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

EP 1550203 A4 20051130 (EN)

Application

EP 03747298 A 20030422

Priority

- US 0312445 W 20030422
- US 37561602 P 20020424

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.

IPC 1-7

H02P 3/22

IPC 8 full level

H02P 3/22 (2006.01)

CPC (source: EP)

H02P 3/22 (2013.01)

Citation (search report)

- [AP] WO 02089306 A1 20021107 - BOREALIS TECH LTD [US]
- See references of WO 03092150A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 03092150 A1 20031106; AU 2003231744 A1 20031110; EP 1550203 A1 20050706; EP 1550203 A4 20051130

DOCDB simple family (application)

US 0312445 W 20030422; AU 2003231744 A 20030422; EP 03747298 A 20030422