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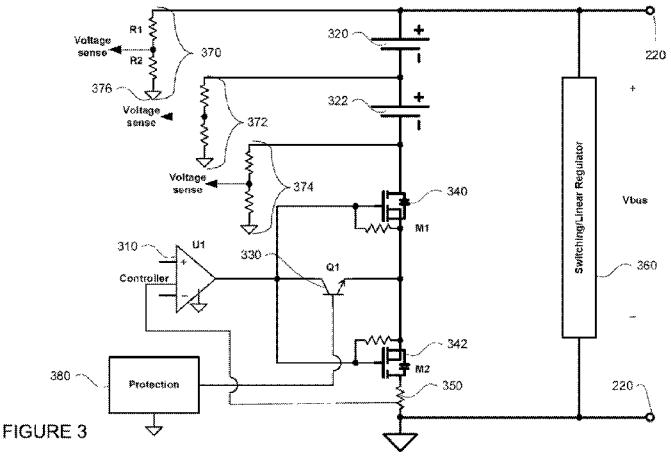


FIGURE 3

(57) Abstract: Aspects of the disclosure relate generally to uninterruptible power supply ("UPS") units (140) for systems (100) requiring back up power. The UPS units include circuitry (230) for controlling charging and allowing discharging of a battery (320, 322). The circuitry includes a controller (310) as well as a pair of metal-oxide semiconductor field effect transistors ("MOSFET") switches (340, 342). The pair of MOSFET switches includes charging and a discharging MOSFET switches in series with the battery operating as a bidirectional switch. A UPS unit may be charged and subsequently stored for period of time. During this time, plurality of features may prevent current leakage from the batteries. For example, PNP bipolar transistors (482, 510) and additional MOSFET switches may be used to prevent current leakage. These features alone or in combination may allow for long term storage of the uninterruptible power supply units without current leakage.

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