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Chandika et al.

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(54) **NETWORK ACCESS DEVICE WITH RESTRICTED AND UNRESTRICTED INPUT PORTS**

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(51) **Int. Cl.**
H04L 12/26 (2006.01)

(52) **U.S. Cl.** **370/230.1**; 370/252; 370/255; 370/463

(58) **Field of Classification Search** 370/299–230.1, 370/241–246, 252, 254, 255, 256, 445, 446, 370/463; 726/11–14; 340/5.2, 5.74; 709/238
See application file for complete search history.

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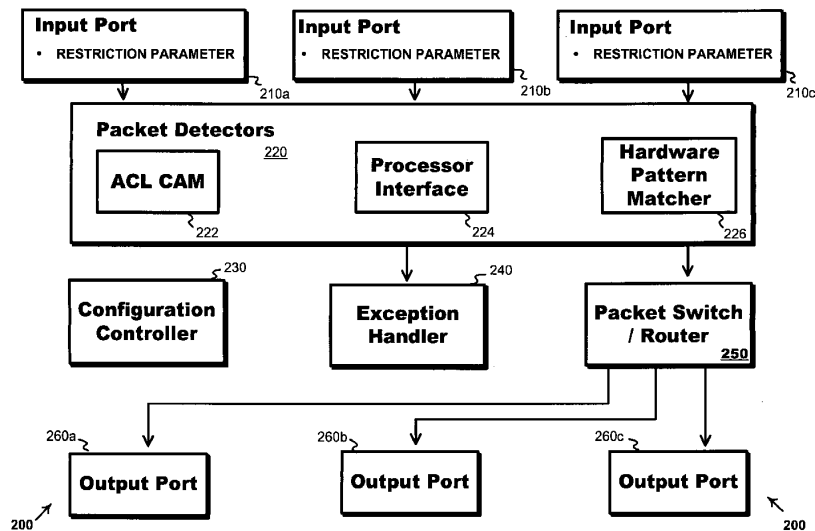
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(57) **ABSTRACT**

Access devices and methods according to the invention interconnect digital devices and a network. Setting a parameter associated with each input port of an access device specifies whether the device connected with that port is restricted or unrestricted. When a particular input port is restricted, packet detectors examine the packets received on that port. In some embodiments, an exception handler handles restricted packets from restricted devices in an advantageously flexible manner. In other embodiments, a controller receives a configuration command and sets the restriction parameters accordingly. The invention provides a simple, abstract, easy to use, and flexible tool for network management, configuration, and reconfiguration.

