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(54) **GRAPH EMBEDDING-BASED VIRTUAL NETWORK MAPPING METHOD**

(71) Applicant: **RESEARCH & BUSINESS FOUNDATION SUNGKYUNKWAN UNVERSITY**, Suwon-si (KR)

(72) Inventors: **Young Seok LEE**, Suwon-si (KR); **Min Jae PARK**, Suwon-si (KR); **Ik Jun YEOM**, Suwon-si (KR); **Hong Uk WOO**, Suwon-si (KR)

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(57) **ABSTRACT**

The present invention provides a graph embedding-based virtual network mapping method including inputting a virtual network and a substrate network corresponding to a virtual network mapping scenario, in an optimized mapping mode, generating an embedding value for every substrate node by applying a graph convolution network (GCN), by a network encoder, to embed the virtual network, determining whether a difference between an embedding value for every substrate node and an embedding value for every previous substrate node which is previously embedded exceeds a set threshold, by a network decoder, and mapping an allocation node of the virtual network to a mapping node of a previous substrate network which is previously mapped according to an embedding value for every previous substrate node when the difference value does not exceed the threshold value, by the network decoder.