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(71) Applicant *(for all designated States except US)*: **L.R.S. INNOVATIONS, INC.** [US/US]; 9428 Sarazen Place, Palmetto, FL 34221 (US).

(72) Inventor; and

(71) Applicant : **SADLER, Lawrence, R.** [US/US]; 9428 Sarazen Place, Palmetto, FL 34221 (US).

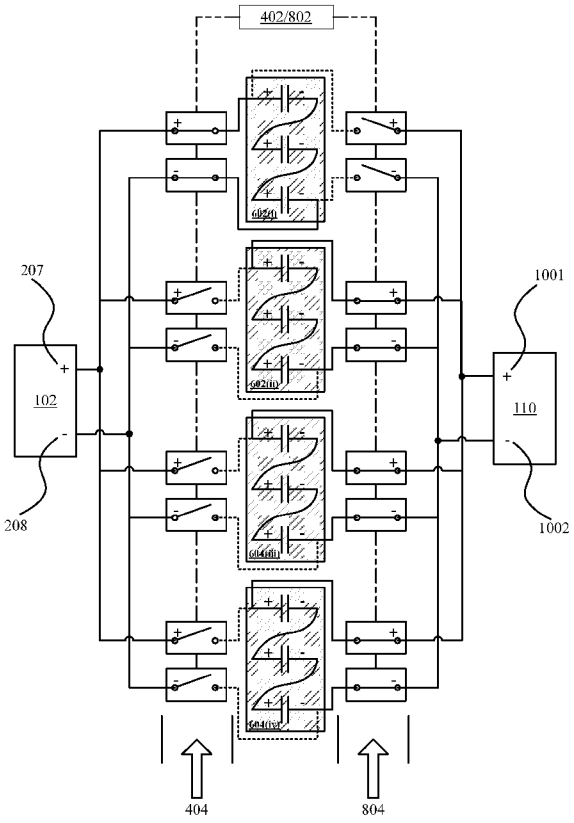
(74) Agents: **KUNZLER, Brian, C.** et al.; 8 East Broadway, Suite 600, Salt Lake City, UT 84111 (US).

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[Continued on next page]

(54) Title: POWER CONDITIONING SYSTEM



(57) Abstract: The present disclosure relates to a power conditioning system that includes an electrical energy source interface for connecting to an electrical energy source 102 and includes a load interface for connecting to a load 110. Between the electrical energy source interface and the load interface is a plurality of electrical energy storage devices 106. Also included in the power conditioning system of the present disclosure is a charging switching subsystem 104 that electrically connects a grouping of electrical energy storage devices 106 to the electrical energy source interface for a selected time interval. A grouping includes less than all of the individual electrical energy storage devices 106. A discharging switching subsystem 108 and a second discharging switching subsystem 806 are also provided for controlling which electrical energy storage devices 106 are discharged and it what type of configuration.

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TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

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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)

H02J 7/00; B60L 3/00; B60L 11/18; B60K 1/04; H02J 7/02; H01M 10/44

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

Korean utility models and applications for utility models
Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) & Keywords: battery, switch, grouping, load

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 2002-124302 A (TSURUKAWA FUMIAKI) 26 April 2002 See the abstract, claim 1, paragraphs [0001]-[0011], and figures 1-2.	1-28
A	JP 2000-014031 A (LOCKHEED MARTIN CORP) 14 January 2000 See the abstract, claims 1-12, and figures 1-6.	1-28
A	WO 2011-056998 A2 (ISE CORPORATION et al.) 12 May 2011 See the abstract, paragraph [035], claims 1-20, and figrue 4.	1-28
A	US 2006-0152189 A1 (AMBROSIO JOSEPH MARIO et al.) 13 July 2006 See the abstract, claims 1,5,6, and figures 1-3.	1-28

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

☒ See patent family annex.

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"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

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
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Korean Intellectual Property Office
189 Cheongsa-ro, Seo-gu, Daejeon Metropolitan City, 302-701, Republic of Korea

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Authorized officer

WEE Jae Woo

Telephone No. 82-42-481-8540

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Information on patent family members

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