



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11) **EP 0 986 969 A1**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
22.03.2000 Bulletin 2000/12

(51) Int. Cl.⁷: **A43B 5/14**

(21) Application number: **99117471.5**

(22) Date of filing: **09.09.1999**

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

(30) Priority: **15.09.1998 IT TV980031**

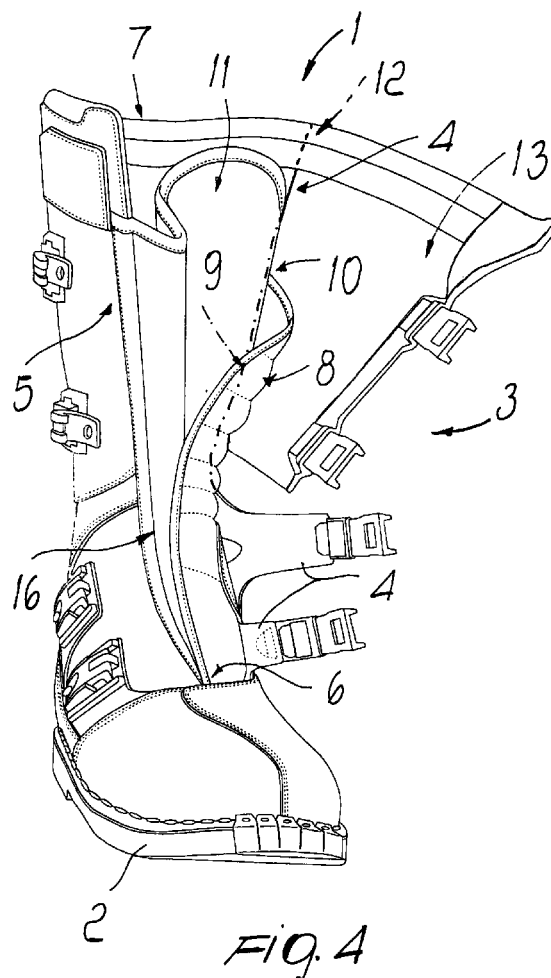
(71) Applicant: **Axo Sport S.p.A.**
31036 Istrana (Treviso) (IT)

(72) Inventor: **Girardi, Sisto**
31040 Trevignano (Treviso) (IT)

(74) Representative:
Modiano, Guido, Dr.-Ing. et al
Modiano & Associati SpA
Via Meravigli, 16
20123 Milano (IT)

(54) **Boot particularly for motorcycling**

(57) A boot, particularly for motorcycling and for motocross, which comprises a sole (2) with which an upper (3) is associated, the upper wrapping around the tibia of the user and having a front region which is open starting from the foot instep region (6) and is formed by a first soft flap (4) and by a second soft flap (5). The upper comprises a third soft flap (8) which protrudes from the foot instep region (6) and is connected, at one side, to the first flap (4) with which a protective plate (13) is associated on the same side, the height of the protective plate (13) being such that it does not affect the foot instep region (6).



EP 0 986 969 A1

Description

[0001] Conventional motocross boots are essentially constituted by a sole where to an upper is stitched which wraps around all of the user's foot and around the tibia up to the vicinity of the region below the knee joint.

[0002] The uppers of these conventional boots were initially made entirely of soft material and the upper was open at the front so as to form a first flap and a second flap which could be mutually partly overlapped and fastened by means of suitable levers or straps.

[0003] However, these conventional boots suffer drawbacks, essentially due to the fact that during sports practice, stones and other blunt objects are often propelled by the motorcycle in movement toward the pilot who is riding behind.

[0004] Accordingly, boots have been provided which entailed the application, at the front region of the tibia, of a plate, usually made of plastics or other rigid material, which was fully stitched along its perimeter at the outer flap of the upper.

[0005] Although this solution allowed to solve the problem of possible accidental impacts against stones or rocks, it led to other disadvantages: the rigidity of the plate in fact caused the entire structure of the boot to be rigid, especially if said plate affected not only the front region of the tibia but also the foot instep region, thus limiting the flexibility of the boot and subjecting the user to considerable fatigue, because the gear selection lever and the brake are operated continuously during sports practice.

