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(54) Title: POLYURETHANE WITH IMPROVED ABRASION RESISTANCE, THE METHOD FOR PREPARING THE SAME AND USE THEREOF

(57) Abstract: The present invention pertains to a polyurethane with improved abrasion resistance. The reactive component for preparing the polyurethane includes a polybutadiene, wherein the polybutadiene comprises 1,2-butene structure unit, 2,3-(cis) butene structure unit and 2,3-(trans) butene structure unit, wherein the amount of the 2,3-(trans) butene structure unit is more than the amount of the 2,3- (cis) butene structure unit. The polyurethane presented in this invention possesses improved abrasion resistance and good surface quality.

#### INTERNATIONAL SEARCH REPORT

International application No PCT/EP2011/053279

A. CLASSIFICATION OF SUBJECT MATTER INV. C08G18/69 C08L7 C08L75/04 C08G18/69 ADD. 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) C08G C08L 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 C. DOCUMENTS CONSIDERED TO BE RELEVANT Category\* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Χ US 3 674 743 A (VERDOL JOSEPH A ET AL) 1-22 4 July 1972 (1972-07-04) column 3, lines 15-40 column 9, lines 6-9 sentences 47-51; example XII claims 1.8 Χ EP 1 400 561 A1 (STAR URETECH LTD [GB]) 1 - 2224 March 2004 (2004-03-24) paragraphs [0010], [0012] example 1 US 5 688 598 A (KECK MITCHELL T [US] ET AL) 18 November 1997 (1997-11-18) Α 1-22 column 1, lines 8-21
example 1; table 1 -/--Х Х Further documents are listed in the continuation of Box C. See patent family annex. Special categories of cited documents : "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 "A" document defining the general state of the art which is not considered to be of particular relevance invention earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to filing date 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) involve an inventive step when the document is taken alone "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 docu-"O" document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled in the art. other means document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 7 September 2011 15/09/2011 Name and mailing address of the ISA/ Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016

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Information on patent family members

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