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(54) Title: MULTI-PORT TRANSFORMER ENABLED MODULAR MULTI-PORT POWER CONVERSION SYSTEM

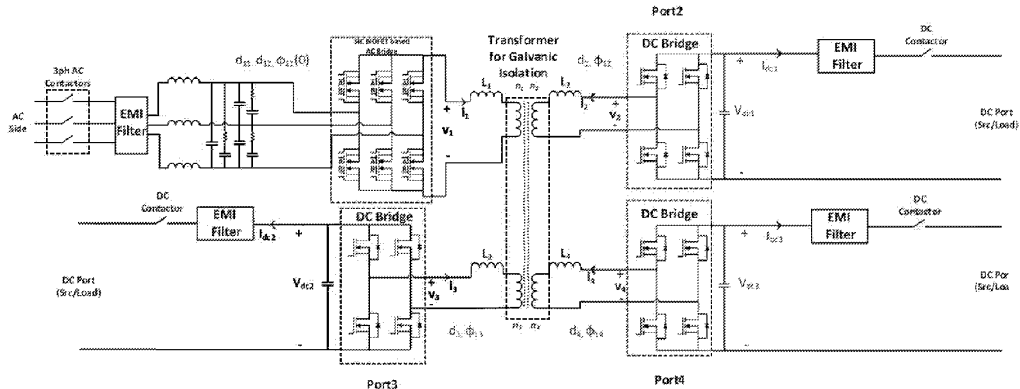


FIG. 2

(57) Abstract: A modular, multiport power conversion system includes a central transformer with a plurality of windings inductively connected to the central transformer. The plurality of windings are connected to ports able to connect to both AC and DC-devices, including both power sources and power consuming nodes. Each port is able to be selectively galvanically isolated, such that a controller is able to determine from which ports power is drawn and/or to which ports power is transferred. The system is operable to use zero voltage switching (ZVS) and/or zero current switching (ZCS) for each port to reduce power loss and increase efficiency, especially for high frequency embodiments.

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- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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