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(57) Abstract :

Title: A COMPACT ISOLATED DC/DC MULTIPORT CONVERTER TO INTERFACE MULTIPLE SOURCES, LOADS AND ENERGY STORAGE DEVICES ABSTRACT A dual transformer triple active bridge (DTTAB) 100 comprising: a three active 1-phase full bridges 102, 104 and 106 and two 1-phase transformers 108 and 110 where the active bridge is a configuration of two switches connected in series to form a leg and two legs are connected in parallel also midpoint of each leg is connected across a primary winding of a transformer and the active bridge is connected across its corresponding port terminal and a secondary winding of the two transformers in series and a duty ratio control is used to control a power flow in the converter, wherein the dual transformer triple active bridge (DTTAB) 100 is an isolated DC/DC three port converter that ensures a compact and efficient interfacing of multiple sources, loads and energy storage devices. FIG. 1

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