

(19)



(11)

EP 1 964 233 B8

(12)

CORRECTED EUROPEAN PATENT SPECIFICATION

(15) Correction information:

Corrected version no 1 (W1 B1)
Corrections, see
Bibliography INID code(s) 73

(51) Int Cl.:

H02J 3/38 ^(2006.01) **H02M 1/15** ^(2006.01)
H02M 1/08 ^(2006.01) **H02M 3/156** ^(2006.01)

(48) Corrigendum issued on:

14.12.2016 Bulletin 2016/50

(86) International application number:

PCT/IT2005/000757

(45) Date of publication and mention of the grant of the patent:

12.10.2016 Bulletin 2016/41

(87) International publication number:

WO 2007/072517 (28.06.2007 Gazette 2007/26)

(21) Application number: **05849555.7**

(22) Date of filing: **22.12.2005**

(54) **A SYSTEM FOR PRODUCING ELECTRIC POWER FROM RENEWABLE SOURCES AND A CONTROL METHOD THEREOF**

SYSTEM ZUM PRODUZIEREN VON ELEKTRISCHEM STROM AUS ERNEUERBAREN QUELLEN UND STEUERVERFAHREN DAFÜR

SYSTEME POUR LA PRODUCTION D'ENERGIE ELECTRIQUE A PARTIR DE SOURCES RENOUVELABLES ET SON PROCEDE DE COMMANDE

(84) Designated Contracting States:

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

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(43) Date of publication of application:

03.09.2008 Bulletin 2008/36

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(56) References cited:

- **CHICCOG ET AL: "Experimental evaluation of the performance of grid-connected photovoltaic systems" ELECTROTECHNICAL CONFERENCE, 2004. MELECON 2004. PROCEEDINGS OF THE 12TH IEEE MEDITERRANEAN DUBROVNIK, CROATIA 12-15 MAY 2004, PISCATAWAY, NJ, USA, IEEE, US, 12 May 2004 (2004-05-12), pages 1011-1016, XP010734901 ISBN: 0-7803-8271-4**

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- ALONSO O ET AL: "Cascaded h-bridge multilevel converter for grid connected photovoltaic generators with independent maximum power point tracking of each solar array" PESC'03. 2003 IEEE 34TH. ANNUAL POWER ELECTRONICS SPECIALISTS CONFERENCE. CONFERENCE PROCEEDINGS. ACAPULCO, MEXICO, JUNE 15 - 19, 2003, ANNUAL POWER ELECTRONICS SPECIALISTS CONFERENCE, NEW YORK, NY : IEEE, US, vol. VOL. 4 OF 4. CONF. 34, 15 June 2003 (2003-06-15), pages 731-735, XP010648900 ISBN: 0-7803-7754-0
- PATCHARAPRAKITI N ET AL: "Maximum power point tracking using adaptive fuzzy logic control for grid-connected photovoltaic system" RENEWABLE ENERGY, PERGAMON PRESS, OXFORD, GB, vol. 30, no. 11, September 2005 (2005-09), pages 1771-1788, XP004883530 ISSN: 0960-1481
- KIM I-S ET AL: "Variable-structure observer for solar-array current estimation in a photovoltaic power-generation system" IEE PROCEEDINGS: ELECTRIC POWER APPLICATIONS, INSTITUTION OF ELECTRICAL ENGINEERS, GB, vol. 152, no. 4, 25 May 2005 (2005-05-25), pages 953-959, XP006024139 ISSN: 1350-2352
- DCHBONEI H ET AL: "A combined voltage controlled and current controlled dual converter for a weak grid connected photovoltaic system with battery energy storage" 33RD. ANNUAL IEEE POWER ELECTRONICS SPECIALISTS CONFERENCE. PESC 2002. CONFERENCE PROCEEDINGS. CAIRNS, QUEENSLAND, AUSTRALIA, JUNE 23 - 27, 2002, ANNUAL POWER ELECTRONICS SPECIALISTS CONFERENCE, NEW YORK, NY : IEEE, US, vol. VOL. 2 OF 4. CONF. 33, 23 June 2002 (2002-06-23), pages 1495-1500, XP010595959 ISBN: 0-7803-7262-X