

ABSTRACT**PARTIAL UPLINK REPEATER SYSTEM, METHOD
AND COMPUTER PROGRAM PRODUCT**

A method for repetition of uplink transmissions comprises: a repeater apparatus, aka uplink repeater, has a controller, a downlink receiver and an uplink transmitter and receiver. Use the downlink receiver to receive a downlink signal from a base station whose cell the uplink repeater is serving. For downlink frame(s) thus received: the controller demodulates at least a portion of the downlink frame and extracts MAP_D data describing allocation of an uplink transmission in upcoming uplink frame(s) to be transmitted after the downlink frame; controller determines a subset of UL transmission allocations to be repeated, to define a subset of mobile stations in the cell, whose uplink transmissions are to be repeated; the uplink receiver receives the UL transmissions to be repeated from each mobile station, and repeats the UL transmissions to be repeated by commanding the UL transmitter to send the content.

Figure 6