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(54) Title: HIGH VOLTAGE BATTERY ARCHITECTURE

(57) Abstract: A power distribution system for an aircraft, comprising a plurality of electric propeller units (EPUs), includes a first paired battery pack unit comprising a first battery electrically connected to a second battery via a first high voltage bus. The first and second batteries are configured to provide power to respectively first and second sets of EPUs of the plurality of EPUs. The system includes a second paired battery pack unit comprising a third battery electrically connected to a fourth battery via a second high voltage bus. The third and fourth batteries are configured to provide power to respectively third and fourth sets of EPUs of the plurality of EPUs. The first high voltage bus and the second high voltage bus are electrically separate from one another.