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19.02.92 Bulletin 92/08(71) Applicant: **Tonen Corporation**
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London WC2R 0AE(GB)(54) **Carbon fibers sized with a sizing agent.**

(57) Petroleum pitch-derived carbon fibers coated with a sizing agent are disclosed. The sizing agent includes the following ingredients (a)-(c):

(a) an epoxy resin having a number average molecular weight of 550-1600 wherein the content of epoxy resin components which are equivalent to polystyrenes having a molecular weight of 10000 or more with respect to retention time in gel permeation chromatography is less than 5 mol %,

(b) at least one ether compound of the general formula:

$$X - O - Y$$

wherein X represents a polyoxyalkylene group and Y represents an aromatic group; and

(c) an ester compound selected from unsaturated fatty acid esters of an aliphatic monohydric alcohol and aliphatic monocarboxylic acid esters of an unsaturated aliphatic monohydric alcohol, wherein the amounts of ingredients (a)-(c) are 55-84 %, 15-35 % and 1-25 %, respectively, based on the total weight of ingredients (a)-(c).

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EUROPEAN SEARCH REPORT

Application Number

DOCUMENTS CONSIDERED TO BE RELEVANT			EP 90314224.8
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
A	<u>US - A - 4 654 264</u> (ASAI et al.) * Claims *	1,4	D 01 F 11/14
A	DERWENT ACCESSION, no. 85-126 300, Questel Tele- systems (WPIL) DERWENT PUBLICATIONS LTD., London * Abstract * & JP-A-60-65 181 (TOHO BESLON KK) -----	1,4	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			D 01 F D 06 M
The present search report has been drawn up for all claims			
Place of search VIENNA		Date of completion of the search 21-11-1991	Examiner BECK
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			