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(54) Title: OPTIMIZED BATTERY CHARGING CIRCUIT WITH POWER FACTOR CORRECTION

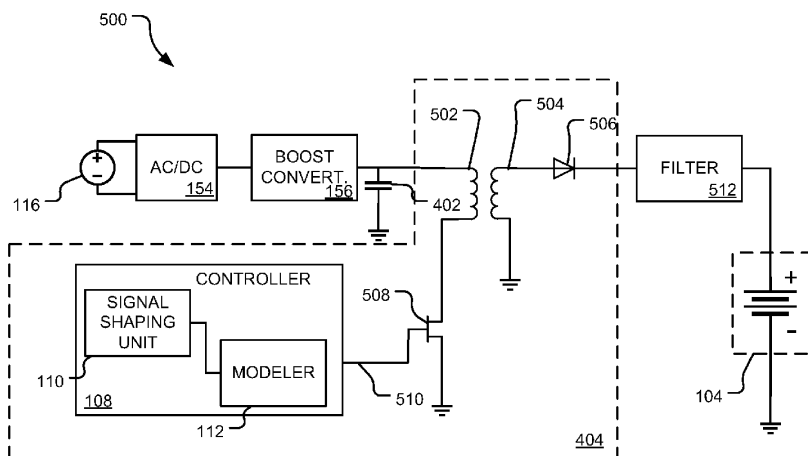


FIG. 5

(57) Abstract: An optimized charge signal shaping circuit is presented such that components of the charge signal circuit arrangement may be operable with fewer components and/or processing overhead than other approaches, thereby reducing costs, using less printed circuit board (PCB) real estate, and being computationally less complicated, among other advantages. In one particular implementation, portions of a power supply circuit may be combined with portions of a charge signal shaping circuit to leverage common functions and component characteristics of the portions, including a direct current/direct current (DC/DC) converter circuit. A reduced charge circuit may take advantage of each component including similar functions and/or circuit devices to reduce the overall number of components used in the charge circuit to reduce the overall footprint, conserve charging energy lost to the redundant components, and reduce the overall cost.

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