

Title (en)
ELECTRIC DIRECT CURRENT NETWORK FOR WATER VESSELS AND FOR OFFSHORE UNITS HAVING INCREASED SHUT-OFF SECURITY

Title (de)
ELEKTRISCHES GLEICHSTROMNETZ FÜR WASSERFAHRZEUGE SOWIE FÜR OFFSHOREANLAGEN MIT ERHÖHTER
ABSCHALTSICHERHEIT

Title (fr)
RÉSEAU ÉLECTRIQUE À COURANT CONTINU POUR NAVIRES ET INSTALLATIONS EN MER PRÉSENTANT UNE SÉCURITÉ DE COUPURE
ACCURUE

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Application
EP 08701641 A 20080123

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Abstract (en)
[origin: WO2008090175A1] The invention relates to an electric direct current network (1) for surface and submarine vessels and for offshore units, having at least one direct current source (2), in particular a battery and/or fuel cell installation, at least one electric consumer (3), e.g. an electric drive motor or a border network, and at least one shut-off device (4) for shutting off a direct current flowing into the direct current network (1). The shut-off device (4) comprises a vacuum switch (5) that is switched in the network and a commutation device (8 or 9), through which a produced electric arc can be turned off when the switch (5) is opened. The shut-off security can be increased such that the vacuum switch (5) comprises a first switch pole (5a) and a second switch pole (5b). The first switch pole (5a) is switched in a current branch (6) from a plus pole of the direct current source (2) to the consumer (3) and the second switch pole (5b) is switched in a current branch (7) from a minus pole of the direct current source (2) to the consumer (3). Both of the switch poles (5a, 5b) are mechanically coupled together and the shut-off device (4) for at least one of the two switch poles (5a, 5b) comprises a commutation device (8 or 9) for turning off an electric arc produced in said switch pole (5a or 5b).

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