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(54) Title: EFFICIENT PACKET PROCESSING IN A SHARED MEMORY REGION

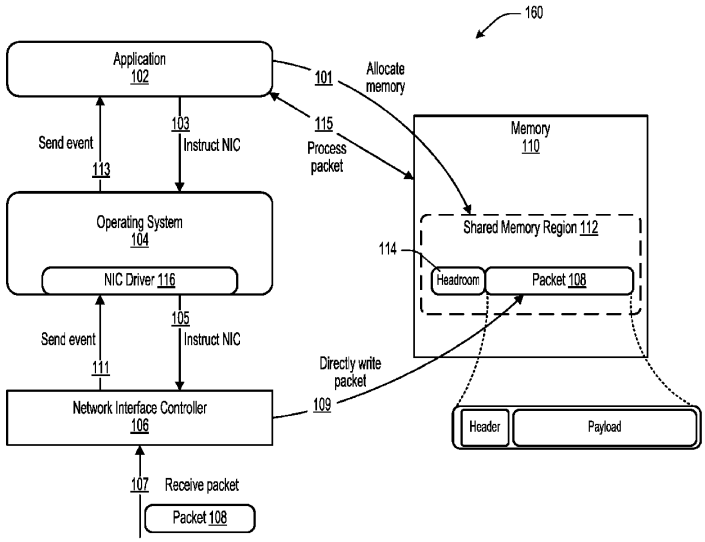


FIG. 1

(57) Abstract: Described herein are systems, methods, and other techniques for processing data packets at a compute infrastructure. An application running on the compute infrastructure allocates a region of a memory for a network interface controller to write or read inbound or outbound data packets. A data packet is received at the network interface controller. The data packet is directly written to the region of the memory. A section of the region of the memory adjacent to the data packet is reserved as headroom such that a memory address occupied by the data packet is adjacent to a memory address occupied by the headroom. The application processes the data packet at the region of the memory by adding data to the data packet, wherein adding the data to the data packet causes the data packet to use at least a portion of the headroom.

[Continued on next page]

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