

Title (en)
Improvements in driving of discharge lamps in particular for vehicle headlamps

Title (de)
Verbesserungen in der Steuerung von Entladungslampen, insbesondere in Fahrzeugscheinwerfern

Title (fr)
Perfectionnements à la commande de l'alimentation de lampes à décharge notamment de projecteurs de véhicule automobile

Publication
EP 1087644 A1 20010328 (FR)

Application
EP 00402459 A 20000906

Priority
FR 9912114 A 19990927

Abstract (en)
The incoming supply is received by a DC/DC converter (1), the input being derived through a switching transistor (Q1) which controls the primary of a transformer (T). The converter output forms the input to a DC/AC converter, supplying the lamp. This converter's bridge rectifier employs transistors switched at frequencies in the range 200-1000 Hz and gives rise to significant electromagnetic interference. The switching of the DC/DC converter transistor is controlled by a regulator (4). By suitably programming the latter, the power delivered to the lamp is modulated in a pseudo-random sequence by a fractional amount, e.g. plus or minus 500 mW on a mean power of 35 W, the resulting frequency spectrum spread substantially reducing the interference, typically by up to 8 dB. Opt., modulation is achieved by the analogue addition of a separately generated power increment/decrement at the output of the DC/DC converter.

Abstract (fr)
Selon le procédé pour la commande d'un dispositif d'alimentation d'une lampe à décharge notamment de projecteur de véhicule automobile, ledit dispositif d'alimentation comportant un convertisseur continu/alternatif, on module dans le temps la puissance d'alimentation fournie audit convertisseur continu/alternatif. La puissance d'alimentation fournie au convertisseur continu/alternatif est modulée selon une séquence pseudo-aléatoire. L'invention concerne également un dispositif d'alimentation qui met en oeuvre ce procédé. <IMAGE>

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CPC (source: EP US)
H05B 41/2928 (2013.01 - EP US)

Citation (search report)
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• [X] EP 0785702 A2 19970723 - OSRAM SYLVANIA INC [US]
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• [X] STORMBERG H -P ET AL: "EXCITATION OF ACOUSTIC INSTABILITIES IN DISCHARGE LAMPS WITH PULSED SUPPLY VOLTAGE", LIGHTING RESEARCH AND TECHNOLOGY, GB, ILLUMINATING ENGINEERING SOCIETY, LONDON, vol. 15, no. 3, 1 March 1983 (1983-03-01), pages 127 - 132, XP002052920, ISSN: 0024-3426

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