



(51) International Patent Classification:  
*H05B 33/08* (2006.01)

(21) International Application Number:  
PCT/IB2009/052153

(22) International Filing Date:  
22 May 2009 (22.05.2009)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
61/059,281 6 June 2008 (06.06.2008) US

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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, BR, BW, BY, BZ, CA, CH, 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, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, 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, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (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, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Declarations under Rule 4.17:**

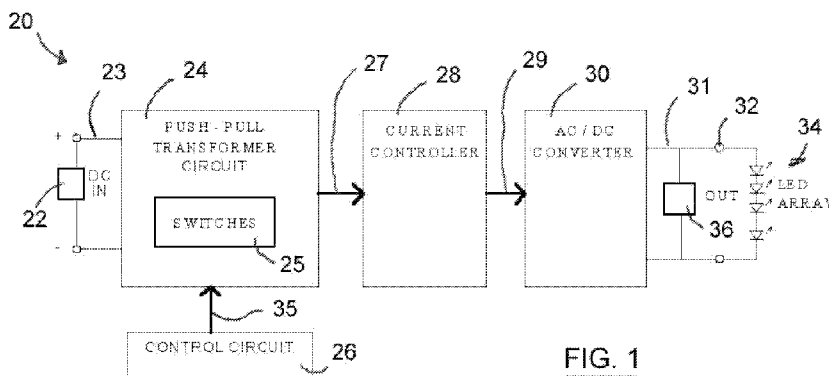
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

**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:  
25 February 2010

(54) Title: LED LAMP DRIVER AND METHOD



(57) Abstract: An LED lamp driver and method including an LED lamp driver receiving low voltage DC power, the LED driver including a push-pull transformer circuit (24) operably connected to receive the low voltage DC power (23) and produce transformer AC power (27), the push-pull transformer circuit (24) having switches (25) responsive to steering signals (35); a self resonant control circuit (26) operably connected to the push-pull transformer circuit (24) to generate the steering signals (35); a current controller (28) operably connected to receive the transformer AC power (27) and produce controlled AC power (29); and an AC/DC converter (30) operably connected to receive the controlled AC power (29) and produce high voltage DC power (31).

WO 2009/147563 A3

## INTERNATIONAL SEARCH REPORT

International application No

PCT/IB2009/052153

**A. CLASSIFICATION OF SUBJECT MATTER**  
 INV. H05B33/08

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
 H05B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category* | Citation of document, with indication, where appropriate, of the relevant passages            | Relevant to claim No.          |
|-----------|---|--------------------------------|
| X         | US 2004/183380 A1 (OTAKE TETSUSHI [JP])<br>23 September 2004 (2004-09-23)                     | 1,5,6,8,<br>10,14              |
| Y         | paragraph [0002] - paragraph [0012]   | 2-4,9-11                       |
| X         | US 6 266 254 B1 (OTAKE TETUSHI [JP])<br>24 July 2001 (2001-07-24)                             | 1,5,7,8,<br>13-15,<br>17,19,20 |
| Y         | the whole document  | 2-4,9-11                       |
| Y         | US 6 577 512 B2 (TRIPATHI AJAY [US] ET AL)<br>10 June 2003 (2003-06-10)<br>the whole document | 2-4,10,<br>11                  |
| A         | DE 24 22 438 A1 (FRIEDEL KARL)<br>20 November 1975 (1975-11-20)<br>the whole document         | 1-20                           |
|           | -/--  |                                |

Further documents are listed in the continuation of Box C.

See patent family annex.

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Date of the actual completion of the international search

22 December 2009

Date of mailing of the international search report

04/01/2010

Name and mailing address of the ISA/

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International application No  
PCT/IB2009/052153

| C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT |  |                         |
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| Category*  | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. - |
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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IB2009/052153

| Patent document cited in search report | Publication date | Patent family member(s) | Publication date   |  |
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