

TITLE

Power distribution systems

(Figure 2)

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ABSTRACT

The present invention relates to power distribution systems (e.g. a marine power distribution and propulsion system) that include first and second ac distribution busbars. The first ac distribution busbar (MVAC1) will typically be a medium
10 voltage (MV) busbar for the propulsion drive systems and the second ac distribution busbar (LVAC1) will typically be a low voltage (LV) for ships services. A 12-pulse rectifier (PC) has its ac terminals electrically connected to the first ac distribution busbar (MVAC1). A multiple output generator (DOG1) has first and second galvanically-isolated stator windings. The first stator winding provides a six-phase ac
15 output and is connected to the first ac distribution busbar (MVAC1). The second stator winding provides a three-phase ac output and is connected to the second ac distribution busbar (LVAC1). The six-phase ac output is phase shifted relative to the three-phase ac output to reduce the problematic coupling of harmonic distortion between the first and second ac distribution busbars.