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(54) **SYSTEM AND METHOD FOR NETWORK ACCESS CONTROL USING ADAPTIVE PROXIES**

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(52) **U.S. Cl.** **713/201**; 709/238; 709/249
(58) **Field of Search** 713/201, 200; 709/238, 249

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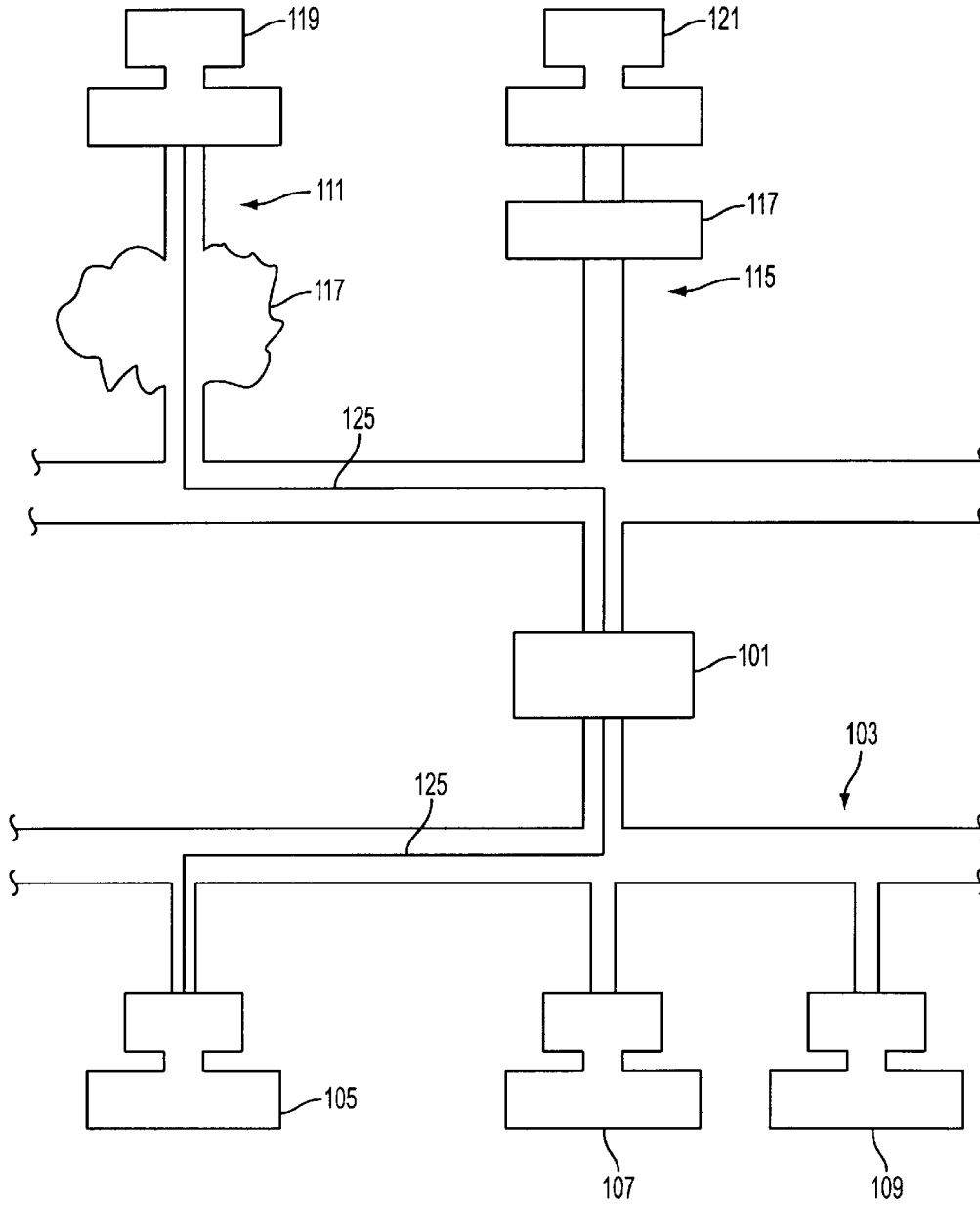
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(57) **ABSTRACT**

