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(54) **5G NETWORK SLICE DEVICE SECURITY PROTECTION**

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(57) **ABSTRACT**

A method of user equipment (UE) implemented network slice security protection is disclosed. The method comprises the UE receiving a request to initialize an application, querying a UE Route Selection Policy (URSP) stored on the UE, and receiving traffic descriptors and security descriptors in response to the querying. The traffic descriptors identify a network slice for the application. The security descriptors comprise a security flag and a virtualization container ID. The method also comprises the UE initiating the application within a virtualization container corresponding to the virtualization container ID based on the security flag indicating that the network slice is secure and binding traffic for the application in the virtualization container to a PDU session based on the traffic descriptors. The method further comprises communicating, by the application executing within the virtualization container, with a core network over the PDU session via the network slice bound to the virtualization container.