

Title (en)

ACTIVE DAMPING CONTROL OF AN ELECTRICAL CONVERTER WITH A RESONANT OUTPUT FILTER

Title (de)

AKTIVE DÄMPFUNGSTEUERUNG EINES ELEKTRISCHEN UMRICHTERS MIT EINEM RESONANZAUSGANGSFILTER

Title (fr)

COMMANDE ACTIVE D'AMORTISSEMENT D'UN CONVERTISSEUR ÉLECTRIQUE AVEC UN FILTRE DE SORTIE RÉSONANT

Publication

**EP 2992596 A1 20160309 (EN)**

Application

**EP 15715229 A 20150407**

Priority

- EP 14164039 A 20140409
- EP 2015057512 W 20150407
- EP 15715229 A 20150407

Abstract (en)

[origin: WO2015155183A1] An electrical converter (10) comprises at least one output phase (16) connected via a electrical filter (20) with an electrical grid (22) or an electrical machine. A method for controlling the electrical converter (10) comprises: receiving a control reference (24) for the electrical converter; determining voltages and/or currents (26) in the electrical converter; determining switching positions (u) for semiconductor switches (14) of the electrical converter from the control reference (24) and the determined voltages and/or currents, based on model predictive direct control (32) such that a deviation from the control reference is minimized; and actively damping oscillations in the at least one output phase caused by the electrical filter.

IPC 8 full level

**H02M 1/12** (2006.01); **H02M 7/487** (2007.01); **H02M 7/5387** (2007.01)

CPC (source: EP)

**H02M 1/12** (2013.01); **H02M 7/53873** (2013.01); **H02M 7/487** (2013.01)

Citation (search report)

See references of WO 2015155183A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**WO 2015155183 A1 20151015**; EP 2992596 A1 20160309

DOCDB simple family (application)

**EP 2015057512 W 20150407**; EP 15715229 A 20150407