A method, system and computer program for providing multilevel security to a computer network. The method comprises the step of receiving a first communication packet on at least one network interface port from an outside network. The method further includes the steps of filtering the first packet in one of at least two levels of security comprising a first level of security which examines the content information of the packet and a second level of security which examines the first packet excluding the content information of the packet. The system includes a first packet filter configured to filter its input packets by examining content information of its packets and a second packet filter configured to filter its input packets by examining the header information without examining the content information of its packets. The system further includes a third filter which is configured to forward a number of packets to one of the first and second filters, thereby providing security to the computer network. The computer program includes a first module located in an application layer, a second module located in a network layer, and a third module located in a kernel space and configured to examine a number of packets received by the computer network from at least one outside network and to forward the number of packets to one of the first and second modules after examining the number of packets.

29 Claims, 7 Drawing Sheets

FIG. 1
(PRIOR ART)

FIG. 2

Receive a Packet —251

Is the packet a connection control packet? —253

No → Step 331

Yes

Is the packet a connection establishing packet? —255

No → Disconnect the connection or put the connection on hold —257
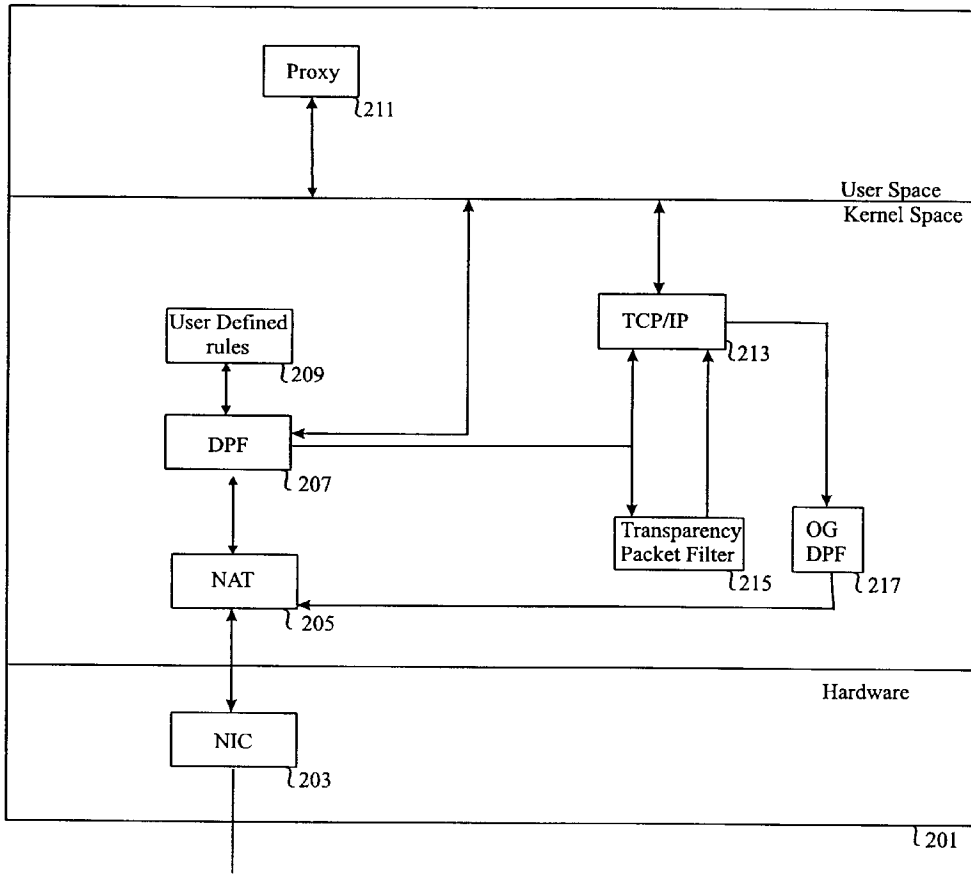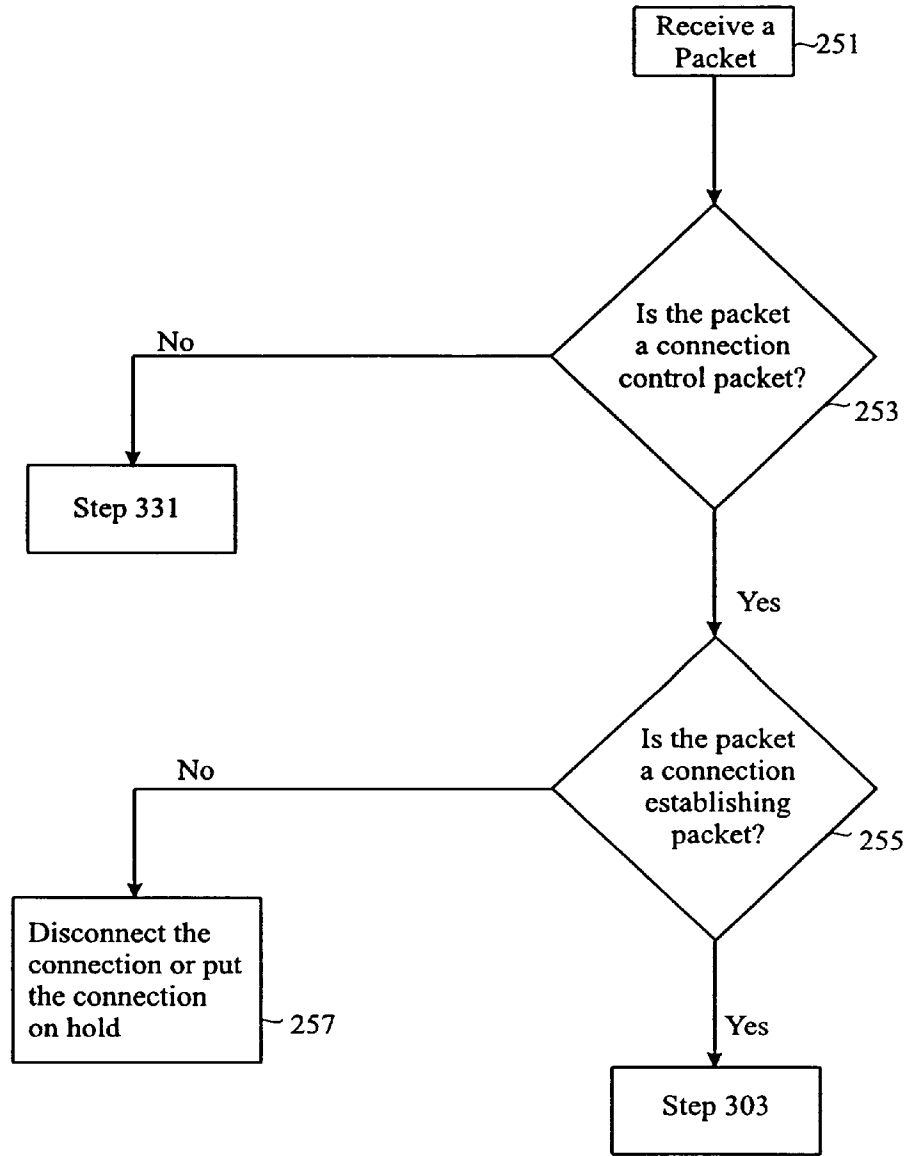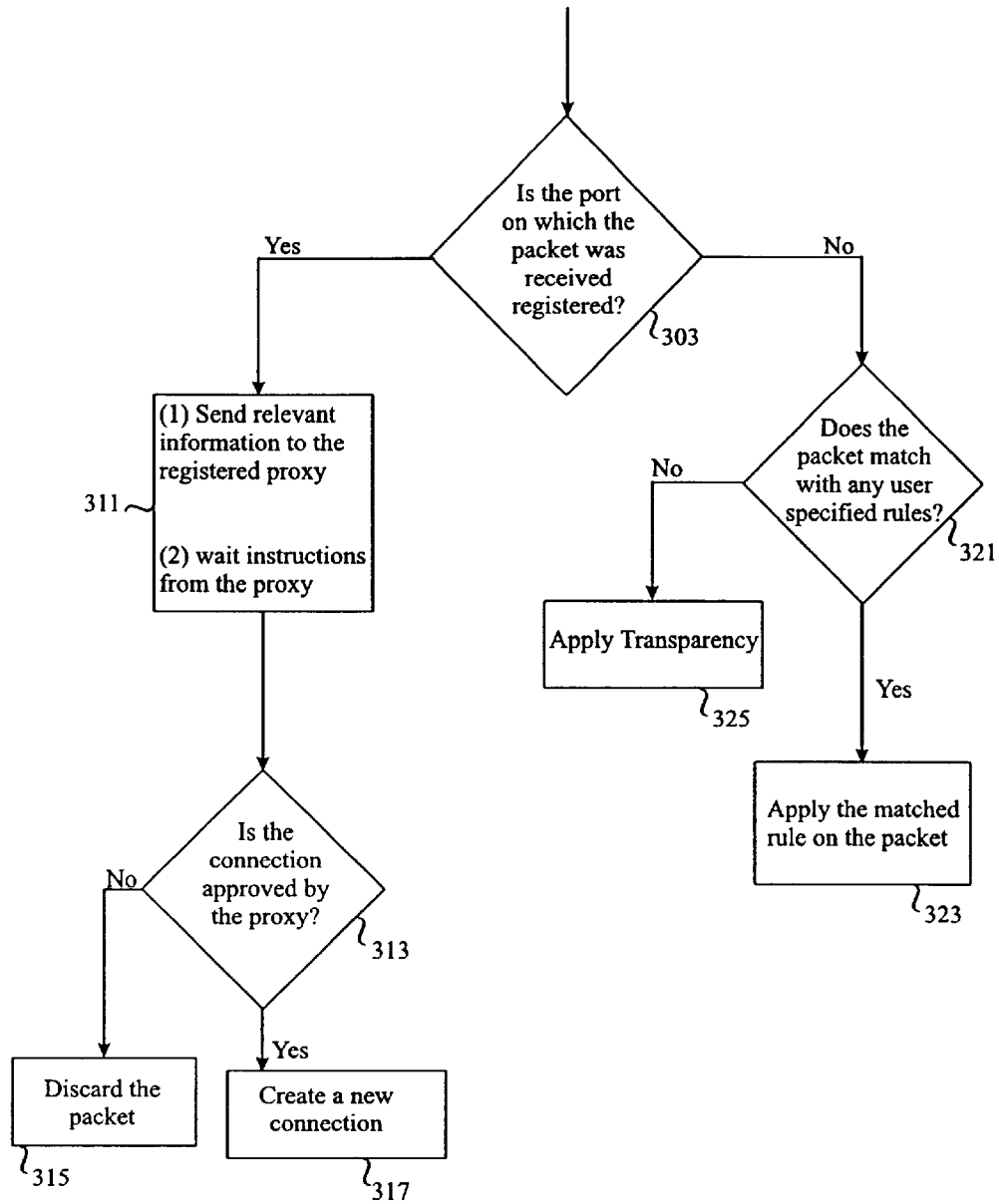
Yes → Step 303

FIG 3

FIG. 4

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