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(54) Title: AN ELECTRIC CURRENT MEASURING ARRANGEMENT, A VOLTAGE SOURCE CONVERTER AND A METHOD FOR OPERATION OF THE CONVERTER

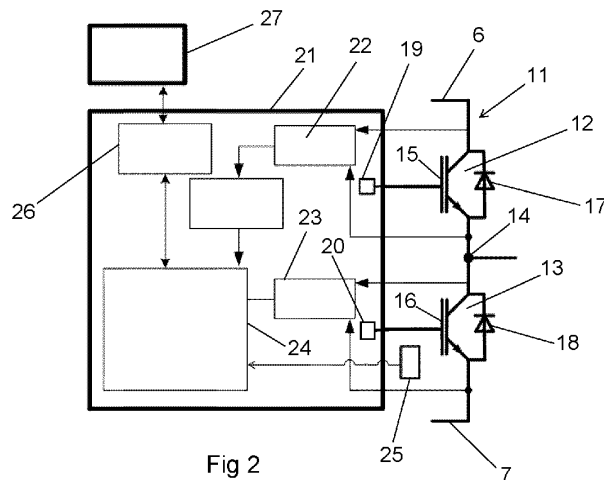


Fig 2

(57) Abstract: An arrangement for measuring an electric current in an electric power converter, which circuit comprises a half bridge (11) with two current valves (12, 13) connected in series and each comprising a rectifying diode (17, 18) and at least a first of the valves has a semiconductor device (15, 16) of turn-off type connected in anti-parallel therewith. A midpoint (14) of the half bridge between the two current valves is connected to a first of opposite sides of the half bridge and opposite ends of the series connection of the valves are connected to a second of said opposite sides of the half bridge. A gate drive unit (21) controls the semiconductor devices (15, 16). The arrangement has at least a member (22, 23) configured to measure the voltage drop across the rectifying diode (17, 18) of one of the current valves or the semiconductor device (15, 16) of one of the current valves. A member (25) measures the temperature in the vicinity of the current valve for which a voltage drop is measured and a calculating unit (24) uses information about voltage drop and temperature to calculate and deliver a value of the current flowing through the current valve. 25

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