[0006] Moreover, the rigidity of the perimetric connection of the plate to the flap made it more difficult for the user to open the boot in order to insert or remove the foot: said plate is in fact pre-formed with respect to the user's leg.

[0007] Another drawback during manufacture is the fact that said rigid plates require, for perimetric stitching, the use of particular machines and the constant and attentive presence of an operator who must be significantly skilled, since he has to adapt, during stitching, the positioning of the soft flap at the perimetric edge of the rigid plate.

[0008] If this coupling during stitching is not exact, tensions form in the upper or material is released, possibly creating localized pressure regions and therefore reducing user comfort.

[0009] The aim of the present invention is to solve the above problems, eliminating the drawbacks of the cited prior art and thus providing a boot for motorcycling and particularly for motocross which allows to achieve both optimum protection of the user's leg and optimum fitting and removal of the boot.

[0010] Within the scope of this aim, an important object is to provide a boot which combines optimum protection of the user's leg with optimum flexibility which consequently further increases user comfort of said boot.

[0011] Another important object is to provide a boot which has a lower production cost.

[0012] Another important object is to provide a boot which can be manufactured even by using personnel that has not been particularly trained.

[0013] Another object is to provide a boot which is structurally simple, reliable and safe in use.

[0014] This aim, these objects and others which will become apparent hereinafter are achieved by a boot, particularly for motorcycling, which comprises a sole with which an upper is associated, said upper wrapping around the tibia of the user and having a front region which is open starting from the foot instep region and is formed by a first soft flap and by a second soft flap, characterized in that it comprises a third soft flap protruding from the foot instep region and is connected, at one side, to said first flap with which a protective plate is associated on the same side, the height of said protective plate being such that it does not affect the foot instep region.

[0015] Further characteristics and advantages of the invention will become apparent from the following detailed description of a particular embodiment, illustrated only by way of non-limitative example in the accompanying drawings, wherein:

Figures 1 and 2 are two side views of a left boot;
Figure 3 is a front perspective view of a partially open right boot;
Figure 4 is a view, similar to Figure 3, of the fully open boot.

[0016] With reference to the above figures, the reference numeral 1 designates a boot which is used particularly in motorcycling and in particular in motocross.

[0017] Said boot is constituted by a sole 2 with which an upper 3 is perimetrically associated, said upper affecting the foot and part of the leg of the user.

[0018] Said upper is constituted by a first flap 4 and by a second flap 5, both of which are soft.

[0019] In the particular embodiment, both the first flap and the second flap affect a region which is adjacent to the front part of the tibia and run from the foot instep region 6 to the upper perimetric edge 7 of the upper 3.

[0020] A front opening is thus provided.

[0021] The boot further comprises a third flap 8 which protrudes at the foot instep region 6 approximately from the coupling point of the second flap 5, then partially wraps around it and is joined, for example by stitching, at the perimetric edge 9 of the first flap 4.

[0022] The third flap also is soft and advantageously the upper point 10 for coupling to the first flap 4 is located amply below the top perimetric edge 7 of the upper.

[0023] The boot further has a fourth flap or accordion-like portion 11 which is soft and connects the perimetric edge 9 of the entire first flap 4 to the corresponding perimetric edge of the second flap 5, so as to constitute an

additional soft element for resting all of the user's tibia.

[0024] Said fourth flap or accordion-like portion 11 is waterproof and prevents the inflow of water, mud and stones during use of the boot.

[0025] One side 12 of a protective plate 13 is associated, preferably by stitching, at part of the perimetric edge 9 of the first flap 4; said plate advantageously has an anatomical shape and is obtained for example by injection-molding a thermoplastic material or by hot-forming thermosetting resin reinforced with carbon-fiber and composite-fiber fabrics.

