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(54) METHOD AND SYSTEM FOR NETWORK PROCESSOR SCHEDULING BASED ON SERVICE LEVELS

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(57) ABSTRACT

A system and method of moving information units from an output flow control toward a data transmission network in a prioritized sequence which accommodates several different levels of service. The present invention includes a method and system for scheduling the egress of processed information units (or frames) from a network processing unit according to service based on a weighted fair queue where position in the queue is adjusted after each service based on a weight factor and the length of frame, a process which provides a method for and system of interaction between different calendar types is used to provide minimum bandwidth, best effort bandwidth, weighted fair queuing service, best effort peak bandwidth, and maximum burst size specifications. The present invention permits different combinations of service that can be used to create different QoS specifications. The "base" services which are offered to a customer in the example described in this patent application are minimum bandwidth, best effort, peak and maximum burst size (or MBS), which may be combined as desired. For example, a user could specify minimum bandwidth plus best effort additional bandwidth and the system would provide this capability by putting the flow queue in both the NLS and WFQ calendar. The system includes tests when a flow queue is in multiple calendars to determine when it must come out.

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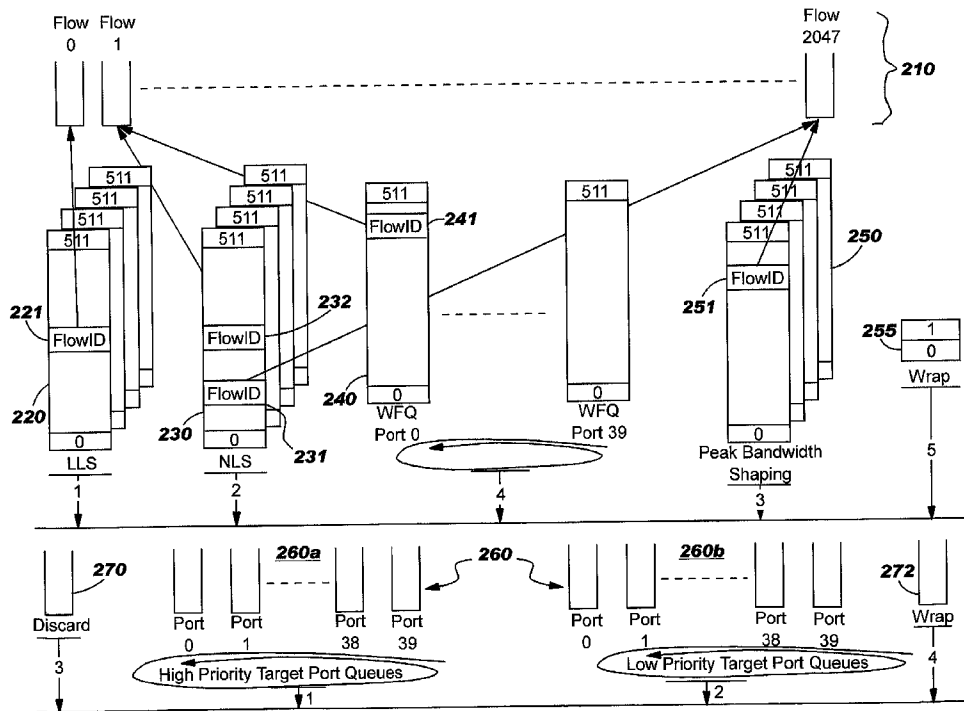


