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(84) Designated Contracting States: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE Designated Extension States: AL LT LV MK RO SI	(72) Inventor: Pienisaari, Heikki 04600 Mäntsälä (FI)
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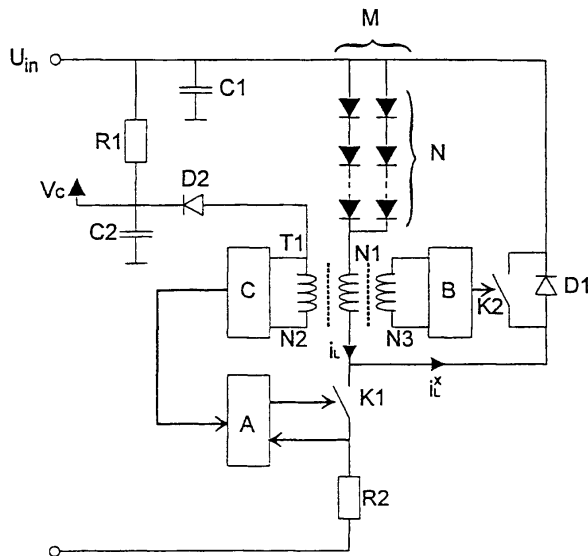
Method and apparatus for supplying power to light emitting diodes

(57)

The invention relates to a method and an apparatus for supplying power to light emitting diodes connected to a light emitting diode matrix (MN) comprising one or more parallel connected light emitting diodes or a series connection thereof. The method comprises repeated phases where the amount of current in the main circuit formed of a series connection of the light emitting diode matrix (MN), a switching element (K1) and an in-

ductance (N1) is monitored, the main circuit is opened by the switching element (K1) when the current of the main circuit reaches a predetermined value, whereby the current starts flowing through a zero diode circuit formed of a zero diode (D1) arranged on a circuit, the amount of current in the zero diode circuit is monitored, and the main circuit is closed by the switching element (K1) when the zero diode circuit current reaches a pre-determined value.

FIG. 1





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EUROPEAN SEARCH REPORT

Application Number
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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
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The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.6) H05B H02M
Place of search THE HAGUE		Date of completion of the search 6 November 2000	Examiner Speiser, P
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 99 66 0053

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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06-11-2000

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