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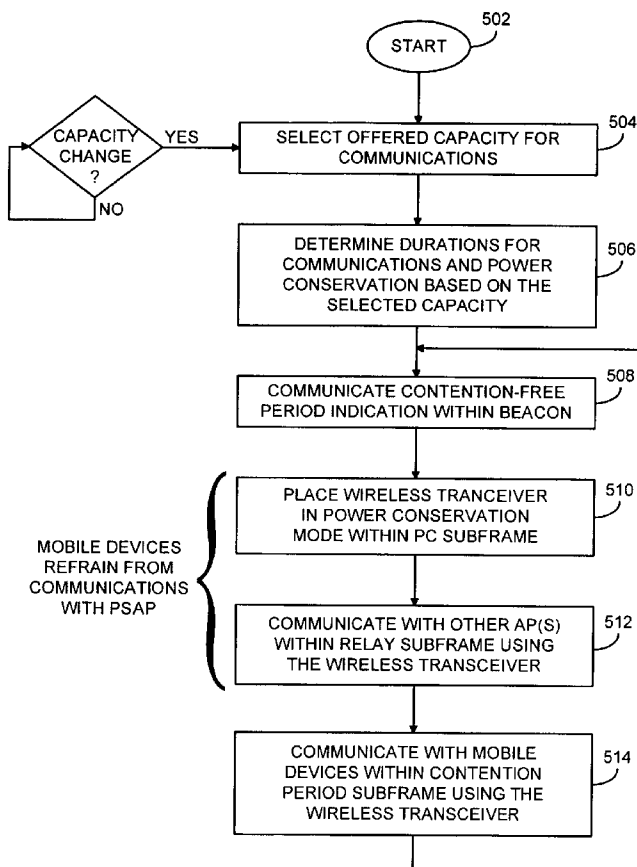
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(54) Title: WIRELESS ACCESS POINT METHODS AND APPARATUS FOR REDUCED POWER CONSUMPTION AND COST



(57) Abstract: In one illustrative technique, a contention-free period indication is communicated by a wireless access point (AP) (e.g. a battery-powered AP) to a plurality of mobile communication devices within a beacon of a superframe. The contention-free period indication identifies a duration of a contention-free period within which the mobile devices must refrain from communicating through the AP. During each contention period subframe of each superframe, information is communicated to and/or from the mobile devices through a wireless transceiver of the AP. During each power conservation subframe of each superframe, the wireless transceiver is placed into a power conservation mode which is at least part of the contention-free period. Alternatively, or in combination with the wireless transceiver being placed in the power conservation mode, information for the mobile devices may be communicated to and/or from another AP within each relay subframe of each superframe which is at least part of the contention-free period. Advantageously, power consumption may be reduced in the AP and/or a single radio interface may be utilized in the AP for communications. The durations of the power conservation subframe and the other subframes may be variably adjusted to tradeoff power savings with a real-time capacity requirement of the AP.



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