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(54) Electronic ballast for fluorescent lamp using silicon-controlled phase-luminosity modulator for adjusting luminosity

(57) The present invention relates to an electronic ballast of a fluorescent lamp using a silicon-controlled phase-luminosity modulator for adjusting luminosity. The ballast comprises: (a) a filter and rectification circuit having an output port and connected to a municipal alternating current power supply; (b) a frequency-control and switch circuit having an output port; including an integrated circuit (IC) for controlling frequency and producing switch-triggering signals; (c) an output circuit, having an input port connected to the output port of the frequency-control and switch circuit; (d) light-modulating signal processing circuit, connected to the output port of filter

and rectification circuit and the input port of frequency control and switch circuit; (e) direct-current high voltage stabilization circuit, with an input port connected to the output port of filter and rectification circuit, an output port connected to the input port of frequency control and switch circuit, and feedback port connected with the output circuit. This electronic ballast requires only three simple circuits and few components. Thus, it can be manufactured at a lower cost with a smaller dimension. With its stable capacity of light modulating, the ballast of the present invention can be applied easily and widely, especially in the integrated and compact fluorescent lamps.

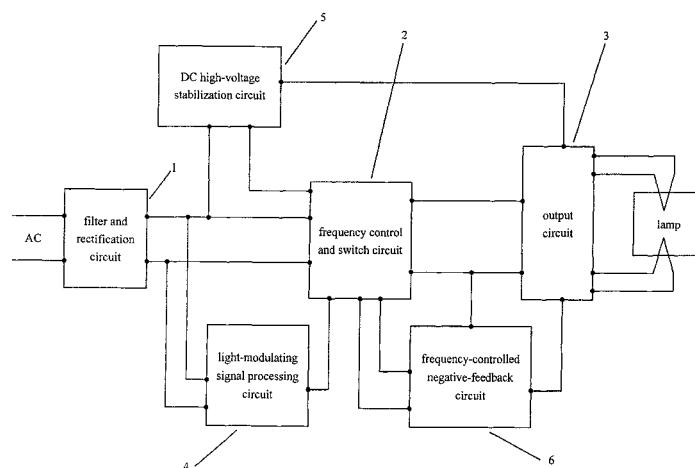


Fig. 2



DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (IPC)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	US 5 872 429 A (XIA ET AL) 16 February 1999 (1999-02-16) * column 1, line 19 - column 2, line 31 * * column 3, lines 13-61 * * column 4, lines 28-67 * * column 9, line 17 - column 10, line 15 * * column 14, lines 53-63 * * figures 1,2a-2c,3,4,20 * -----	1-13	H05B41/392
X	US 6 020 689 A (GRADZKI ET AL) 1 February 2000 (2000-02-01) * figures 1,3,4 * * column 1, lines 5-60 * * column 2, line 12 - column 3, line 67 * * column 4, lines 31-67 * * column 5, line 16 - column 6, line 26 * * column 7, lines 18-22 * * column 8, lines 35-67 * * column 10, lines 31-65 * * column 11, line 48 - column 12, line 20 * * figures 1,3,4 * -----	1-13	TECHNICAL FIELDS SEARCHED (IPC)
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1 The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
The Hague		30 November 2005	Hagan, C
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			
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**ANNEX TO THE EUROPEAN SEARCH REPORT
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