

Title (en)

INVERTER WITH A LOAD CIRCUIT COMPRISING A SERIES RESONANT CIRCUIT AND A DISCHARGE LAMP

Publication

EP 0113451 B1 19871014 (DE)

Application

EP 83112488 A 19831212

Priority

DE 3246454 A 19821215

Abstract (en)

[origin: US4547706A] In an inverter controlled with a firing unit connected to switches and defining an operating frequency, a resonant frequency of a series oscillating circuit of the inverter connected to one of the switches is placed below this operating frequency. Given this operating situation, a short of the d.c. voltage source is impossible. Given, for example, unfavorable component tolerances, however, the operating frequency can be moved close to the resonant frequency and cause impermissibly high voltages at the components. Such a voltage rise is limited according to the invention by means of a voltage-dependent resistor. It preferably lies in series with a capacitor and takes care of a voltage-dependent shift of the resonant frequency.

IPC 1-7

H05B 41/29; H02H 9/04

IPC 8 full level

H02H 9/04 (2006.01); **H05B 41/24** (2006.01); **H05B 41/26** (2006.01); **H05B 41/298** (2006.01)

CPC (source: EP US)

H05B 41/2985 (2013.01 - EP US); **Y10S 315/07** (2013.01 - EP US)

Citation (examination)

DE 3112281 A1 19821007 - SIEMENS AG [DE]

Cited by

US4798583A; EP2265097A1; US5825136A; EP0610642A1; NL8403441A; US5801491A; GB2180418A; EP0855850A1; US6118223A; EP1071315A3; EP0752804A1; US8450934B2; EP0686103B1

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