

(12)

**EUROPEAN PATENT APPLICATION**

(21) Application number: 84106989.1

(51) Int. Cl.<sup>4</sup>: **A 47 L 13/16**  
**A 47 L 17/08, A 47 L 1/15**

(22) Date of filing: 19.06.84

(30) Priority: 22.12.83 IT 2432483

(43) Date of publication of application:  
31.07.85 Bulletin 85/31

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

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

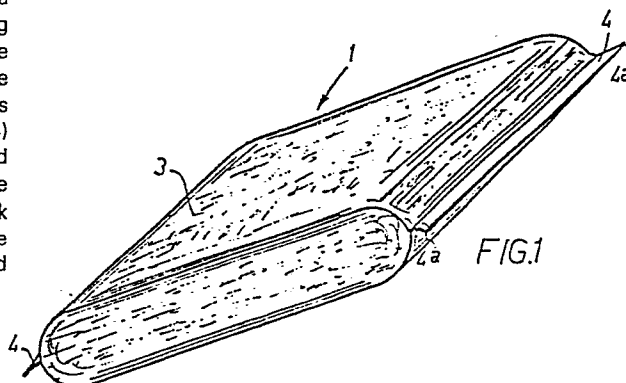
(71) Applicant: **F.I.L.P.A. S.r.l.**  
**Via dei Mille 1 - 1/A - 1/B - 1/C**  
**I-20098 S. Giuliano Milanese (MI)(IT)**

(72) Inventor: **Mantica, Mario**  
**Via P. Solaroli 7/5**  
**Milan(IT)**

(74) Representative: **de Dominicis, Riccardo et al,**  
**de Dominicis & Partners S.a.s. Via Brera, 6**  
**I-20121 Milano(IT)**

(54) **A roughened cleaning sponge particularly for delicate surfaces, and manufacturing method therefor.**

(57) A roughened cleaning sponge, particularly for easily scratched surfaces, such as stainless steel surfaces, surfaces coated with thin layers of a plastic material, motor vehicle windshields, and the like, which comprises a core (2) of a sponge-like materiale covered with an outer roughening fabric (3). Both the core (2) of a sponge-like materiale and the roughening fabric (3), the latter being a knit tubing, are formed from a thermoplastic plastics. The crosswise seams are pressure heat sealed to define a stiff heat sealed band (4) having scraping side and corner portions (4a). A reliable and durable envelope is thus provided for the sponge-like core (2). Manufacturing begins with the formation of a basic blank (6) of some lenght from which individual sponges (1) are fabricated by heat sealing and severing along the heat sealed end bands (4) thereof.





European Patent  
Office

# EUROPEAN SEARCH REPORT

0149705

Application number

EP 84 10 6989

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. 4)
X	DE-A-1 503 794 (MILES LABORATORIES INC.) * Pages 4,12,13; figures 2,7 *	1	A 47 L 13/16 A 47 L 17/08 A 47 L 1/15
A	---	3	
X	GB-A-2 063 058 (GROPPER, G.) * Page 1, lines 92-118; page 2, lines 21-36; figures 3-5 *	1	
A	---	2,3,7	
A	US-A-4 052 238 (BOTVIN, G.B.)		
A	US-A-4 015 306 (FENSTER, L.A.)		TECHNICAL FIELDS SEARCHED (Int. Cl. 4)
A	FR-A-2 112 593 (MOLENA AG)		A 47 L
A	GB-A-1 245 242 (BRENNAN, J.P.)		
	-----		
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 22-04-1985	Examiner MUNZER E.
<b>CATEGORY OF CITED DOCUMENTS</b>			
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	