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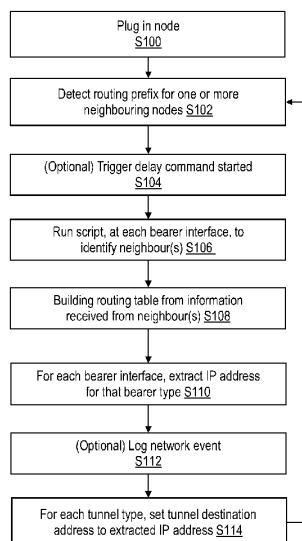
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(54) **Title:** SECURE COMMUNICATION SYSTEM

Fig. 2



(57) **Abstract:** A method of creating one or more secure tunnels within a network, a router node implementing the method and a network comprising a plurality of router nodes. The method comprises: connecting a first router node to the network, wherein the first router node comprises a plurality of bearer interfaces, each having a virtual routing and forwarding VRF module; receiving, from neighbouring nodes in the network, at least one loopback address for at least one bearer interface in the neighbouring nodes; and detecting, using the first router node, one or more routing prefixes associated with a traffic or management tunnel within the at least one received loopback address. In response to detecting the one or more routing prefixes, the method comprises using the first router node to: build a routing table comprising at least one loopback address for a bearer interface of the same type in one of the neighbouring nodes; extract, from the built routing table, an IP address for each of the traffic and management tunnels to be created; and set each extracted IP address as the destination address for each of the traffic and management tunnels. The method also comprises establishing a traffic and management tunnel to each neighbouring node, by selecting a bearer interface to connect to each neighbouring node; learning the set destination addresses for the traffic and management tunnels for the selected bearer interface and building the management tunnel and the traffic tunnel to each neighbouring node using the learnt destination addresses.

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