



US005574950A

# United States Patent [19]

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Hathorn et al.

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

[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.<sup>6</sup> ..... **G06F 15/02**

[52] U.S. Cl. .... **395/861; 395/200.09; 364/222.2; 364/242.94; 364/242.5; 364/DIG. 1**

[58] Field of Search ..... **364/952, 200; 395/650, 145, 600, 575, 200.01, 200.02, 200.09, 821, 861**

### [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.

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**17 Claims, 9 Drawing Sheets**

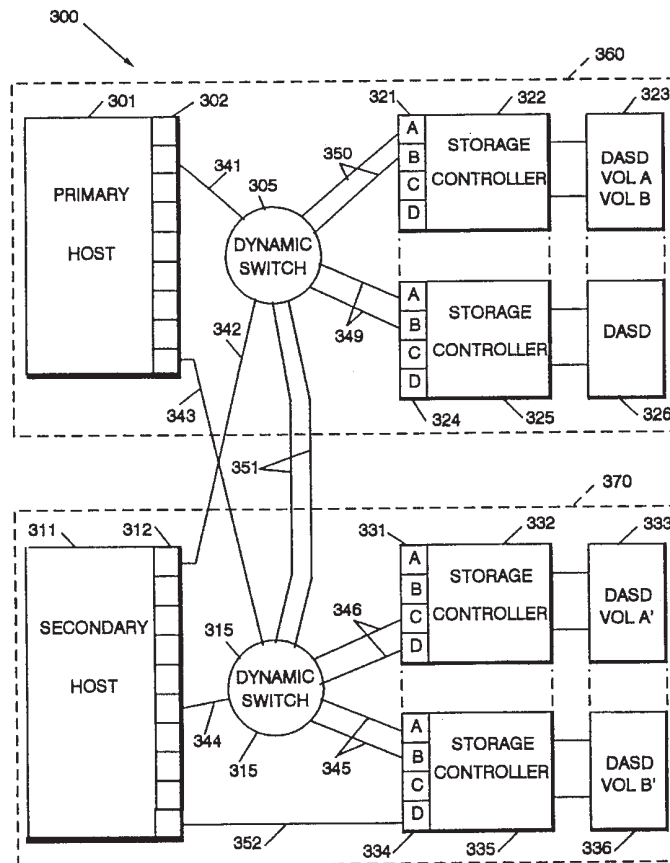


FIG. 1  
PRIOR ART

