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(54) Title: HYBRID POWER PLANT FOR IMPROVED EFFICIENCY AND DYNAMIC PERFORMANCE

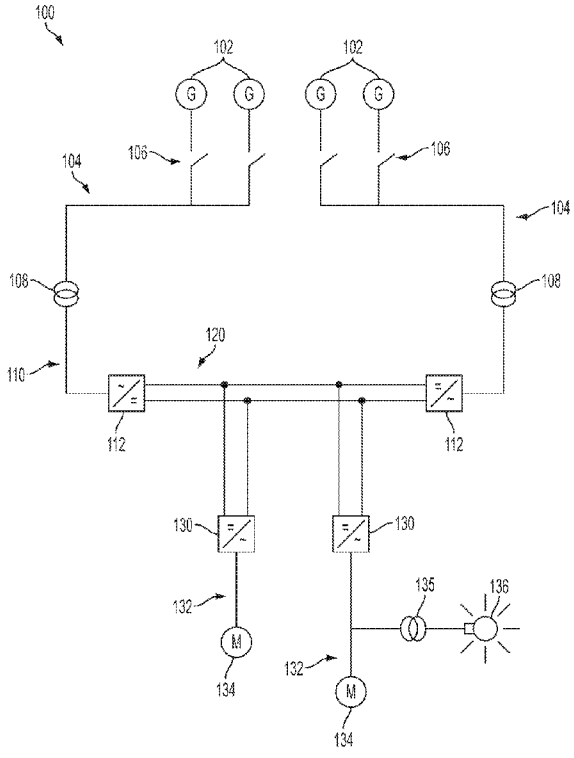


FIG. 1

(57) Abstract: A hybrid power plant is characterized by a substantially constant load on generators regardless of momentary swings in power load. Short changes in power load are accommodated by DC components such as capacitors, batteries, resistors, or a combination thereof. Resistors are used to consume power when loads in the power plant are generating excess power. Capacitors are used to store and deliver power when the loads in the power plant demand additional power. Reducing rapid changes in power load as seen by the generators allows the generators to operate at higher efficiencies and with reduced emissions. Additionally, power plants employing combinations of generators, loads, and energy storage devices have increased dynamic performance.

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