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Dyckerhoff et al.

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(54) **BANDWIDTH DIVISION FOR PACKET PROCESSING**

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Related U.S. Application Data

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(51) **Int. Cl.**
H04L 12/66 (2006.01)

(52) **U.S. Cl.** **370/352**; 370/468

(58) **Field of Classification Search** 370/352, 370/351, 389, 401, 399, 468, 400, 498, 474, 370/465, 397, 392; 709/238
See application file for complete search history.

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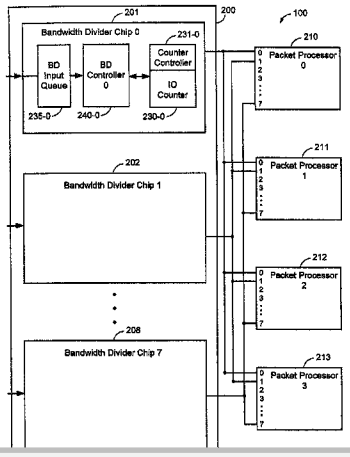
(57) **ABSTRACT**

A bandwidth divider and method for allocating bandwidth between a plurality of packet processors. The bandwidth divider includes a plurality of counters for measuring the bandwidth of data packets transferred from the bandwidth divider to a respective packet processor; and a controller for analyzing the plurality of counters and transferring a data packet to a selected packet processor based on the contents of the counters. The method monitors the bandwidth consumed by the packet processors; determines, based on the bandwidth consumed by the packet processors, which packet processor has consumed the least amount of bandwidth; and allocates a next data packet to the packet processor which has consumed the least amount of bandwidth.

22 Claims, 10 Drawing Sheets



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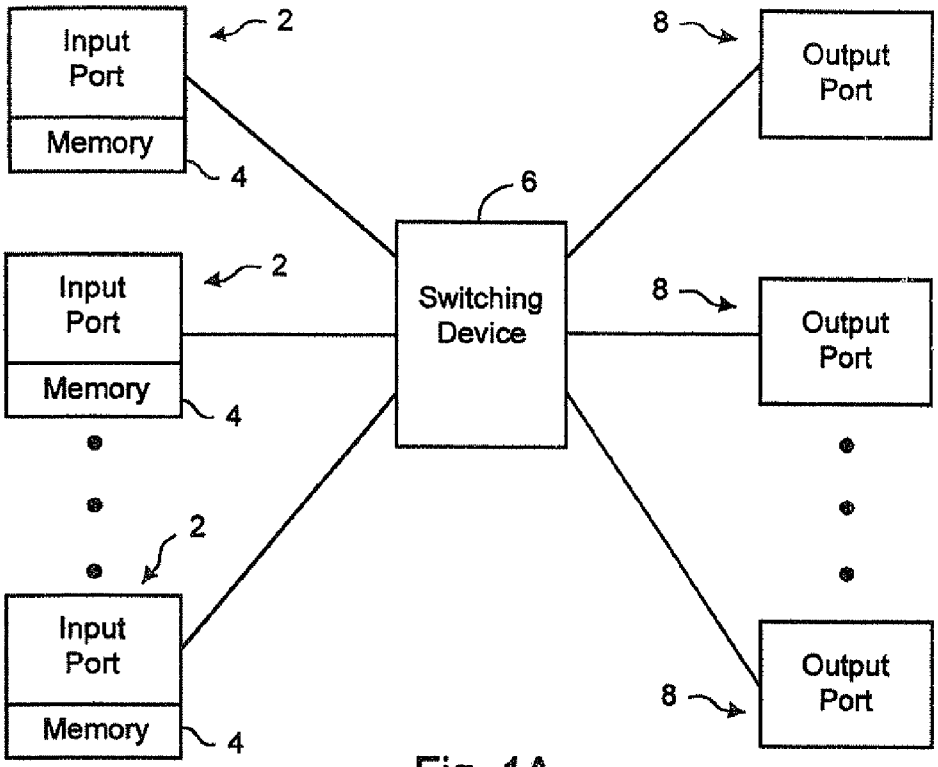

Fig. 1A
(Prior Art)

