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(54) **Title**: FRAMEWORKS AND INTERFACES FOR OFFLOAD DEVICE-BASED PACKET PROCESSING

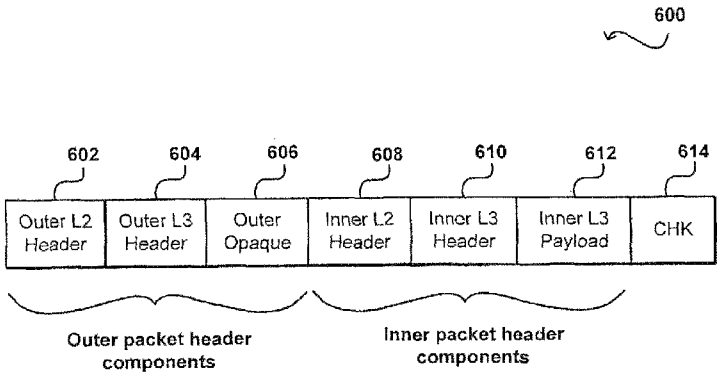

FIG. 6

(57) **Abstract**: High-speed processing of packets to, and from, a virtualization environment can be provided while utilizing hardware-based segmentation offload and other such functionality. A hardware vendor such as a network interface card (NIC) manufacturer can enable the hardware to support open and proprietary stateless tunneling in conjunction with a protocol such as single root I/O virtualization (SR-IOV) in order to implement a virtualized overlay network. The hardware can utilize various rules, for example, that can be used by the NIC to perform certain actions, such as to encapsulate egress packets and decapsulate packets.

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