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(54) Title: WATER-DISPERSIBLE AND MULTICOMPONENT FIBERS FROM SULFOPOLYESTERS

(57) Abstract: Disclosed are multicomponent fibers derived from a blend of a sulfopolyester with a water non-dispersible polymer wherein the as-spun denier is less than about 6 and wherein the water dispersible sulfopolyester exhibits a melt viscosity of less than 12,000 poise measured at 240° C at a strain rate of 1 rad/sec, wherein the sulfopolyester comprising less than about 25 mole % of residues of at least one sulfomonomer, based on the total moles of diacid or diol residues, and wherein said poly(ethylene) terephthalate has an inherent viscosity of less than 0.55 dL/g. The multicomponent fiber is capable of being drawn at a relatively high fiber speed, particularly at least about 2000 m/min, and may be used to produce microdenier fibers. Fibrous articles may be produced from the multicomponent fibers and microdenier fibers. Also disclosed is a process for multicomponent fibers, nonwoven fabrics, and microdenier webs.



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International application No

PCT/US2007/025661 CLASSIFICATION OF SUBJECT MATTER INV. D01F8/14 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) D01F 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, WPI Data C. DOCUMENTS CONSIDERED TO BE RELEVANT Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. US 2006/194047 A1 (GUPTA RAKESH K [US] ET 1-21 X AL) 31 August 2006 (2006-08-31) cited in the application paragraphs [0144], [0136]; claims 1-20,40,41examples 6,7 X WO 2004/113598 A (EASTMAN CHEM CO [US]) 1-21 29 December 2004 (2004-12-29) cited in the application paragraph [0011] examples 6,7 paragraph [0038] JP 2005 002510 A (TEIJIN CORDLEY LTD) 1,2 6 January 2005 (2005-01-06) abstract 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

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7

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