COMMUNICATION APPARATUS AND COMMUNICATION METHOD FOR MULTI-AP JOINT RE-TRANSMISSION

BACKGROUND

1. TECHNICAL FIELD

[0001] The present disclosure generally relates to communication apparatus and methods for electronic devices and systems, and more particularly relates to joint re-transmission in multi-AP networks.

2. DESCRIPTION OF RELATED ART

[0002] Wireless networks that communicate via multi-AP joint transmission enable electronic devices to communication in networks with joint transmissions sent to multiple electronic devices. Such networks have advantages over other wireless networks in which wireless communication is limited to a single transmission to one electronic device.

SUMMARY

[0003] One non-limiting and exemplary embodiment facilitates providing joint transmission and re-transmission communication in multi-AP networks. By way of example, this communication includes joint re-transmission between two or more access points (APs) and one or more wireless stations (STAs).

One example embodiment is an access point (AP) that includes a receiver, which, in operation, receives a Joint Transmission (JT) Trigger frame from another AP that indicates MAC protocol data units (MPDUs) to be jointly transmitted to a communication apparatus; and a local memory that stores one or more MPDUs previously transmitted to the communication apparatus. One example embodiment is an access point (AP), comprising:

circuitry, which, in operation, determines that a communication apparatus failed to receive one or more MAC protocol data units (MPDUs) that were jointly transmitted

by the AP and another AP to the communication apparatus; anda transmitter, which, in operation, transmits a Joint Transmission (JT) Trigger frame to the another AP without re-distributing failed MPDUs to the another AP. One example embodiment is a method comprising receiving, at an access point (AP) a Joint Transmission (JT) Trigger frame from another AP that indicates MAC protocol data units (MPDUs) to be jointly transmitted to a communication apparatus; and storing, in a local memory of the AP, one or more MPDUs previously transmitted to the communication apparatus.