

(19)



Europäisches Patentamt
European Patent Office
Office européen des brevets



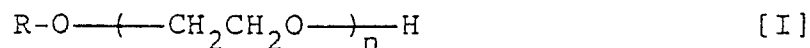
(11) Publication number:

0 340 475 A3

(12)

EUROPEAN PATENT APPLICATION(21) Application number: **89106179.8**(51) Int. Cl.⁵: **D01F 9/14**(22) Date of filing: **07.04.89**(30) Priority: **12.04.88 JP 88154/88**(43) Date of publication of application:
08.11.89 Bulletin 89/45(84) Designated Contracting States:
DE FR(88) Date of deferred publication of the search report:
02.10.91 Bulletin 91/40(71) Applicant: **NIPPON OIL CO. LTD.**
3-12, 1-chome Nishi-Shinbashi
Minato-ku Tokyo 105(JP)(72) Inventor: **Harakawa, Michiharu**
338-104, Iwai-cho Hodogaya-ku
Yokohama-shi Kanagawa-ken(JP)
Inventor: **Sohda, Yoshio**
2-235-638, Kosugi-cho Nakahara-ku
Kawasaki-shi Kanagawa-ken(JP)
Inventor: **Kato, Kenji**
1-1006-A-402, Kosugigotomachi
Nakahara-ku
Kawasaki-shi Kanagawa-ken(JP)(74) Representative: **Kraus, Walter, Dr. et al**
Patentanwälte Kraus, Weisert & Partner
Thomas-Wimmer-Ring 15
W-8000 München 22(DE)(54) **Process for producing pitch-derived carbon fibers.**

(57) A process for producing pitch-derived carbon fibers from pitch fibers produced by melt-spinning a carbonaceous pitch, which comprises adding a polyoxyethylene alkyl ether of the following formula [I]:



wherein R represents an aliphatic hydrocarbon having 8 to 12 carbon atoms and n represents an integer of 3 to 9,

as an emulsifier in an amount of 1 to 12 wt. %, based on an amino-modified silicone oil, to this oil having a molecular weight of 500 to 5,000 and an amine value of 2 to 15 to obtain an aqueous silicone emulsion and then applying the thus obtained emulsion to the pitch fibers when or before bundling the pitch fibers thereby adhering said oil to the pitch fibers in an amount of 0.01 to 0.8 wt. % based on the fibers.

EP 0 340 475 A3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number

EP 89 10 6179

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
X	EP-A-0 159 120 (TAKEMOTO YUSHI K.K.) * Whole document * ---	1	D 01 F 9/145 D 01 F 9/24
X	EP-A-0 157 499 (TAKEMOTO YUSHI K.K.) * Whole document * -----	1	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			D 01 F
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 05-07-1991	Examiner HELLEMANS W.J.R.
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	