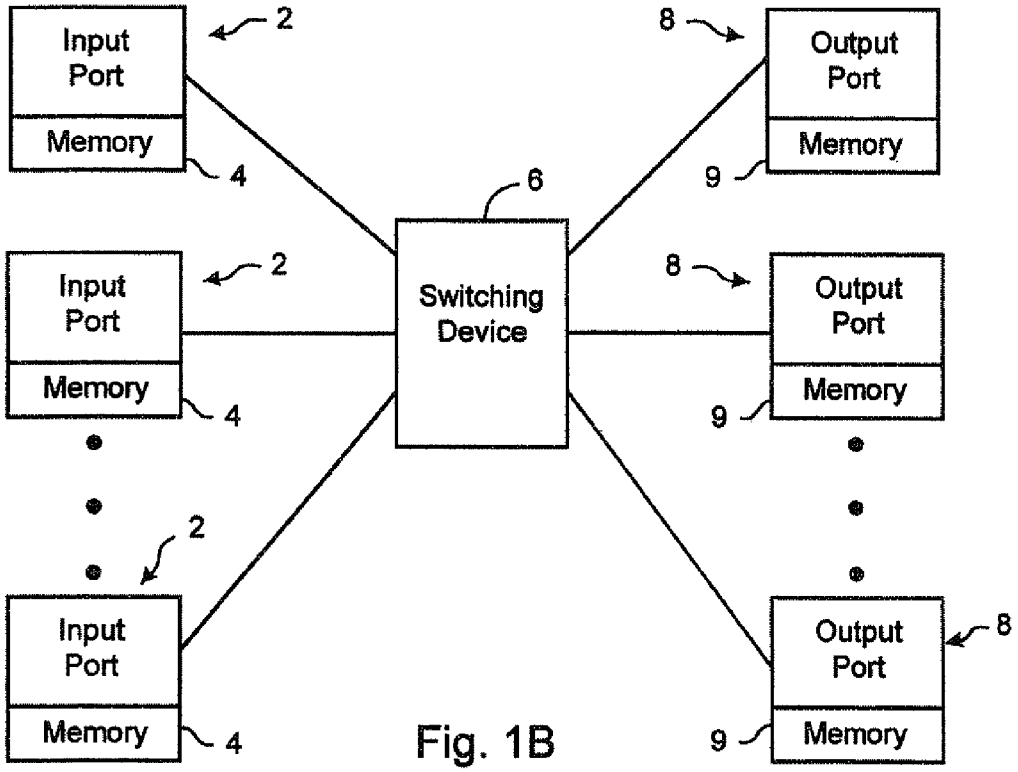

Fig. 1B
(Prior Art)

