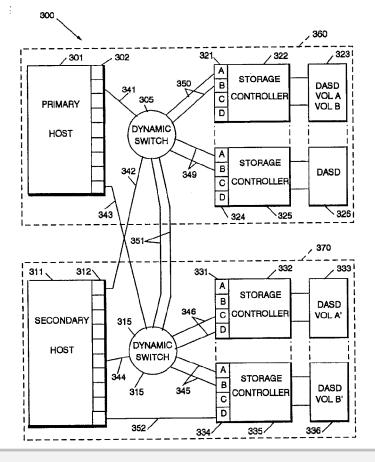
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[57] ABSTRACT

A remote copy system incorporates dynamically modifiable ports on the storage controllers such that those ports can operate either as a control unit link-level facility or as a channel link-level facility. When configured as a channel link-level facility, a primary storage controller can appear as a host processor to a secondary storage controller. Using dynamic switches coupled between primary and secondary sites, fewer ESCON communication links are required since the ESCON communication links can function either as a channel or as storage controller communication link.

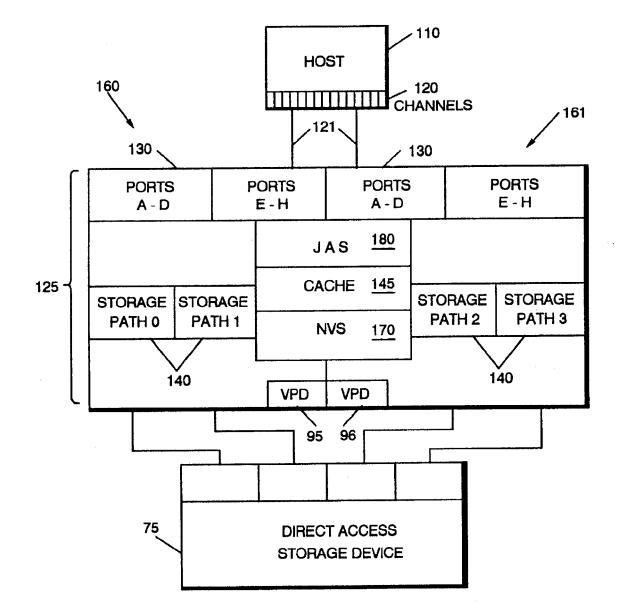
17 Claims, 9 Drawing Sheets



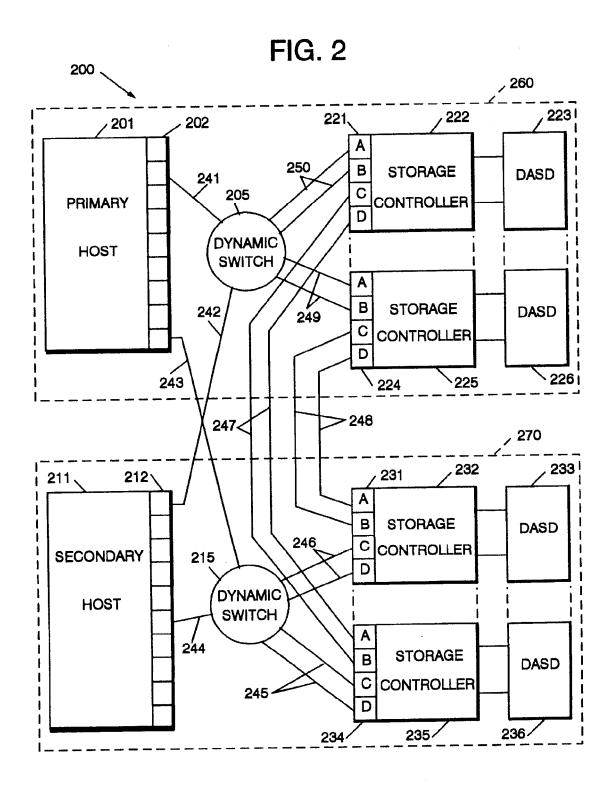
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FIG. 1

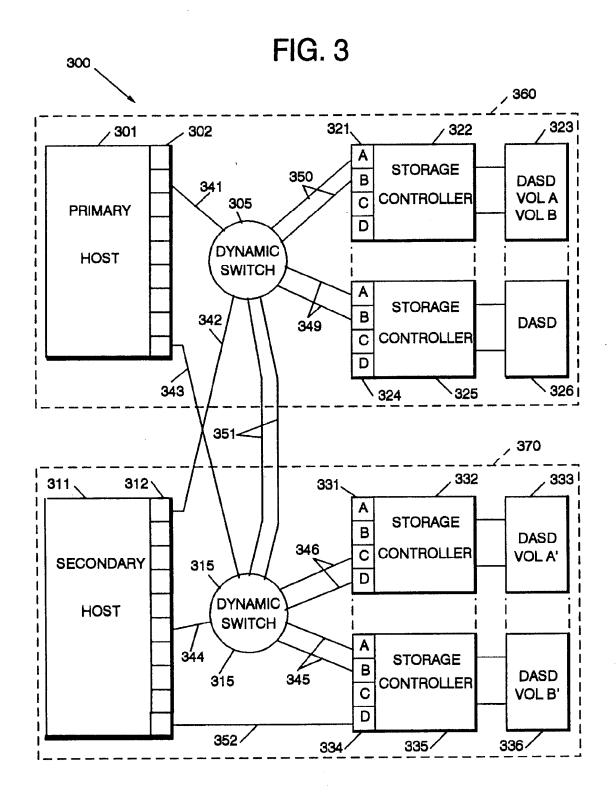
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FIG. 4 401 **REMOTE COPY** PATHS INITIALIZATION 403 402 LINK ADDRESSES SERIAL NUMBERS **CONFIGURE PATHS** SUBSYSTEM ID'S TO SECONDARY i 404 IS YES LOGICAL PATH BEING 407 USED? POST ERROR MESSAGE NO 406 ESTABLISH LOGICAL PATH TO SECONDARY CONTROLLER 408 QUERY STATUS OF SECONDARY CONTROLLER 409 IS NO SECONDARY CU THE CORRECT ONE? POST ERROR MESSAGE YES 411 INDICATE COMPLETION STATUS

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