FIG. 1

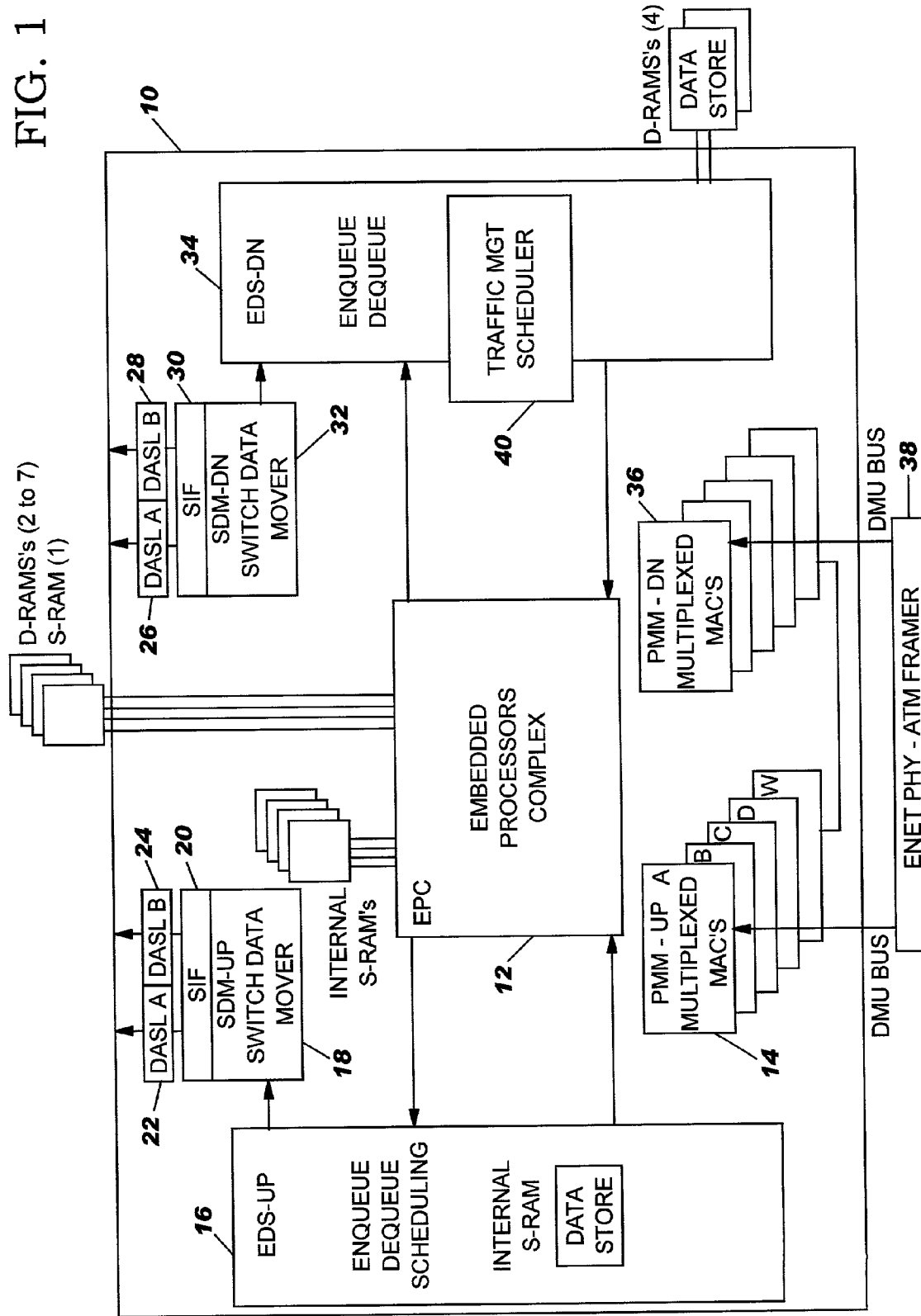
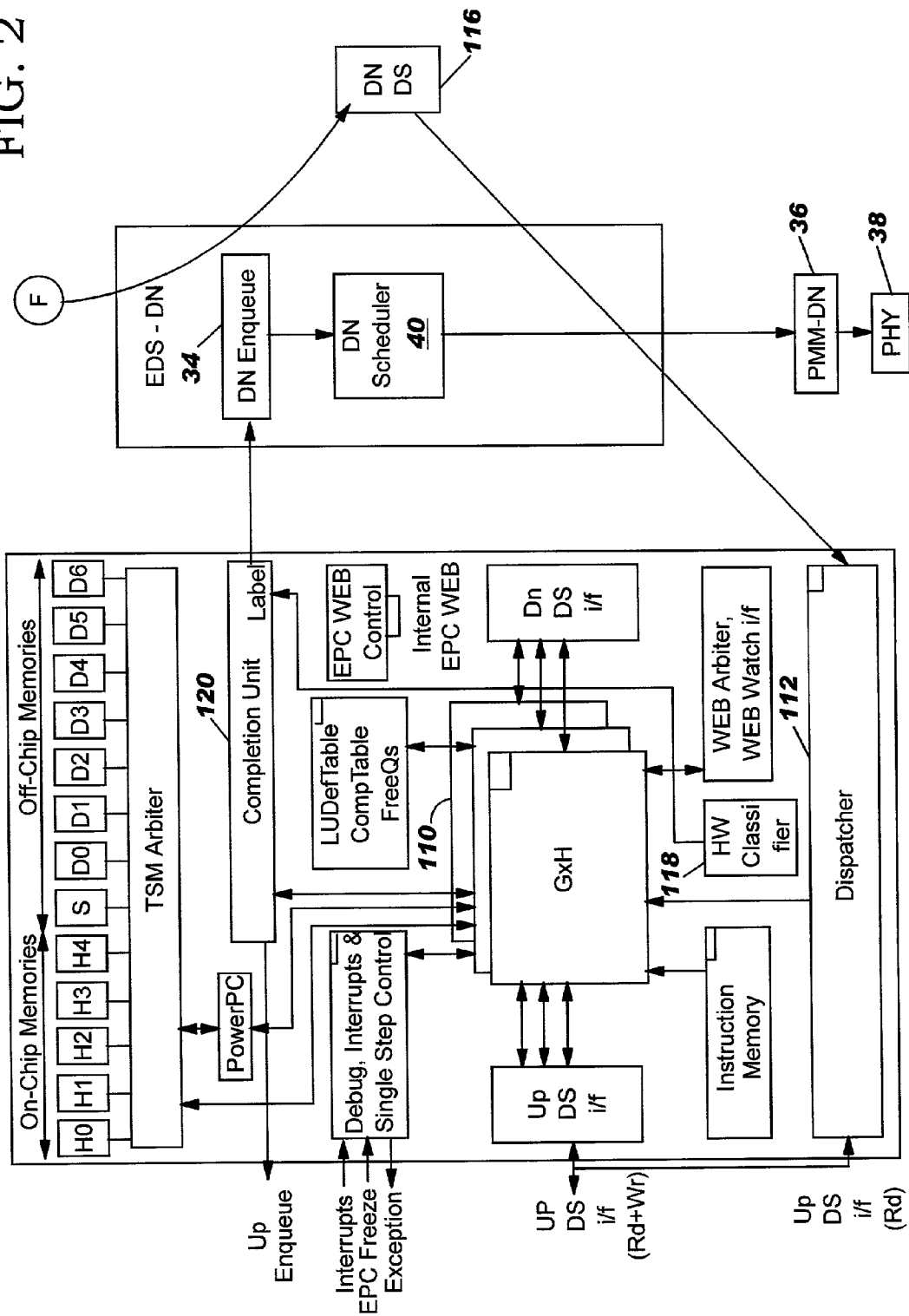
