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(54) Title: ADDITIVES FOR USE IN POLYMER PROCESSING AND METHODS OF PREPARATION AND USE THEREOF

(57) Abstract: Compositions comprising a polymeric liquid and a viscosity modifier comprising a solid material active in lowering the viscosity of the polymeric liquid. The solid material has a particle size of about 75 microns equivalent spherical diameter and is present at a concentration of up to about 2 % by weight of the composition. The solid material can act by lowering the viscosity of the polymeric liquid at stress amplitudes and strain rates where a linear relation exists between stress amplitude and strain rate, and by lowering the viscosity of the polymeric liquid at stress amplitudes and strain rates approaching and exceeding the critical stress value of the polymeric liquid. Methods of preparing and using the compositions, and methods of selecting the solid material, are presented.



WO 2004/016226 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/25906

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C08K 3/34

US CL : 524/445, 456, 492

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)

U.S. : 524/445, 456, 492

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 practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4,347,174 A (NAGASE et al) 31 August 1982 (31.08.1982), see column 8, lines 25 to 30 and Table 5.	1, 2, 5-7, 14, 16-18, 22, 24, 26-28
X	US 5,109,051 A (KROENKE et al) 28 April 1992 (28.04.1992), see entire document.	1, 2, 5-9, 12, 14, 16-18, 22, 24, 26-28, 31
X	US 5,667,842 A (LARSON et al) 16 September 1997 (16.09.1997), see entire document, particularly column 22, lines 51 +.	1, 2, 5-7, 14, 16-19, 22, 24, 26-28

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

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