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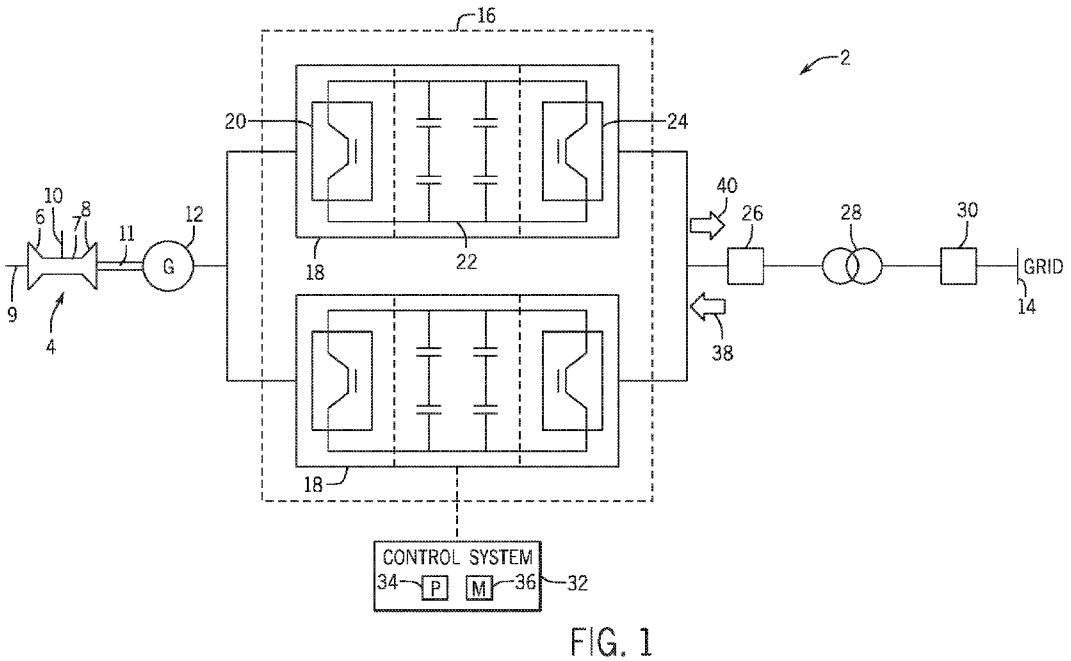


FIG. 1

(57) Abstract: A system (2) for providing power to a power grid (14) includes a generator (12) configured to output a first voltage associated with a first set of power characteristics. The system (2) includes a power conversion system (16) including a rectifier (20) configured to convert first voltage to a direct current DC voltage. The power conversion system (16) includes an inverter (24) comprising one or more switches configured to convert the DC voltage to a second voltage. The system (2) includes a processor (34) configured to receive a second set of power characteristics associated with a power grid (14). The processor (34) is configured to determine one or more signals configured to cause the switches in the inverter (24) to convert the DC voltage into the second voltage, wherein the second voltage comprises the second set of power characteristics. The processor (34) is configured to send the signals to the switches.

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