Title (en)

Electronic ballast for a discharge lamp, provided with a lamp power measurement by means of a DC-signal

Title (de)

Elektronisches Vorschaltgerät einer Gasentladungslampe mit Messung der Lampenleistung durch ein Gleichstromsignal

Title (fr)

Ballast électronique pour une lampe à décharge, avec mesure de la puissance de la lampe en utilisant un signal à courant continu

Publication

EP 0852453 A1 19980708 (EN)

Application

EP 97660149 A 19971219

Priority

FI 970018 A 19970103

Abstract (en)

The invention relates to a controllable or dimmable electronic ballast for a low pressure discharge lamp, especially a fluorescent lamp. A halfbridge inverter (TR1, TR2; V2, V3) supplies power to a load circuit (L2, C2, C3, LL). A regulation or control block (A1/I, II) regulates the frequency of the halfbridge inverter for regulating the light output of a lamp. One branch of the halfbridge inverter is provided with current measuring elements (R2, R3, C4), from which is obtained current measurement information proportional to the load circuit power for the regulation or control block, which is further supplied separately with measurement information about a direct current that has passed through the lamp and is proportional to the internal resistance of the lamp. The latter measurement information is used for controlling regulation of the lamp at low regula tion levels of the light output. <IMAGE>

IPC 1-7

H05B 41/00; H05B 41/392

IPC 8 full level

H05B 41/392 (2006.01)

CPC (source: EP)

H05B 41/3925 (2013.01)

Citation (search report)

- [X] EP 0422255 A1 19910417 - SIEMENS AG [DE]
- [XP] WO 9701945 A1 19970116 - PHILIPS ELECTRONICS NV [NL], et al
- [A] EP 0589081 A1 19940330 - KNOBEL LICHTTECH [CH]
- [A] GB 2246034 A 19920115 - LUTRON ELECTRONICS CO [US]

Cited by

AU764223B2; US8638048B2; US8952617B2; US7982452B2; US6504318B1; US7679293B2; WO2013034387A1; WO2011055158A1; WO2013034386A1; WO0059273A1

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