



COMPACT AND EFFICIENT TRANSFORMERLESS
POWER CONVERSION SYSTEM

Abstract of the Disclosure

A transformerless power conversion system including a plurality of capacitors connected in series; a charging circuit connected to the plurality of capacitors, the charging circuit charging the plurality of capacitors from a voltage source to a predetermined voltage; a circuit for inverting the polarity of the charge stored in selected capacitors of the plurality of capacitors, the polarity inverting circuit including a plurality of inductor circuits, each of which can be switchably coupled to a corresponding different one of the selected capacitors to form a resonant circuit which aids in inverting the polarity of a stored charge in that capacitor; and a discharging circuit for extracting power from the plurality of capacitors at a transformed voltage.