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PACKET TRANSMISSION SYSTEM, AND APPARATUS AND METHOD FOR CONTROLLING PACKET TRANSMISSION ROUTE

ABSTRACT OF THE DISCLOSURE

A packet transmission system includes a home agent providing a home link and a home address to a mobile node, one or more access routers, each providing a foreign link and a c/o address to the mobile node, and one or more mobility support routers that relay a packet to the destination between the mobile node and the home agent or a counterpart correspondent node. When the mobile node moves into a new foreign link, the corresponding access router transmits a registration request to the home agent and/or the correspondent node. When acquiring a registration request on the way to the destination, each mobility support router stores an entry having the home address of the mobile node and the c/o address contained in the registration request, and produces and transmits a new registration request updating the c/o address to its own address. When receiving a packet addressed to the home address recorded in the entry, the mobility support router encapsulates this packet to produce a tunneling packet and relays the tunneling packet to the c/o address that is recorded in the entry in association with the home address, thereby correctly forwarding the data packet to the destination.

Figure 4

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