21 Claims, 5 Drawing Sheets



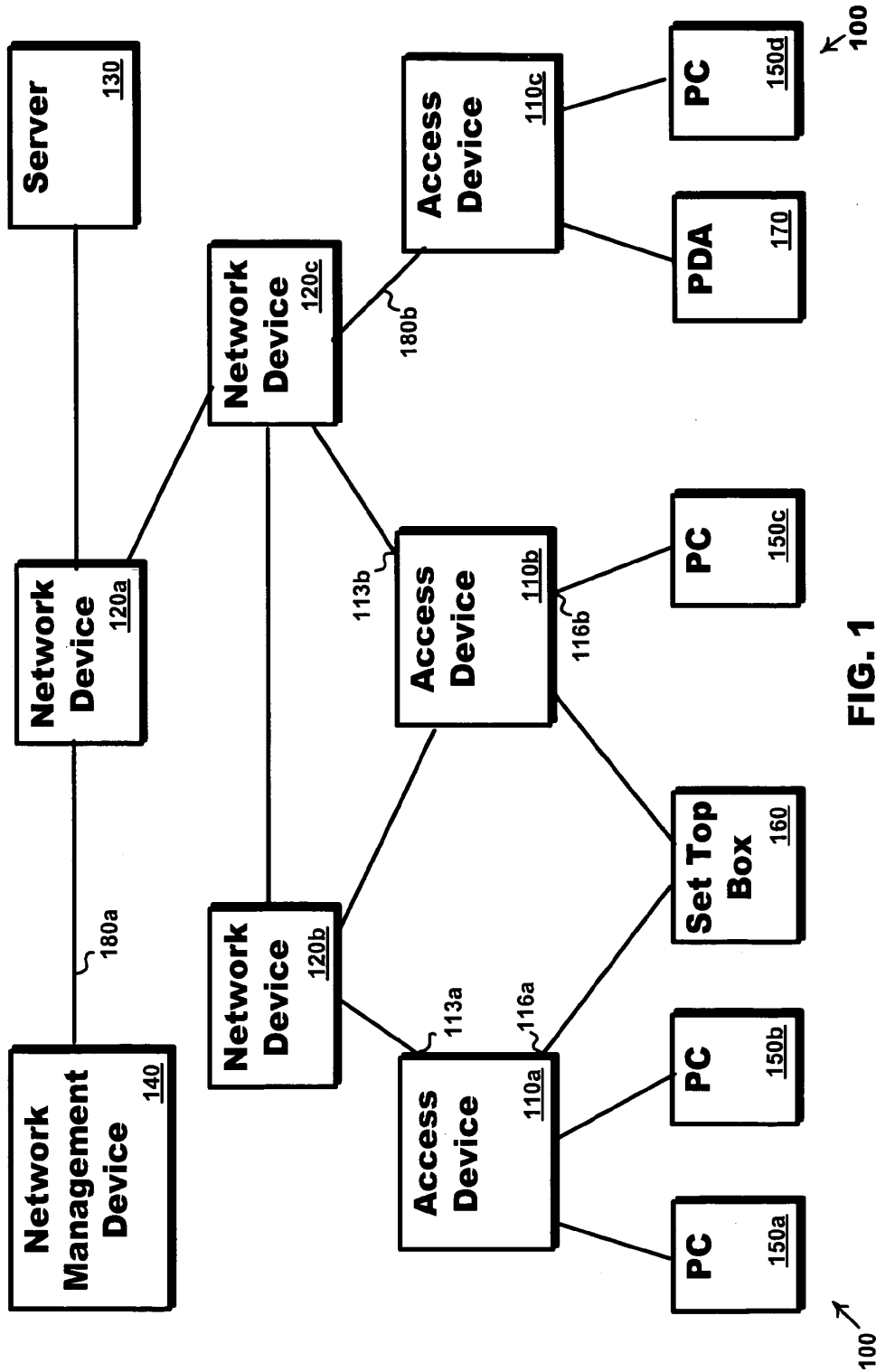


FIG. 1

