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(54) Title: NETWORKING SYSTEMS**(57) Abstract**

A novel networking architecture and technique for reducing system latency caused, at least in part, by access contention for usage of common bus and memory facilities, wherein a separate data processing and queue management forwarding engine and queue manager are provided for each I/O module to process packet/cell control information and delivers queuing along a separate path that eliminates contention with other resources and is separate from the transfer of packet/cell data into and from the memory.

