



- (51) International Patent Classification:
H05B 37/02 (2006.01)
- (21) International Application Number:
PCT/CN2010/080529
- (22) International Filing Date:
30 December 2010 (30.12.2010)
- (25) Filing Language: English
- (26) Publication Language: English
- (71) Applicant (for all designated States except US):
CLIPSAL AUSTRALIA PTY LTD [AU/AU]; New South Wales (AU).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **HU, Ruilong** [CN/CN]; 4th Floor Tower 1, Kerry Plaza, No. 1 Zhongxin Si Road, Futian District, Shenzhen, Guangdong 518048 (CN). **OUYANG, Chunbai** [CN/CN]; 4th Floor Tower 1, Kerry Plaza, No. 1 Zhongxin Si Road, Futian District, Shenzhen, Guangdong 518048 (CN). **DING, Jianjun** [CN/CN]; 4th Floor Tower 1, Kerry Plaza, No. 1 Zhongxin Si Road, Futian District, Shenzhen, Guangdong, 518048 (CN).
- (74) Agent: **BEIJING SANYOU INTELLECTUAL PROPERTY AGENCY LTD.**; 16th Fl., Block A, Corporate Square, No. 35 Jinrong Street, Beijing 100033 (CN).
- (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, 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, PE, PG, PH, PL, PT, RO, RS, RU, 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, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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))

(54) Title: DEVICE AND METHOD FOR CONTROLLABLY DIMMING OUTPUT OF LOAD

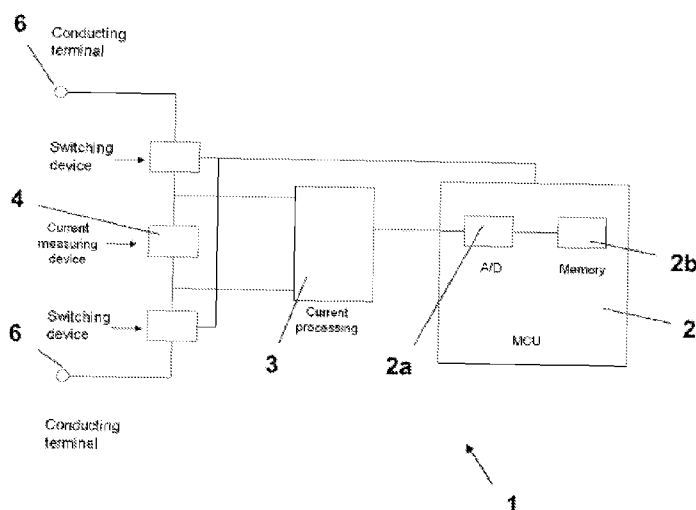


FIG. 1

(57) Abstract: A device configured for electrical connection with a load to control an output of the load. The device includes circuitry for varying a conduction angle of an input AC supply voltage applied to the load, a current scanner for scanning at least one current form flowing through the load in response to the varying conduction angle of the input AC supply voltage applied to the load, and a digital signal processing unit electrically coupled to the current scanner and the circuitry. The digital signal processing unit is configured for identifying an operational load type of the load by reference to a pattern indicative of a relationship between the scanned at least one current form and the varying conduction angle of the input AC supply voltage. The digital signal processing unit is further configured for applying at least one of a plurality of predetermined operational modes to control the output of the load based upon the identified operational load type of the load.