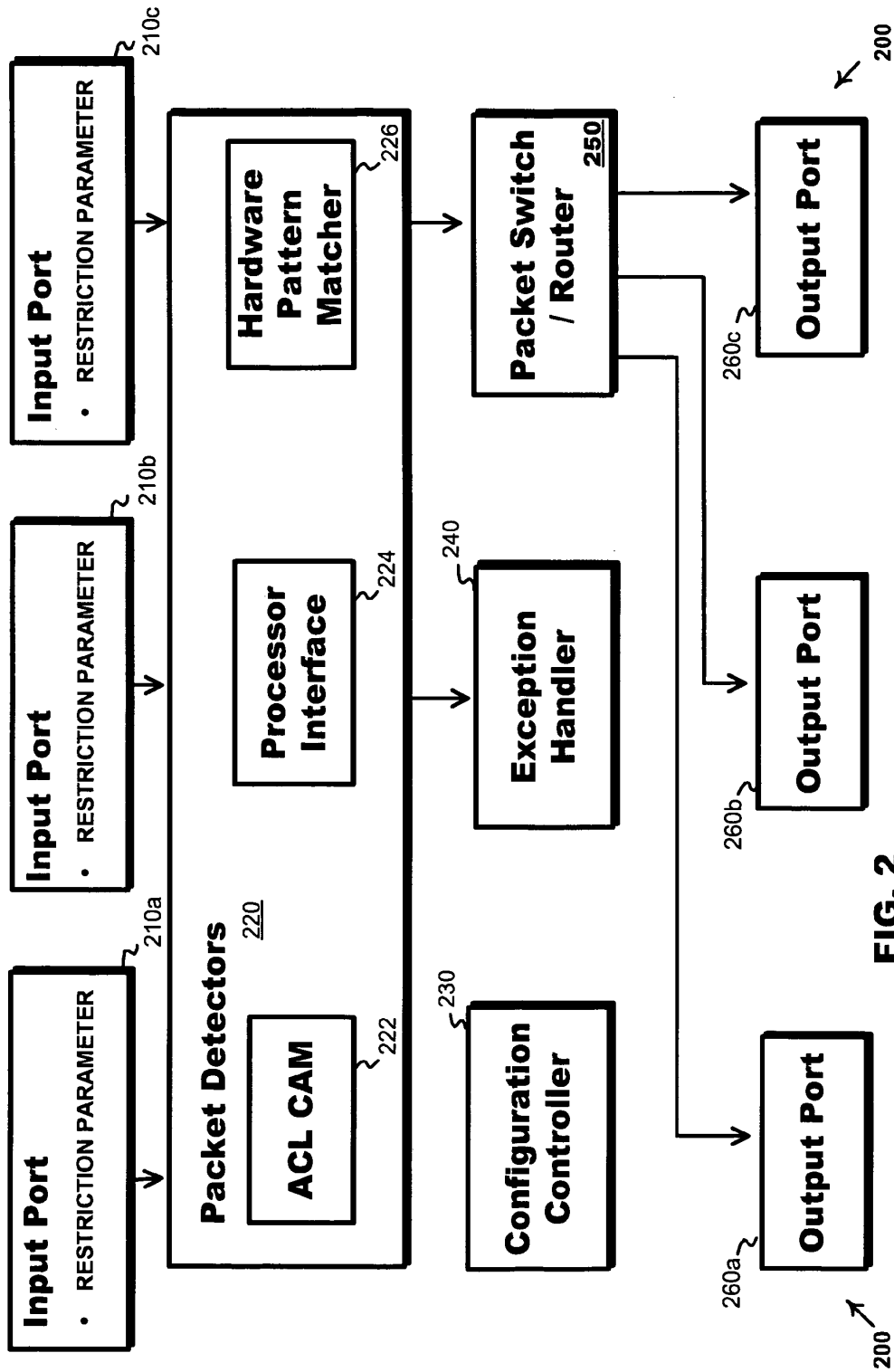


FIG. 2

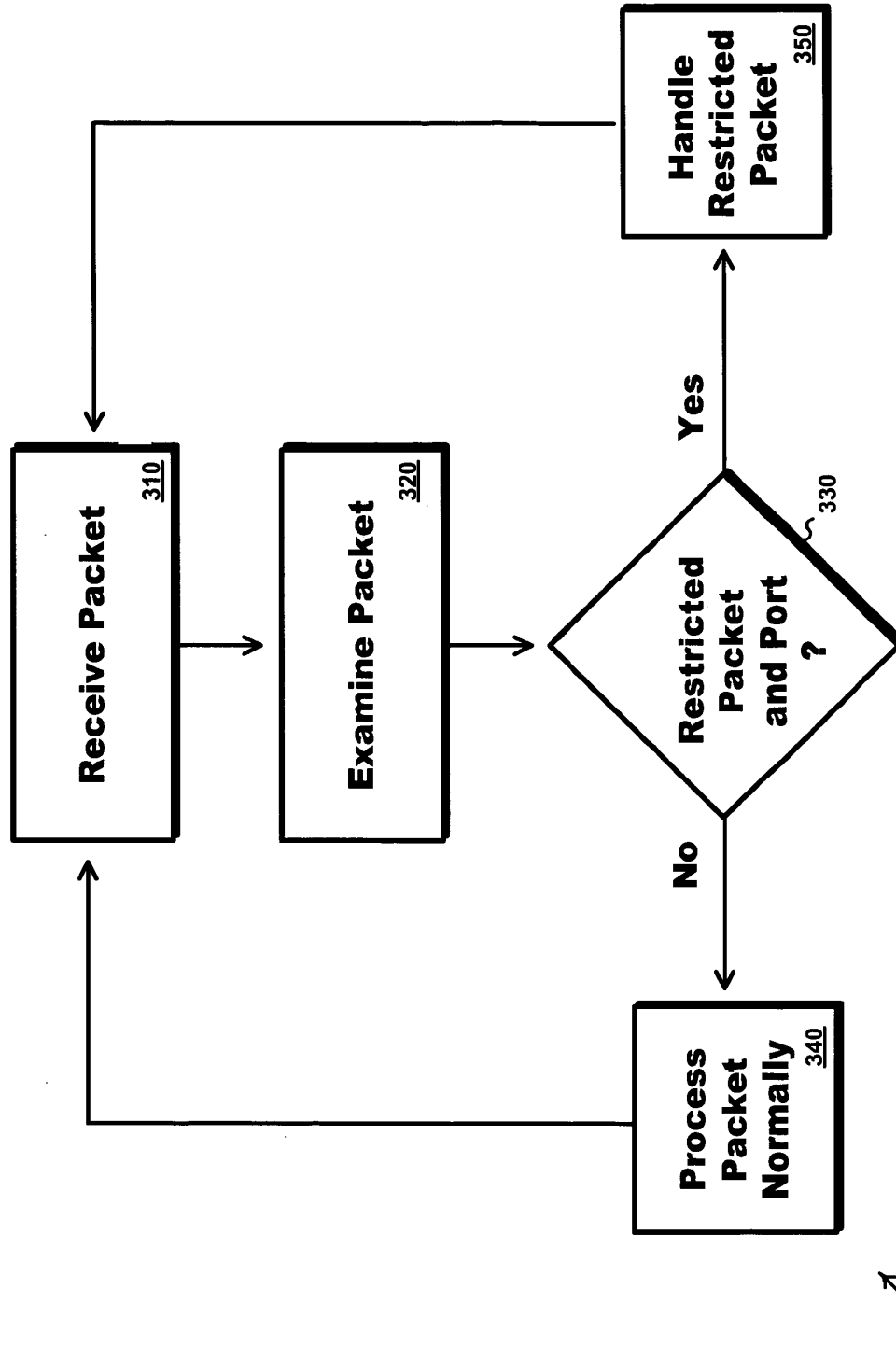


FIG. 3

