Abstract:

Title: APPARATUS AND METHOD FOR DRIVING LIGHT-EMITTING DIODES (LEDs)

(57) Abstract: System and method for improving efficiency in driving LEDs. A preferred embodiment comprises a switch current regulator (420) coupled to a current control signal input, the switch current regulator to control an amount of current provided to the LED based upon a magnitude of a voltage on the current control signal input, a switching voltage regulator (440) coupled to the switch current regulator and the LED, the switching voltage regulator to provide current to the LED, and a sensor (445, 450, 455) coupled to the switch current regulator, the LED, and a signal feedback circuit, the sensor to measure status information regarding the switch current regulator and the LED and provides the information to a controller, wherein the status information can be used to adjust the current on the current control signal input.
Date of publication of the international search report:
13 November 2008
INTERNATIONAL SEARCH REPORT

International application No.
PCT/US06/31378

A. CLASSIFICATION OF SUBJECT MATTER.

IPC: G05F 1/00(2006.01); H05B 3/00(2006.01); 37/02(2006.01)


According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
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</thead>
<tbody>
<tr>
<td>P,X</td>
<td>US 7,061,394 B2 (Biebl) 13 June 2006 (13.06.2006), Fig. 3; abstract; Col. 4, lines 26-62.</td>
<td>1,6,7</td>
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<td>8, 9</td>
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<td>P,Y</td>
<td>US 2003/0218794 (Takeda et al.) 27 November 2003 (27.1.2003), Figs. 1, 7; paragraphs [0025], [0067], [0068], [0099] through [0107]; [0155]</td>
<td>8, 9</td>
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<td>X</td>
<td>US 6,717,559 (Stein) 6 April 2004 (6.04.2004), Figs. 1-6; Col. 7, line 38- Col. 9, line 19</td>
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<td>Y</td>
<td>6,072,458 (Asakawa et al.) 6 June 2000 (6.06.2000), Figs. 2, 10</td>
<td>14, 15</td>
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</table>

D. Further documents are listed in the continuation of Box C.

D. See patent family annex.

Date of the actual completion of the international search
27 May 2008 (27.05.2008)

Date of mailing of the international search report
11 July 2008 (11.07.2008)

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Form PCT/ISA/210 (second sheet) (April 2007)