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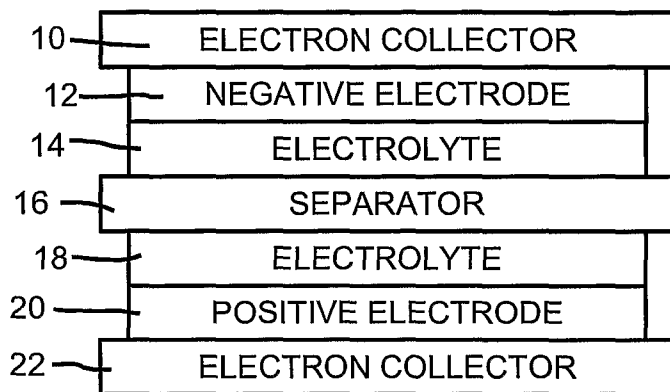
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(54) Title: IMPROVEMENT I CYCLING STABILITY OF LI-ION BATTERY WITH MOLTEN SALT ELECTROLYTE



(57) Abstract: An example battery according to an embodiment of the present invention includes a positive electrode, a negative electrode, and an electrolyte. The positive electrode comprises a positive active material, and has a positive electrode area and a positive electrode capacity. The negative electrode comprises a negative active material, and has a negative electrode area and a negative electrode capacity. The battery has an electrode area ratio equal to the positive electrode area divided by the negative electrode area, and an electrode capacity ratio equal to the positive electrode capacity divided by the negative electrode capacity. In an example battery, the electrode area ratio is

at least approximately one, and/or the electrode capacity ratio is at least approximately one.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/30751

<p>A. CLASSIFICATION OF SUBJECT MATTER IPC: H01M 6/04(2007.01),4/58(2007.01)</p> <p>USPC: 429/188,231.1,231.3,231.95 According to International Patent Classification (IPC) or to both national classification and IPC</p>																						
<p>B. FIELDS SEARCHED</p> <p>Minimum documentation searched (classification system followed by classification symbols) U.S. : 429/188, 231.1, 231.3, 231.95</p> <p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched</p> <p>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Please See Continuation Sheet</p>																						
<p>C. DOCUMENTS CONSIDERED TO BE RELEVANT</p> <table border="1"> <thead> <tr> <th>Category *</th> <th>Citation of document, with indication, where appropriate, of the relevant passages</th> <th>Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>E,Y</td> <td>US 2006/0088767 A (LI et al) 27 April 2006 (27.04.2006), paragraphs [0014] through paragraph [0064].</td> <td>1-24</td> </tr> <tr> <td>E,Y</td> <td>US 2006/0088763 A (LI et al) 27 April 2006 (27.04.2006), paragraph [0011] through paragraph [0044].</td> <td>1-24</td> </tr> <tr> <td>E,Y</td> <td>US 2006/0083986 A (LI et al) 20 April 2006 (20.04.2006), paragraph [0013] through [0068].</td> <td>1-24</td> </tr> <tr> <td>E,Y</td> <td>US 2006/0068282 A (KISHI et al) 30 March 2006 (30.03.2006), paragraph [0017] through paragraph [0045].</td> <td>1-24</td> </tr> <tr> <td>E,Y</td> <td>US 2006/0019168 A (LI et al) 26 January 2006 (26.01.2006), paragraph [0012] through paragraph [0083].</td> <td>1-24</td> </tr> <tr> <td>E,Y</td> <td>US 2006/0019167 A (LI) 26 January 2006 (26.01.2006), paragraph [0012] through paragraph [0061].</td> <td>1-24</td> </tr> </tbody> </table>		Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	E,Y	US 2006/0088767 A (LI et al) 27 April 2006 (27.04.2006), paragraphs [0014] through paragraph [0064].	1-24	E,Y	US 2006/0088763 A (LI et al) 27 April 2006 (27.04.2006), paragraph [0011] through paragraph [0044].	1-24	E,Y	US 2006/0083986 A (LI et al) 20 April 2006 (20.04.2006), paragraph [0013] through [0068].	1-24	E,Y	US 2006/0068282 A (KISHI et al) 30 March 2006 (30.03.2006), paragraph [0017] through paragraph [0045].	1-24	E,Y	US 2006/0019168 A (LI et al) 26 January 2006 (26.01.2006), paragraph [0012] through paragraph [0083].	1-24	E,Y	US 2006/0019167 A (LI) 26 January 2006 (26.01.2006), paragraph [0012] through paragraph [0061].	1-24
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<p>Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201</p>	<p>Authorized officer Thomas Parsons Telephone No. (571) 272-1700</p> <p>Jean Proctor Paralegal Specialist</p>																					

INTERNATIONAL SEARCH REPORT

International application No.

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Continuation of B. FIELDS SEARCHED Item 3:

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search terms: battery, molten salt electrolyte, lithium ion battery, electrode capacity, electrode area