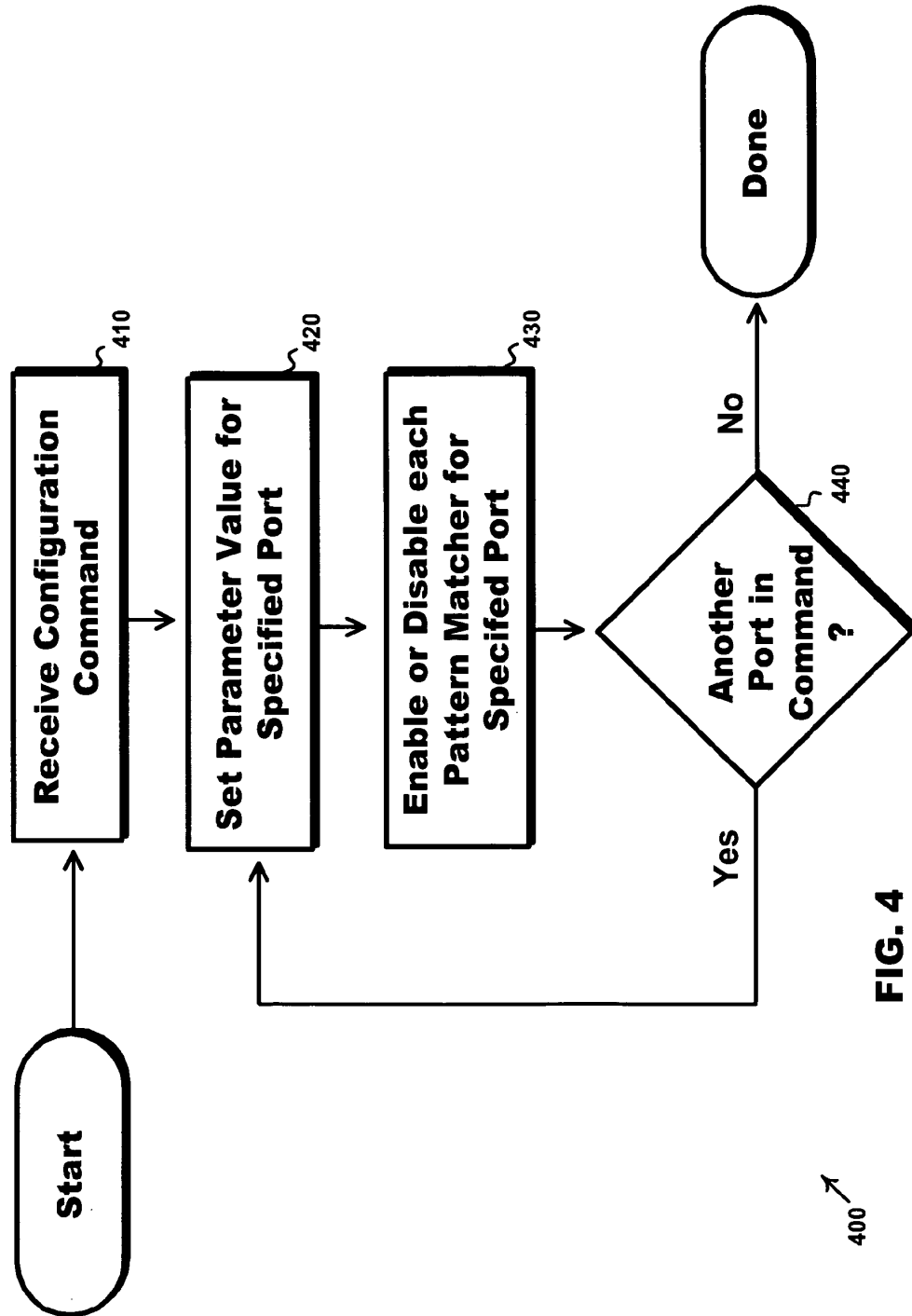


FIG. 4

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