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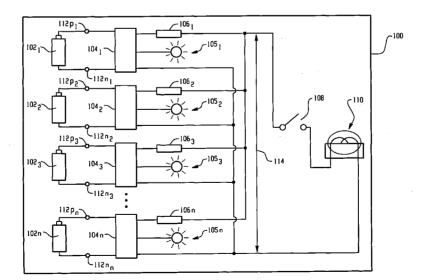
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(54) Title: ENHANCED PORTABLE BATTERY POWERED ELECTRICAL APPLIANCE



(57) Abstract: A portable battery powered appliance such as a flashlight accepts at least first and second batteries (102<sub>1</sub>, 102<sub>2</sub>). The appliance also includes an electrical load (110) such as a light source. A first circuit ( $104_1$ ) such as a DC to DC converter receives power from the first battery (102<sub>1</sub>) and supplies power to the load (110). A second circuit (104<sub>2</sub>) such as a DC to DC converter receives power from the second battery (1022) and supplies electrical power to the load (110). In one embodiment, the appliance accepts batteries (102) having multiple physical sizes.



### INTERNATIONAL SEARCH REPORT

International application No PCT/US2006/042613

# A. CLASSIFICATION OF SUBJECT MATTER INV. H02M1/10

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

#### **B. FIELDS SEARCHED**

 $\begin{tabular}{ll} Minimum documentation searched (classification system followed by classification symbols) \\ H02M \end{tabular}$ 

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 practical, search terms used)

#### EPO-Internal

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abstract figure 1	6,9,10, 21,25,26
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abstract figures 2-8,14-18 column 1, line 57 - column 2, line 14 	12,13
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Further documents are listed in the continuation of Box C.	X See patent family annex.
A' document defining the general state of the art which is not considered to be of particular relevance E' earlier document but published on or after the international filing date L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) O' document referring to an oral disclosure, use, exhibition or other means D' document published prior to the international filing date but later than the priority date claimed	<ul> <li>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</li> <li>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</li> <li>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</li> <li>"&amp;" document member of the same patent family</li> </ul>
Date of the actual completion of the international search  22 October 2007  Name and mailing address of the ISA/	Date of mailing of the international search report  05/11/2007  Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Lund, Michael

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