

Title (en)

Resonant converter for a gas discharge lamp

Title (de)

Resonanzwandler für eine Gasentladungslampe

Title (fr)

Convertisseur résonant pour une lampe à décharge

Publication

EP 2547176 A1 20130116 (EN)

Application

EP 11250662 A 20110715

Priority

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Abstract (en)

The invention relates to methods and apparatus for control of electrical lighting, in particular for powering a gas discharge lamp using a resonant power converter. Embodiments disclosed include a method of controlling a resonant power converter (400) to drive a gas discharge lamp (401), the resonant power converter comprising first and second series connected switches (402, 403) connected between first and second supply voltage lines (404, 405) and a resonance circuit comprising a capacitor (406) and an inductor (407), the resonance circuit connected between a node (408) connecting the first and second switches (402, 403) and the second supply voltage line (405), the method comprising, in an operational mode, the sequential steps of: closing the first switch (402) to start a first conduction interval; and opening the first switch (402) to end the first conduction interval when a voltage across the capacitor (406) crosses a predetermined first voltage level, wherein controlling the predetermined first voltage level determines a power level provided to the gas discharge lamp (401).

IPC 8 full level

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CPC (source: EP)

H05B 41/2828 (2013.01); **H05B 41/2856** (2013.01); **H05B 41/3927** (2013.01)

Citation (applicant)

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- WO 2009037613 A1 20090326 - NXP BV [NL], et al
- WO 2010073196 A1 20100701 - NXP BV [NL], et al
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