



- (51) **International Patent Classification:**
H02P 9/00 (2006.01) *H02H 7/06* (2006.01)
- (21) **International Application Number:**
PCT/EP2013/056185
- (22) **International Filing Date:**
25 March 2013 (25.03.2013)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
12166857.8 4 May 2012 (04.05.2012) EP
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- (81) **Designated States** (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY,
BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM,
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP,
KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,

ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI,
NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU,
RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ,
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA,
ZM, ZW.

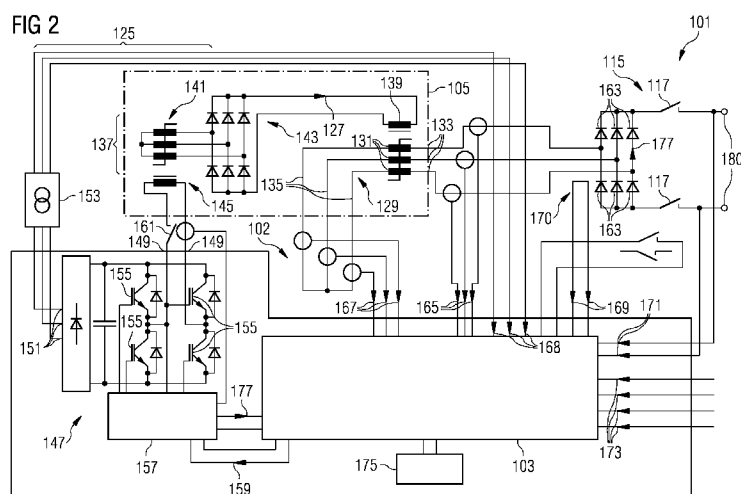
- (84) **Designated States** (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ,
UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ,
TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV,
MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments (Rule 48.2(h))

- (88) **Date of publication of the international search report:**
15 May 2014

(54) **Title:** SYNCHRONOUS GENERATOR CONTROL, GENERATOR SYSTEM AND VESSEL ENERGY SYSTEM



(57) **Abstract:** It is described an arrangement (102) for controlling a synchronous generator (105) having a stator (129) comprising at least one stator winding (131) and having a rotor (137) with an electromagnet (139) driven by a field current (127), the rotor (137) being rotatable relative to the stator (129), the electromagnet (139) being inductively coupled to the stator winding (131), the arrangement (102) comprising: a measurement system adapted to measure at least one quantity (167, 165, 168, 169, 171); and a controller (103) adapted to cause shutting down the field current (127), if the quantity satisfies at least one criterion associated with at least one malfunction.

