

(12)

EUROPEAN PATENT APPLICATION

(21) Application number: **84400741.9**

(51) Int. Cl.⁴: **D 06 N 7/00**

(22) Date of filing: **13.04.84**

(30) Priority: **13.04.83 US 484594**

(43) Date of publication of application:
21.11.84 Bulletin 84/47

(88) Date of deferred publication of search report: **21.08.85**

(84) Designated Contracting States:
AT BE CH DE FR GB IT LI LU NL SE

(71) Applicant: **CHEMICAL FABRICS CORPORATION**
Water Street P.O. Box 476
North Bennington Vermont 05257(US)

(72) Inventor: **Effenberger, John A.**
120 Elm Street
Bennington Vermont 05257(US)

(72) Inventor: **Keese, Frank M.**
64 High Street
Hoosick Falls New York 12090(US)

(74) Representative: **Descourtieux, Philippe et al,**
CABINET BEAU de LOMENIE 55 rue d'Amsterdam
F-75008 Paris(FR)

(54) **Novel reinforced fluoropolymer composite and method for making same.**

(57) A novel composite comprises a substrate having a coating matrix including an initial layer of a perfluoropolymer 12 and an overcoat 18 comprising a fluoroelastomer, a fluoroplastic, a fluoroelastomer/fluoroplastic blend, or a combination thereof. The perfluoropolymer in the initial layer may be a perfluoroplastic, a perfluoroelastomer, or blends thereof. In a separate embodiment, the novel composite includes a substrate coated solely with one or more layers of perfluoroelastomer alone or as a blend with a perfluoroplastic. Where the substrate is not susceptible to hydrogen fluoride corrosion, the composite may include solely one or more layers of a fluoroelastomer and a hydrogen-containing perfluoroplastic. Crosslinking acceler-

ators may be used to cross-link one or more of the resins contained in the coating layers. Each composite may be topcoated with a layer or layers of a fluoroplastic, fluoroelastomer, and/or a blend thereof. The composite is flexible, exhibits good matrix cohesion and possesses substantial adhesion of the matrix to the material acting as the reinforcement or substrate. A method for making such a composite comprises the unique deployment of a perfluoropolymer directly onto the substrate in a relatively small amount sufficient to protect the substrate from chemical corrosion without impairing flexibility, followed by the application of the overcoat layer.

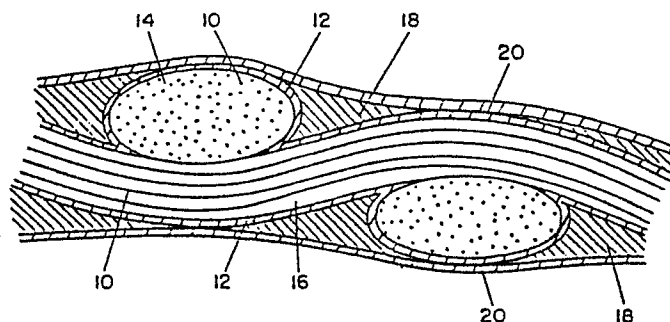


FIG. 1

Croydon Printing Company Ltd.



European Patent
Office

EUROPEAN SEARCH REPORT

0125955

Application number

EP 84 40 0741

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. ³)
X	US-A-3 790 403 (RIBBANS) * Claims 1-7; column 4, lines 30-41; column 7, lines 29-38 *	1,2,7, 9,12, 13,16, 21	D 06 N 7/00
A	DE-B-2 601 569 (CHEMICAL FABRICS CORP.) * Claims 1,4 * -----	1	
			TECHNICAL FIELDS SEARCHED (Int. Cl. ³)
			D 06 N D 06 M
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 25-04-1985	Examiner GINESTET M.E.J.
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	