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(54) Title: DISTRIBUTED VARIABLE IMPEDANCE BALANCER CONTROL

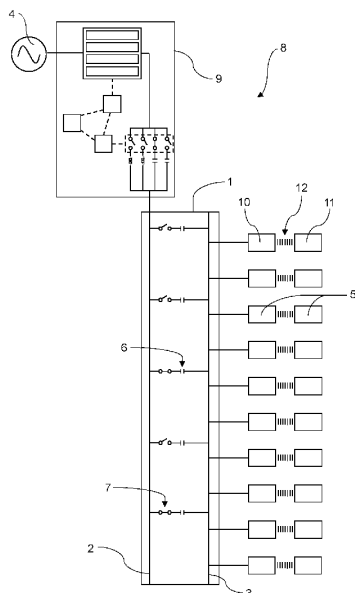


FIG. 6

(57) Abstract: A power transmission system comprises: (a) a power source, (b) one or more load(s), (c) a capacitive transmission line having: (i) a first conductor connected to the power source but not to the one or more load(s), (ii) a second conductor connected to the one or more load(s) but not to the power source, and (iii) a dielectric material between the first conductor and the second conductor, and (d) an impedance management system for modifying an impedance of the capacitive transmission line between at least a first impedance and a second impedance, different from the first, without switching the capacitive transmission line between a capacitive mode and a conventional mode. In preferred embodiments, the capacitive transmission line is a capacitive cable. The invention provides a capacitive transmission line and an impedance management system for use in such a power transmission system.

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