



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
26.03.2003 Bulletin 2003/13

(51) Int Cl.7: **A43B 13/18, A43B 7/24**

(43) Date of publication A2:
01.08.2001 Bulletin 2001/31

(21) Application number: **01101122.8**

(22) Date of filing: **19.01.2001**

(84) Designated Contracting States:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE TR
 Designated Extension States:
AL LT LV MK RO SI

(72) Inventor: **Attilieni, Attilio**
55010 Tofori (Lucca) (IT)

(74) Representative: **Petruzzelli, Antonio**
European Patent Attorney
C.so Italia, No. 43
20122 Milano (IT)

(30) Priority: **25.01.2000 IT MI000086**

(71) Applicant: **STEFCON S.p.A.**
55013 Lammari (Lucca) (IT)

(54) **Shock-absorbing sole structure**

(57) 1. A shock-absorbing sole structure of the type comprising: a sole with tread (1, 1', 1'', 1''') in turn having at least one heel cavity (3, 3', 3'', 3''') and at least one sole cavity (5, 5', 5'', 5''') on the upper surface of the tread (1, 1', 1'', 1'''), a heel protuberance and a sole protuberance on the lower surface of the tread (1, 1', 1'', 1''') corresponding to the heel cavity (3, 3', 3'', 3''') and respectively to the sole cavity (5, 5', 5'', 5'''); and an element (13, 13', 13'', 13''') for covering the heel cavity (3, 3', 3'', 3''') and the

sole cavity (5, 5', 5'', 5''') to be fixed above the upper surface of the tread (1, 1', 1'', 1'''), characterised in that elastic shock-absorbing means (11t and 11p, 11't and 11'p, 11''t and 11''p, 11'''t and 11'''p) are provided in the housings defined by the internal walls of the heel cavity (3, 3', 3'', 3''') and of the sole cavity (5, 5', 5'', 5''') and by the lower wall of said covering element (13, 13', 13'', 13'''), said elastic shock-absorbing means (11t and 11p, 11't and 11'p, 11''t and 11''p, 11'''t and 11'''p) being formed by a solid material with elastic behaviour similar to air.

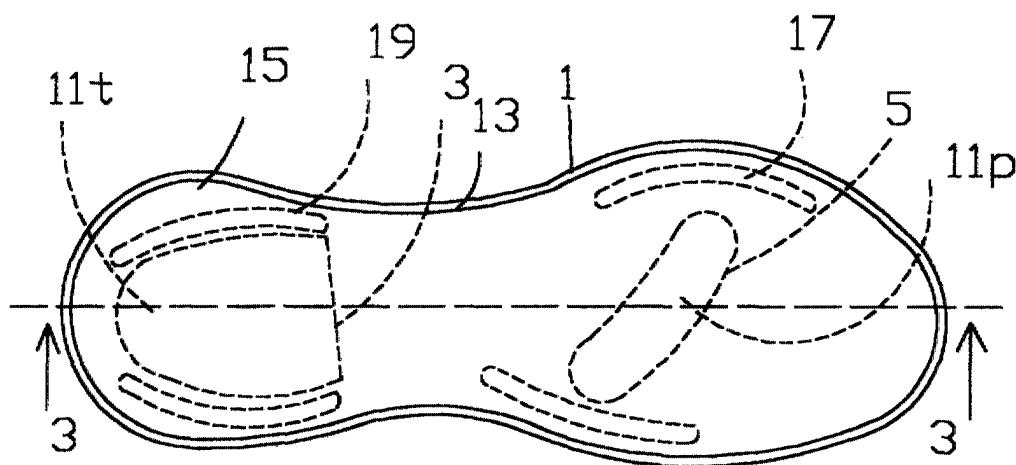


Fig. 1



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 01 10 1122

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.7)
X	DE 87 15 023 U (LEDERER JOSEF) 7 January 1988 (1988-01-07) * the whole document *	1,2,5-7, 10	A43B13/18 A43B7/24
X	GB 1 444 091 A (GRIGGS CO LTD R) 28 July 1976 (1976-07-28) * the whole document *	1,2,8,10	
X	EP 0 743 023 A (SALOMON SA) 20 November 1996 (1996-11-20) * column 3, line 52 - column 5, line 20 *	1,3,6,10	
X	US 5 400 527 A (GOGGIA GIUSEPPE ET AL) 28 March 1995 (1995-03-28) * column 2, line 40 - column 3, line 33; figures 5-8 *	1,3,4,7, 10	
A	WO 98 09546 A (REEBOK INT LTD) 12 March 1998 (1998-03-12) * page 15, line 3 - page 16, line 2; figures 6,7,13,14 *	4	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			A43B
The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 4 February 2003	Examiner Vesin, S
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			

EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 01 10 1122

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

04-02-2003

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
DE 8715023	U	07-01-1988	DE 8715023 U1	07-01-1988
GB 1444091	A	28-07-1976	BE 807229 A1	01-03-1974
			DE 2356936 A1	22-05-1974
			FR 2206666 A5	07-06-1974
			IE 38490 B1	29-03-1978
			IT 999348 B	20-02-1976
			LU 68799 A1	21-01-1974
			NL 7315539 A	16-05-1974
EP 0743023	A	20-11-1996	FR 2734128 A1	22-11-1996
			EP 0743023 A1	20-11-1996
			JP 8317802 A	03-12-1996
US 5400527	A	28-03-1995	IT 1259095 B	11-03-1996
			AT 156974 T	15-09-1997
			DE 69313172 D1	25-09-1997
			DE 69313172 T2	18-12-1997
			EP 0570048 A1	18-11-1993
			JP 2916065 B2	05-07-1999
			JP 7265101 A	17-10-1995
WO 9809546	A	12-03-1998	US 5771606 A	30-06-1998
			AU 728402 B2	11-01-2001
			AU 2740197 A	26-03-1998
			CA 2236713 A1	12-03-1998
			EP 0876113 A1	11-11-1998
			WO 9809546 A1	12-03-1998
			US 6453577 B1	24-09-2002