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(54) **PER-NAMESPACE IP ADDRESS MANAGEMENT METHOD FOR CONTAINER NETWORKS**

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(57) **ABSTRACT**

Some embodiments of the invention provide a method of sending data in a network that includes at least one worker node executing one or more sets of containers and a virtual switch, the virtual switch including a gateway interface, a virtual local area network (VLAN) tunnel interface, and a set of virtual Ethernet interfaces associated with the one or more sets of containers. The method configures the gateway interface of the worker node to associate the gateway interface with multiple subnets that are each associated with a namespace. The worker node executes at least (1) first and second sets of containers of a first namespace, and (2) a third set of containers of a second namespace. The method sends data between the first and second sets of containers through a first virtual Ethernet interface associated with the first set of containers and a second virtual Ethernet interface associated with the second set of containers. The method sends data between the first set of containers and the third set of containers through the first virtual Ethernet interface associated with the first set of containers, the gateway interface, and a third virtual Ethernet interface associated with the third set of containers.