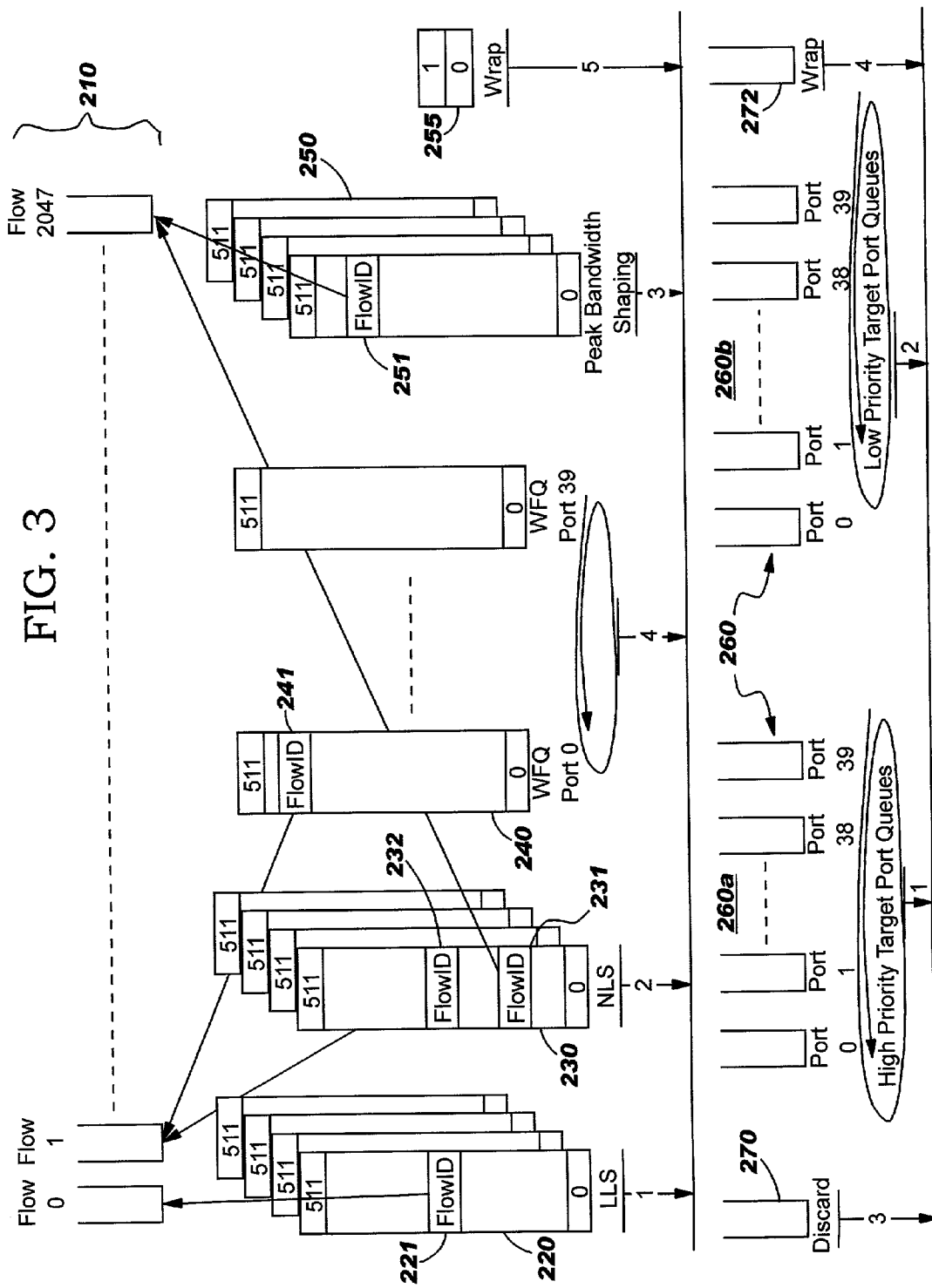


FIG. 2







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