[0026] Moreover, said plate 13 protrudes beyond said perimetric edge 9 so as to wrap around the front region of the tibia and then the fourth flap 11 and partially around the third flap 8; suitable levers 14 are associated with said plate and, together with other levers which are for example associated with the first flap 4 and/or with optional additional reinforcement plates 15, allow to fasten the boot.

[0027] The plate 13, as mentioned, partially wraps around the third flap 8 in that its dimensions, and particularly its height, are such as to affect the boot starting from the upper perimetric edge 7 of the upper up to the vicinity of the foot flexing region 16, which accordingly is not affected by rigid elements but only by soft components such as the third flap 8 and the fourth flap 11.

[0028] As shown in Figures 4 and 3, it is evident that the described solution allows on the one hand optimum opening of the boot and on the other hand optimum flexibility thereof.

[0029] The association of the protective plate 13 at a single side of the first flap 4 in fact allows to easily open the upper, also thanks to the particular shape of the third flap 8, which accordingly further facilitates foot insertion; for example, the fourth flap or accordion-like portion 11 can be larger than the interspace between the adjacent perimetric edges of the first and second flaps, so as to allow divarication thereof in order to facilitate foot insertion.

[0030] Moreover, the presence of the plate only at the tibia region that does not lie above the leg and foot articulation region allows the user to flex the boot without additional effort.

[0031] It has thus been observed that the invention has achieved the intended aim and objects, a boot for motorcycling, particularly for motocross, having been provided which allows both optimum protection for the user's leg and optimum fitting and removal of the boot.

[0032] Moreover, the boot has optimum flexibility, which further increases user comfort, while stitching the plate on a single side allows to reduce manufacturing costs, since particularly trained personnel is not required.

[0033] The materials and the dimensions that constitute the individual components of the boot may of course be the most pertinent according to specific requirements.

[0034] The disclosures in Italian Utility Model Applica-

tion No. TV98U000031 from which this application claims priority are incorporated herein by reference.

[0035] Where technical features mentioned in any claim are followed by reference signs, those reference signs have been included for the sole purpose of increasing the intelligibility of the claims and accordingly, such reference signs do not have any limiting effect on the interpretation of each element identified by way of example by such reference signs.

Claims

1. A boot, particularly for motorcycling, comprising a sole (2) with which an upper (3) is associated, said upper (3) wrapping around the tibia of the user and having a front region which is open starting from the foot instep region (6) and is formed by a first soft flap (4) and by a second soft flap (5), characterized in that it comprises a third soft flap (8) protruding from the foot instep region (6) and connected, at one side, to said first flap (4) with which a protective plate (13) is associated on the same side, the height of said protective plate (13) being such that it does not affect the foot instep region (6).
2. The boot according to claim 1, comprising a first flap (4) and a second flap (5) which affect a region which is adjacent to the front part of the tibia and run from the foot instep region (6) to the upper perimetric edge (7) of the upper (3) so as to form a front opening, characterized in that it comprises a third flap (8) which begins, at said foot instep region (6), approximately from the coupling point of said second flap (5) and then partially wraps around it and is joined at the perimetric edge (9) of said first flap (4).
3. The boot according to claims 1 and 2, characterized in that said third flap (8) is soft and in that the point (10) where said third flap (8) joins said first flap (4) is arranged amply below the upper perimetric edge (7) of said upper (3).
4. The boot according to claims 1 and 3, characterized in that it comprises a fourth flap (11) or accordion-like portion which is soft and connects said perimetric edge (9) of said first flap (4) to the corresponding perimetric edge of said second flap (5) so as to constitute an additional soft and waterproof element on which the entire tibia of the user can rest.
5. The boot according to claims 1 and 4, characterized in that one side (12) of a protective plate (13) is associated at part of said perimetric edge (9) of said first flap (4).
6. The boot according to claims 1 and 5, characterized in that said plate (13) protrudes beyond said peri-

metric edge (9) of said first flap (4) so as to wrap around the front region of the tibia and said fourth flap (11) or accordion-like portion and partially wrap around said third flap (8).

