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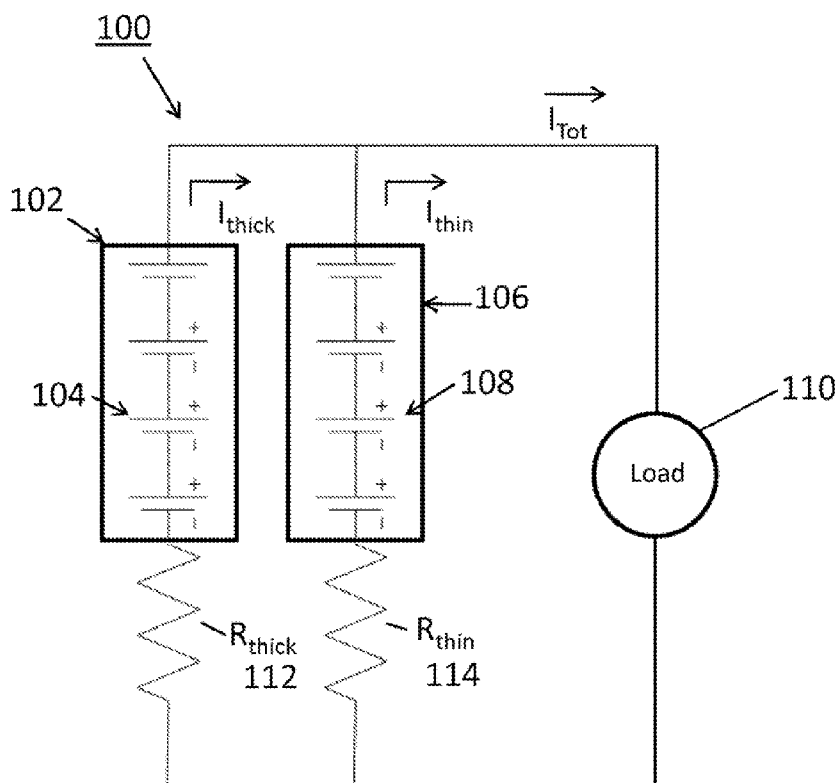
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[Continued on next page]

(54) Title: PROFILE RESPONSIVE ELECTRODE ENSEMBLE



(57) Abstract: An electrochemical energy storage system including at least a first type of electrochemical cell and a second type of electrochemical cell. The first type of electrochemical cell and the second type of electrochemical cell have different geometries. Also methods of making and using the electrochemical energy storage system.



SM, 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

International application No.
PCT/US2012/027098**A. CLASSIFICATION OF SUBJECT MATTER*****H01M 10/04(2006.01)i, H01M 2/20(2006.01)i, H01M 4/50(2010.01)i, H01M 10/05(2010.01)i***

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)

H01M 10/04; H02P 27/06; H02P 4/00; B60K 1/04; H02J 7/00; B60K 6/04

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: hybrid, battery, capacitor, cell, electrochemical, storage.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PESARAN, AHMAD et al., 'Ultracapacitors and Batteries in Hybrid Vehicles', In: the Advanced Capacitors conference, 31 August 2005	1-9, 12, 14-18, 20-24
Y	See pages 2-33.	10-11, 13, 19
Y	US 05318142 A (BATES, BRADFORD et al.) 07 June 1994 See abstract, figures 1-2, columns 2-7, claims 1-16.	10-11, 13, 19
X	MIKKELSEN, KARL BA., 'Design and Evaluation of Hybrid Energy Storage Systems for Electric Powertrains', A master thesis of the University of Waterloo, 30 September 2010 See abstract, pages 1-68.	1, 14, 21
A	US 2009-0033274 A1 (PERISIC, MILUN et al.) 05 February 2009 See abstract, figures 1-3, paragraphs [0009]-[0045], claims 1-20.	1-24
A	US 2007-0090808 A1 (MCCABE, PAUL P. et al.) 26 April 2007 See abstract, figures 1-7, paragraphs [0007]-[0045], claims 1-20.	1-24

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

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"P" document published prior to the international filing date but later than the priority date claimed

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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

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Date of the actual completion of the international search

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Date of mailing of the international search report

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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		WO 2007-048112 A3	26.04.2007