

ABSTRACT

Circuit arrangement for powering a load.

This Sheet Has Been Replaced



A circuit arrangement is described for powering a load having a number of n terminals via a power inverter comprising a number of n branches, in which one of the terminals of the load is optionally connectable to a first or a second terminal of a voltage source by each of the branches, as a result of which a voltage vector having a number of n components is applied to the load, which components can each assume two values constituted by the voltage values produced by the voltage source on the terminals of this source, which arrangement comprises a control circuit by means of which the n components of the voltage vector can be set to the two possible values in a given time sequence, so that the voltage vector complies with a given function of time in which all n components assume the same value (referred to as null vector) in regularly recurring time intervals, the next null vector, in the case that at least one of the components of the voltage vector assumes exclusively a first one of the two values for a given period of time, being formed with the second one of the two values.

This circuit arrangement prevents under all operating conditions that a voltage on a terminal of the load (5) is sustained at a given voltage value beyond a given period of time (ZSP), without the correct operation being impaired.

Fig. 2