5

7. The boot according to one or more of the preceding claims, characterized in that said plate (13) partially wraps around said third flap (8), in that the plate dimensions, particularly its height, are such as to affect said boot from said upper perimetric edge (7) of said upper (3) to the vicinity of said foot flexing region (16), which is accordingly not affected by rigid elements but only by soft components, such as said third (8) and fourth flaps (11).

10
15

20

25

30

35

40

45

50

55

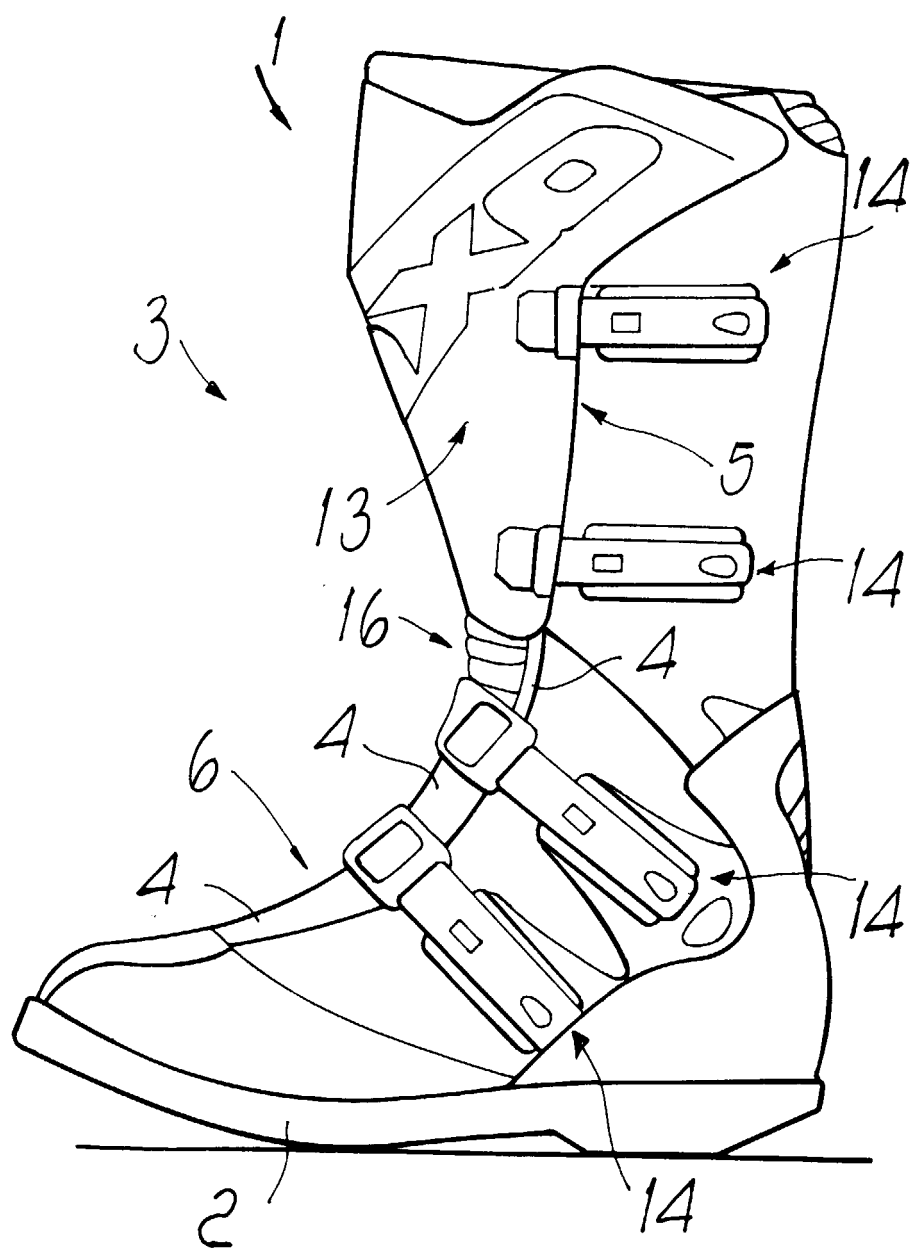


Fig. 1

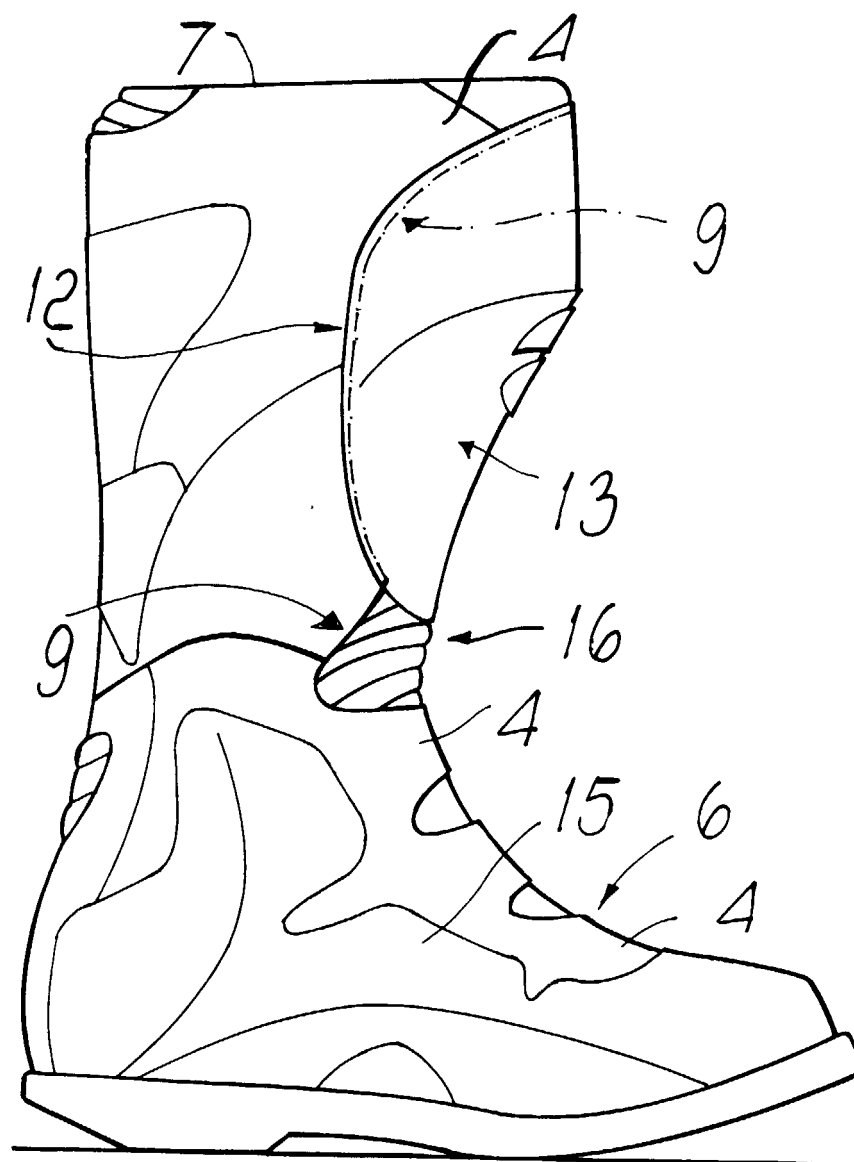


Fig. 2

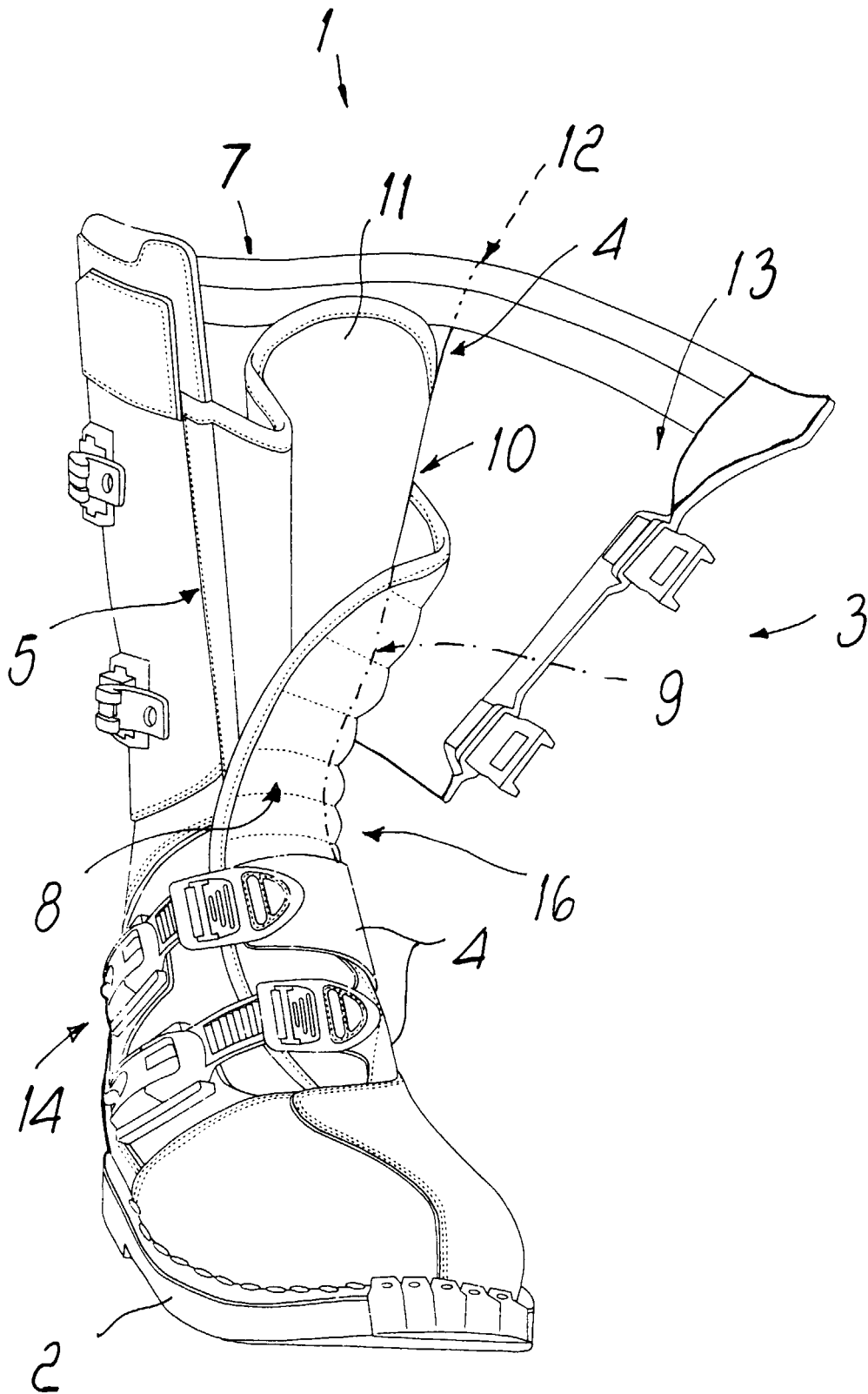
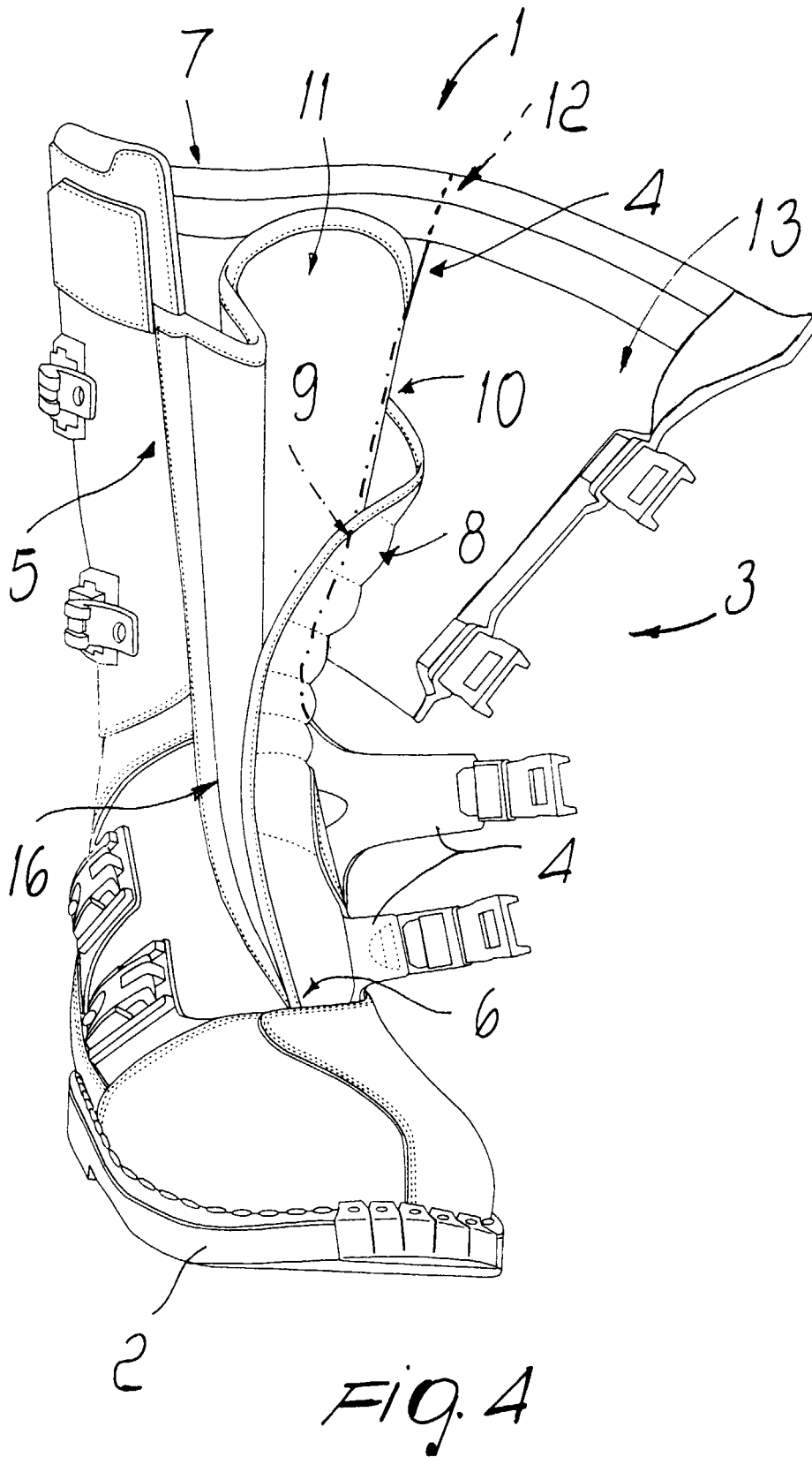


Fig. 3





European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 99 11 7471

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	FR 2 310 717 A (PONTVERT SA RICHARD) 10 December 1976 (1976-12-10)	1,2,7	A43B5/14
Y	* page 6, line 6 - line 30 * * page 4, line 9 - line 12 * * figures *	3,4	
Y	FR 2 313 880 A (NORET & FILS P) 7 January 1977 (1977-01-07) * page 1, line 35 - page 2, line 15 * * figures *	3,4	
A	US 3 783 534 A (PHILLIPS R ET AL) 8 January 1974 (1974-01-08) * column 2, line 25 - line 52 * * figure 2 *		
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.7) A43B
Place of search THE HAGUE		Date of completion of the search 28 December 1999	Examiner van Elk, M
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 99 11 7471

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.

28-12-1999

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
FR 2310717 A	10-12-1976	NONE	
FR 2313880 A	07-01-1977	NONE	
US 3783534 A	08-01-1974	NONE	