

Title (en)
PROCESS AND DEVICE FOR IGNITING DISCHARGE LAMPS

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EP 0271396 B1 19930728 (FR)

Application
EP 87402640 A 19871124

Priority
FR 8616969 A 19861204

Abstract (en)
[origin: EP0271396A1] Process for igniting a discharge lamp, in particular of the arc-lamp or neon tube type, the said lamp being mounted in a series resonant circuit comprising a choke (19) and a capacitor (20), the lamp (23) being disposed in series with the choke and in parallel with the capacitor, this resonant circuit being disposed in the diagonal of a bridge to the terminals of which are supplied voltage pulses delivered by a chopped supply, characterised in that it consists in varying the chopping frequency of the energising pulses over a frequency range stretching between two predetermined extreme values which enclose the resonance frequency of the circuit or one of its harmonics in accordance with an approximately linear law, respectively increasing then decreasing, with a scanning period for this given range, in simultaneously setting to a constant and bounded value the angle of flow of the pulses measuring the ratio of the duration of the latter to their period, so that the current supplied to the lamp on each pulse is substantially reduced, in then igniting the lamp by virtue of the voltage surge created by the resonance of the circuit when the chopping frequency is equal to the resonance frequency or one of its harmonics, in detecting the flow of the current in the lamp in order to reduce the frequency of the pulses to a value substantially lower than the resonance frequency, at the same time the angle of flow being raised to an optimal value. <IMAGE>

IPC 1-7
H05B 41/29

IPC 8 full level
H05B 41/288 (2006.01)

CPC (source: EP)
H05B 41/2883 (2013.01)

Cited by
EP0408121A3; CH686390A5; EP1326486A1; US5365151A; CN110677951A; GB2261332A; GB2261332B; EP0380795A1; US4999546A; US5068574A; EP1119224A1; FR2803977A1; GB2338358A; GB2338358B; GB2226463A; US6546346B1; US6753659B2; WO9733456A1; WO9301695A1; WO9835538A1; US7589480B2; US6188183B1; US6384544B1; US6495971B1; US6541923B1; WO9418811A1; WO0030413A1

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