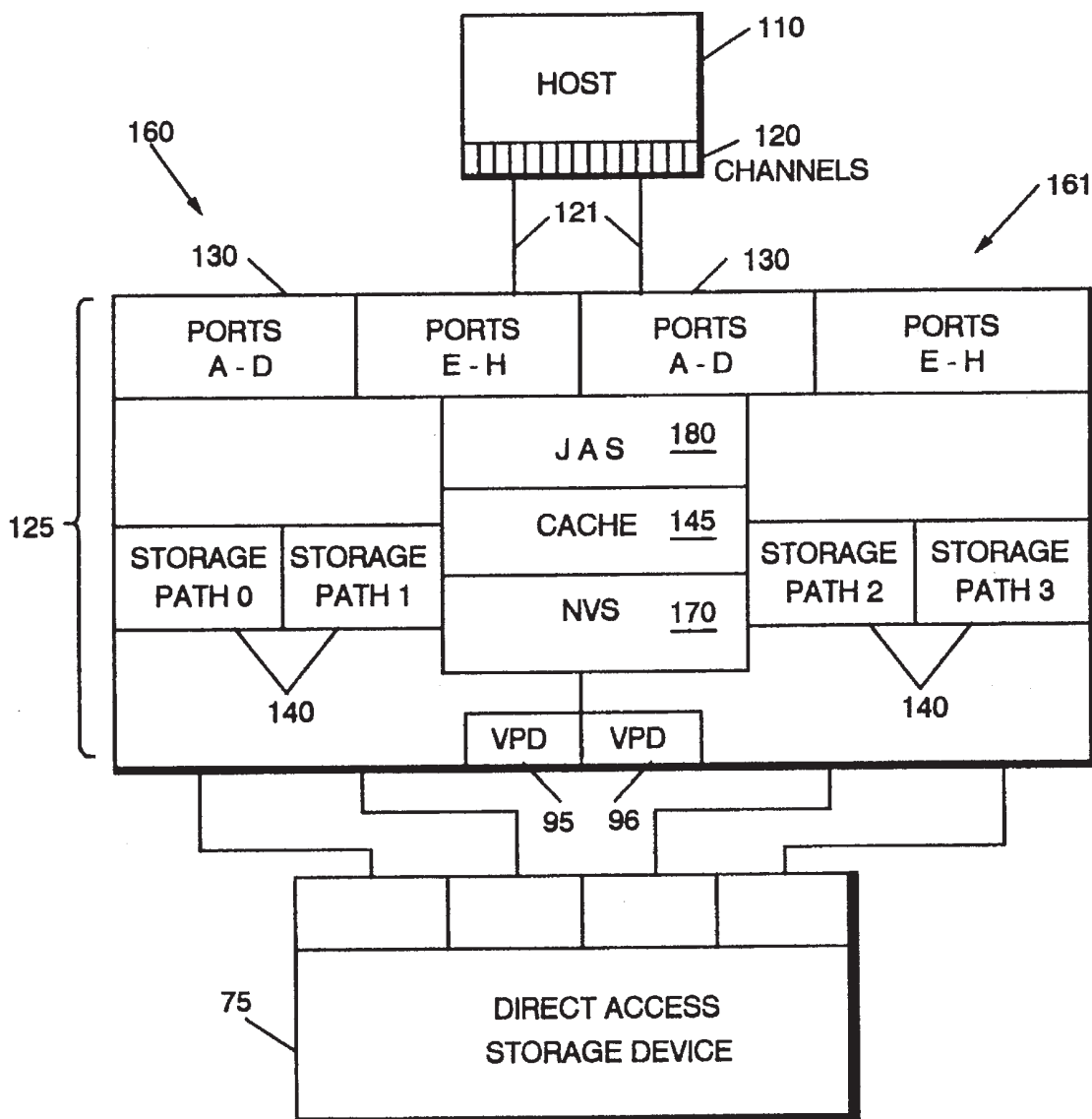


FIG. 2

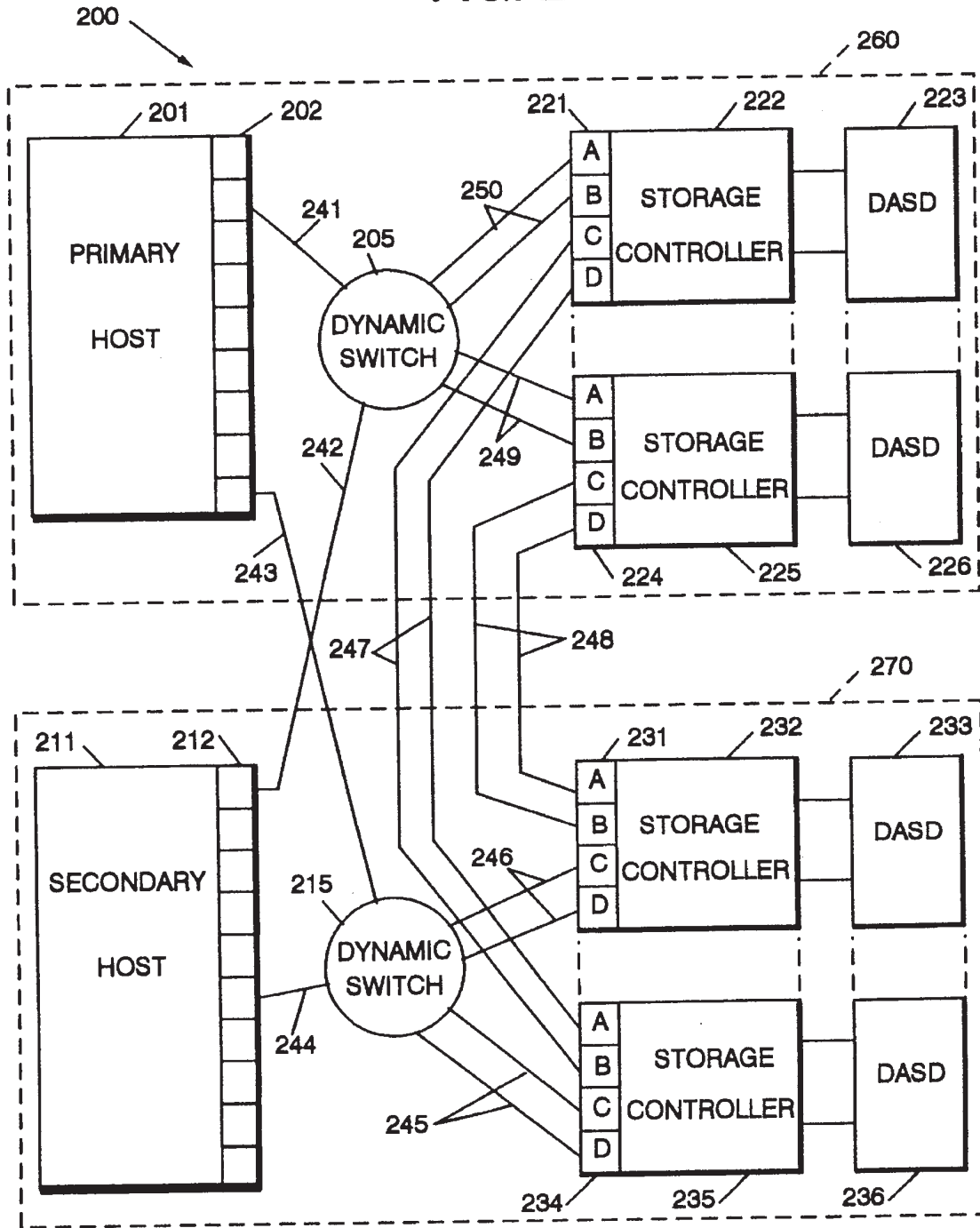


FIG. 3

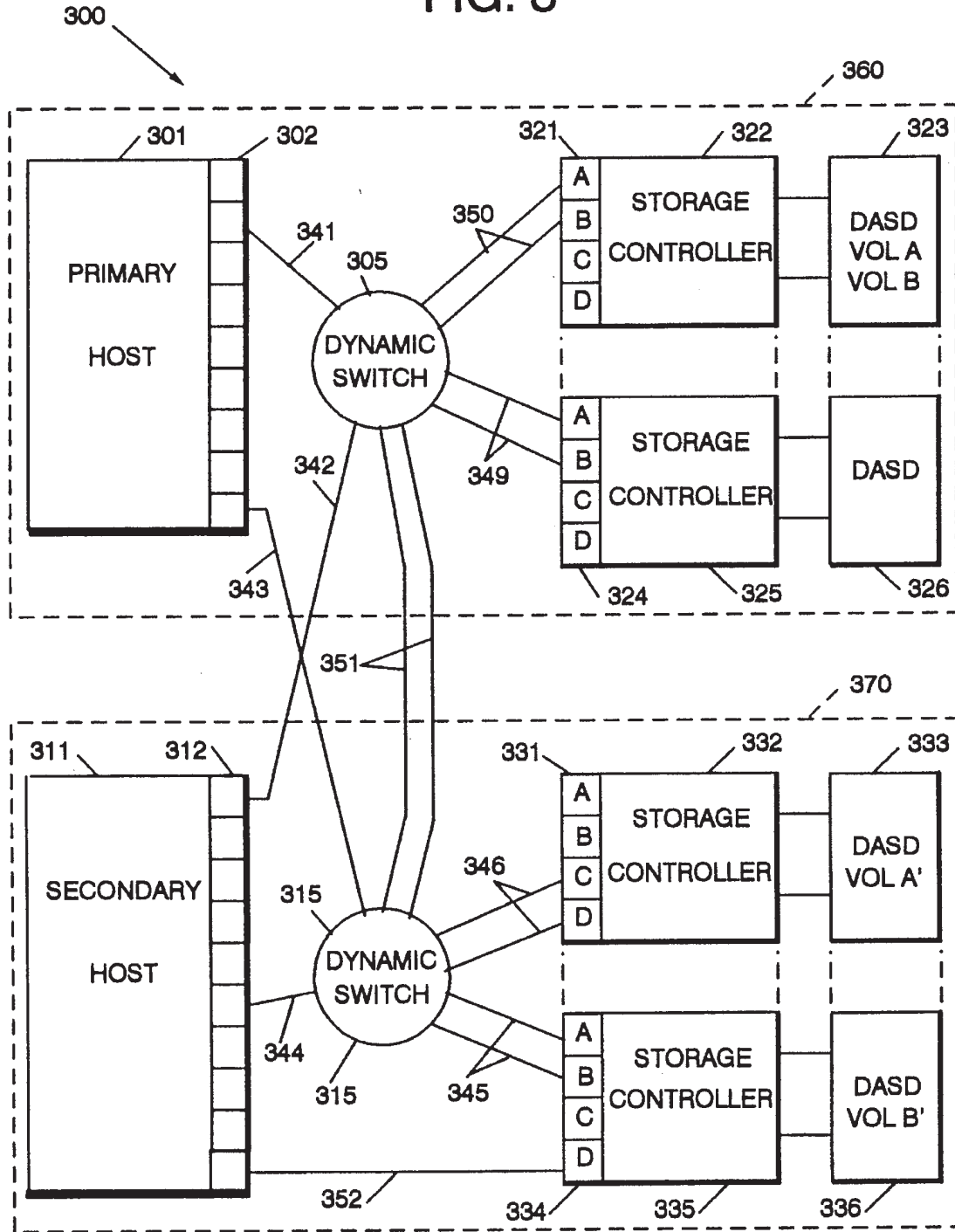
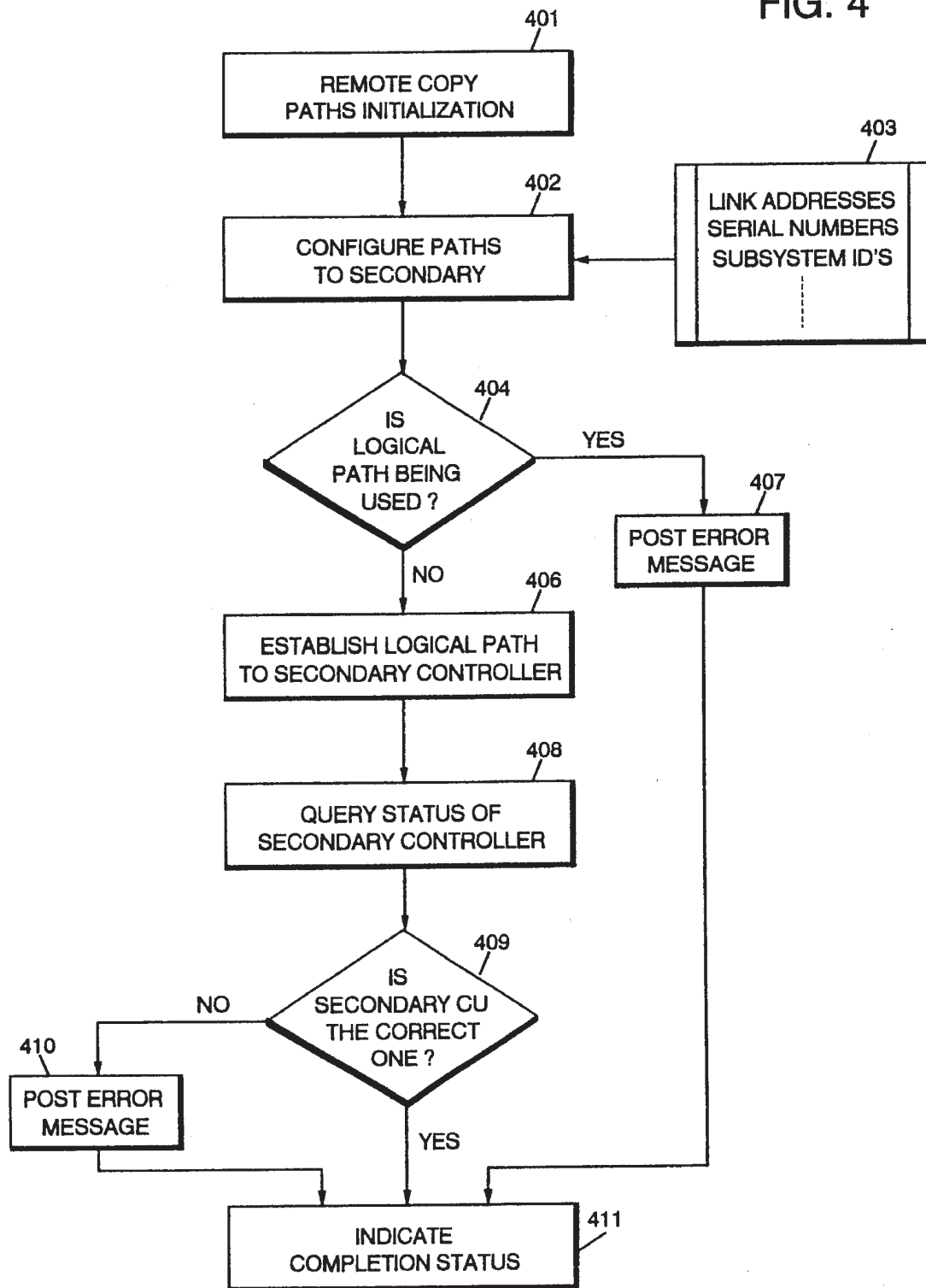


FIG. 4



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