ABSTRACT

METHOD AND SYSTEM FOR IMPROVING RESPONSIVENESS IN EXCHANGING FRAMES IN A WIRELESS LOCAL AREA NETWORK

A method and system for improving responsiveness in exchanging management and control frames in a wireless local area network are disclosed. An initiator sends a frame (action, management, control or data frame) to a responder. Upon correctly receiving the frame, the responder sends a response frame to the initiator instead of directly sending an acknowledgement (ACK) packet. The responder preferably accesses the wireless medium to send the response frame in a short inter-frame spacing (SIFS). With this scheme, a long delay associated with having to contend for the wireless medium to send the response frame is avoided and therefore, the responsiveness and timeliness of the feedback mechanism is significantly enhanced. The response frame may be piggybacked on or aggregated with another packet.

Fig. 2