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(54) Title: BINDER FOR SECONDARY BATTERY PROVIDING EXCELLENT ADHESION STRENGTH AND CYCLE PROPERTY

(57) Abstract: Provided is a binder for secondary battery electrodes comprising a copolymer consisting of 79 to 98% by weight of at least one selected from the group consisting of (a) an ethylenically unsaturated carbonic acid ester monomer and (b) a vinyl monomer and a nitrile monomer, (c) 1 to 20% by weight of an ethylenically unsaturated carbonic acid monomer, and (d) 1 to 20% by weight of a phosphorus (P)-containing monomer including a P=O bond and one or more reactive double bonds in a molecular structure thereof, based on the total weight of the binder. The binder fundamentally improves stability of an electrode in the process of fabricating the electrode, thus providing secondary batteries with superior cycle properties.



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INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR2011/000395**A. CLASSIFICATION OF SUBJECT MATTER*****H01M 4/62(2006.01)i, H01M 4/485(2010.01)i, H01M 4/583(2010.01)i, H01M 10/0525(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 4/62; H01M 4/36; H01M 4/13

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: binder, battery, copolymer, phosphorus, carbonic acid.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	KR 10-2008-0034219 A (LG CHEM. LTD.) 21 April 2008 See abstract, claims 1-13, paragraphs [0010]-[0121].	1-17
A	KR 10-2009-0125782 A (ZEON CORPORATION) 07 December 2009 See abstract, claims 1-7, paragraphs [0010]-[0169].	1-17
A	KR 10-0642082 B1 (ZEON CORPORATION) 13 November 2006 See abstract, claims 1-2, pages 2-6.	1-17
A	KR 10-2006-0004685 A (ZEON CORPORATION) 12 January 2006 See abstract, claims 1-12, pages 3-9.	1-17
A	KR 10-2000-0075953 A (ZEON CORPORATION) 26 December 2000 See abstract, claims 1-9, pages 2-10.	1-17

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

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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