

Title (en)

MESH CONNECTED BRAKE ARRAY FOR ELECTRICAL ROTATING MACHINES

Title (de)

MASCHENVERBUNDENES BREMSARRAY FÜR ELEKTRISCHE DREHMASCHINEN

Title (fr)

SYSTEME DE FREINAGE CONNECTE EN POLYGONE POUR MACHINES TOURNANTES ELECTRIQUES

Publication

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Application

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Abstract (en)

[origin: WO03092150A1] In the present invention, several polyphase devices are connected together: an inverter (420), and electrical rotating machine (440), and a resistive load or braking resistor (430). The purpose of the resistive load is to dissipate excess electrical power which may be produced when the inverter acts to slow down the rotating machine (440), causing the rotating machine to act as a generator. In common art, this resistive load is a single DC resistor coupled to the DC link of the inverter via a separate resistor control transistor. In the present invention, the resistive load is a mesh connected array of resistors, and is electrically connected to the same inverter output terminals that the rotating machine is connected to. When it is desired that the resistors absorb energy, for example from a braking operation, then the harmonic content of the inverter output is adjusted, thus placing voltage differences across the resistor array (430) and causing current to flow in the resistors.

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