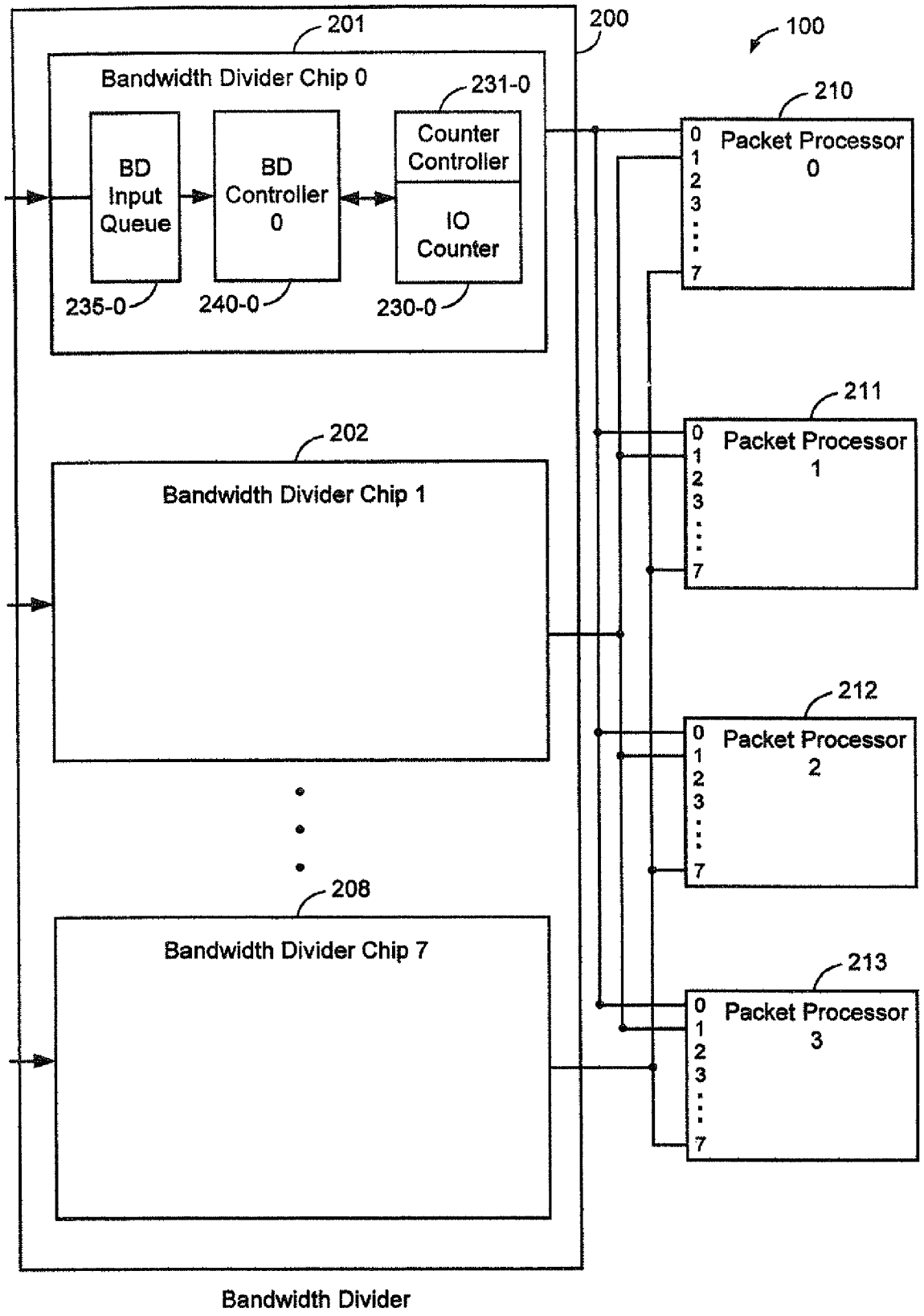

FIG. 2A

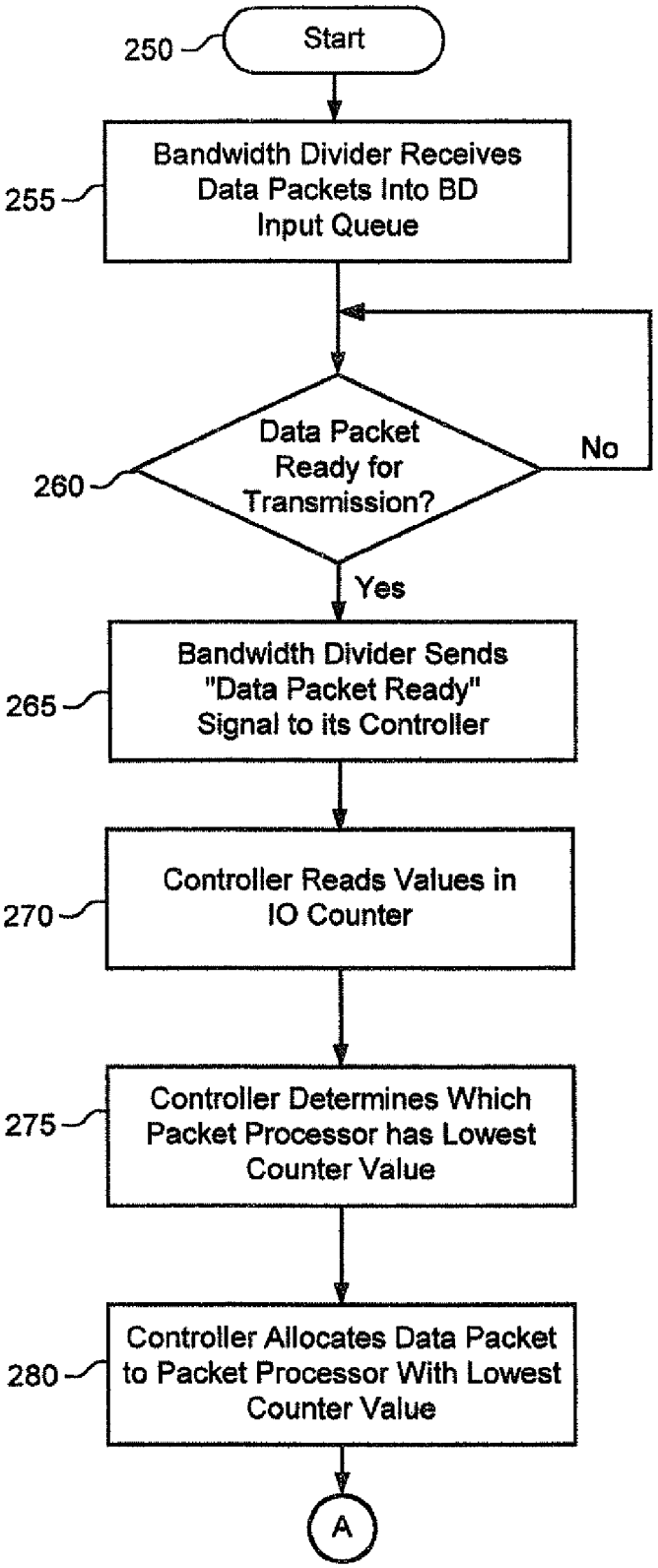

FIG. 2B

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