

ABSTRACT**ARCHITECTURE AND METHODS FOR TRAFFIC MANAGEMENT BY
TUNNELING IN MOVING HIERARCHICAL CELLULAR NETWORKS**

A hierarchical cellular network system having a core and comprising a plurality of nodes, wherein at least one node comprises a relay; and wherein at least one relay includes: a tunneling sub-system; a backhauling link subsystem interfacing between the tunneling subsystem and a node which is closer to the core than the relay; and a base station subsystem, interfacing between the tunneling subsystem and a mobile station or a node which is further from the core than the relay, wherein the tunneling subsystem is operative to perform the following, on data arriving from a base station subsystem belonging to another node from among the plurality of nodes: collecting the data; and encapsulating the results to be sent in an individual session into packets and sending the packets to the Backhauling Link Subsystem.

Fig. 9A and 9B