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Subscription based MIMO wireless power tranmission

Subscription based multiple-input-single-output and multiple-input-multiple-output wireless energy transfer enables selective charging and powering of mobile devices using a plurality of spatially distributed transmitters that are synchronized under the control of a transmitter controller. Amplitude, phase, and frequency of each transmitter is controlled to promote or deny the transfer of energy to particular mobile devices or positions through optimization techniques based on the incident power level at each mobile device subscribing to the system. Measurements related to the incident power level may be directly provided by the mobile device or the incident power is remotely determined through analysis of backscatter gains.