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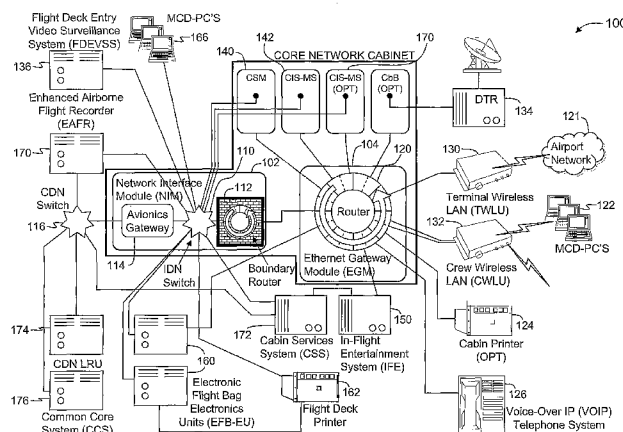
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(54) Title: METHODS AND APPARATUS PROVIDING AN AIRBORNE E-ENABLED ARCHITECTURE AS A SYSTEM OF SYSTEMS



(57) Abstract: A network architecture for implementation in a vehicle is described that comprises an Ethernet gateway module (EGM) and network interface module (NIM). The EGM comprises an Ethernet switch and router therein and is configured to provide an open data network (ODN) connection to the network architecture for a plurality of open data network devices. The NIM is configured to provide an isolated data network and comprises an Ethernet switch to connect a plurality of secure devices to an isolated data network (IDN), the secure devices related to operation and navigation of the vehicle, a router and a gateway/router. The router is configured to interface the IDN to the open data network connections and comprises a packet filtering function to determine which, if any, data from the ODN may be passed through to the IDN and applied to operation and navigation of the vehicle via the secure devices connected to the IDN. The gateway/router provides network address and protocol translation to connect the IDN to a secure common data network associated with vehicle operation. The architecture provides segregation between network devices in the IDN and CDN related to operation and navigation of the vehicle, and network devices in the ODN.

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