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(54) Title: LOW INTERFACIAL TENSION SURFACTANTS FOR PETROLEUM APPLICATIONS

(57) Abstract: The invention relates to a class of novel surfactants that have utility in the recovery and/or extraction of oil.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 09/46718

A. CLASSIFICATION OF SUBJECT MATTER
 IPC(8) - C09K 8/584 (2009.01)
 USPC - 507/206
 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)
 USPC- 507/206

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
 USPC- 166/300;
 Patents and NPL

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 PubWest (US Patent, PgPub: classification best fit), DialogClassic (Derwent, EPO, JPO, USPTO, WIPO: keyword), GoogleScholar;
 search terms: surfactant?, recover?, extract?, oil?, spill?, slick?, water?, resorcinol?, resorcin?, asa, alkyl? succinic? anhydr?, glycidyl
 hexadecyl ether?, hydrophob?, hydrophil?, ether?

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 2006/131541 A1 (HUFF et al.) 14 December 2006 (14.12.2006), pg 1, ln 5-18; pg 1, ln 37 to pg 2, ln 40; pg 3, ln 1-19; pg 6, ln 30-37; pg 21, ln 23-32	1-26
Y	WO 2008/033709 A2 (STOKES et al.) 20 March 2008 (20.03.2008), pg 5, para 1; pg 5, para 4; pg 6, para 4; pg 7, para 4 to pg 8, para 1; pg 12, para 4-5; pg 13, para 1; pg 13, para 3; pg 15, para 2; pg 19, para 3	1-26
A	US 5,292,843 A (JENKINS et al.) 08 March 1994 (08.03.1994), entire document	1-26
A	US 4,266,610 A (MEISTER) 12 May 1981 (12.05.1981), entire document	1-26

Further documents are listed in the continuation of Box C.

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"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 invention
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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	

Date of the actual completion of the international search 14 July 2009 (14.07.2009)	Date of mailing of the international search report 19 AUG 2009
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