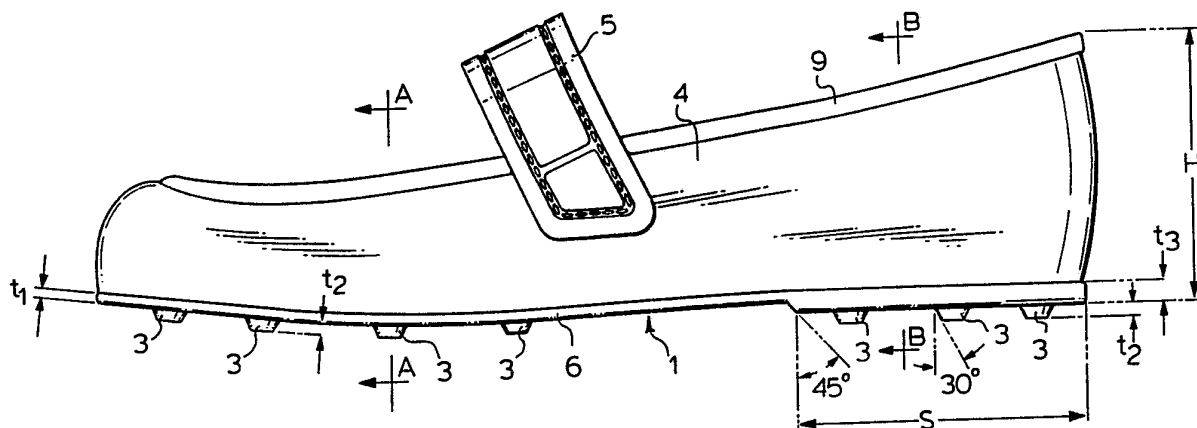




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<p>(21) International Application Number: PCT/CA91/00121 (22) International Filing Date: 11 April 1991 (11.04.91) (30) Priority data: 9008911.1 20 April 1990 (20.04.90) GB (71)(72) Applicant and Inventor: SHELLEY, James, C. [US/CA]; 80 Fifeshire Road, Willowdale, Ontario M2L 2G8 (CA). (74) Agent: PERRY, Stephen, J.; Sim & McBurney, 330 University Avenue, Suite 701, Toronto, Ontario M5G 1R7 (CA). (81) Designated States: AT (European patent), AU, BE (European patent), CA, CH (European patent), DE (European patent), DK (European patent), ES (European patent), FR (European patent), GB, GB (European patent), GR (European patent), IT (European patent), JP, LU (European patent), NL (European patent), SE (European patent), US.</p>		<p>Published <i>With international search report.</i> <i>With amended claims and statement.</i></p>

(54) Title: SHOE SLIP ON GOLF ACCESSORY



(57) Abstract

A slip-on accessory for use with street shoes, comprising an integral upper and sole fabricated from flexible material, integrally formed spikes projecting from said sole, and an integrally formed strap extending from a top portion of said upper on the instep side thereof and having a free end thereof for attachment to the opposite side top portion of said upper.

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SHOE SLIP ON GOLF ACCESSORYTechnical Field

The present invention relates to a transportable
5 golf accessory adapted to fit over ordinary street shoes
or sport shoes for providing full stability and traction
normally attributable to a rigid golf shoe.

Background Art

Overshoes for golf shoes are well known in the prior
10 art. For example, United States Patents 2,260,138
(Feinberg) and 3,559,310 (Kiela) disclose rubberized
overshoes which are intended to be worn over the regular
golf shoe for protection thereof when playing golf over
wet or marsh terrain. However, regular spiked golf shoes
15 are known to be expensive, and can be difficult to pack
in luggage with other clothing when travelling. Thus, a
novice golfer may consider investment in a pair of golf
shoes to be too costly, while a travelling golfer may
find the procedure of transporting such golf shoes to be
20 a nuisance. The latter disadvantage is particularly true
when travelling on a return leg of a journey with shoes
that have been worn for golfing and have collected mud
and dirt thereon. In the presence of other clothing
within a suitcase, the shoes can soil and even
25 permanently damage such other clothing.

One attempt at overcoming the above-noted prior art
disadvantages is disclosed in United States Patent
1,841,710 (Byrne et al). The Byrne et al patent teaches
an overshoe having spiked soles, which may be readily
30 slipped over and removed from a regular pair of shoes, in
order to convert the regular pair of shoes into spiked
shoes and thus replace comparatively expensive spiked
sport shoes. However, the overshoe disclosed in Byrne et
al teaches, in addition to a gum rubber upper and
35 outsole, the use of a leather insole, leather heel and
non-integral spikes or cleats which are clinched to the
leather.

The complex construction with multiple materials as
taught by Byrne et al is not seen to overcome the cost

disadvantage of regular golf shoes. Furthermore, the positioning of the spikes as well as the size of the leather insole are thought to restrict the ability of the overshoe in Byrne et al to fit a broad range of shoe sizes. The leather insole and non-integral cleat construction are also not seen to overcome the disadvantage in prior art golf shoes that such shoes may not be easily transported. Indeed, it is believed that the semi-rigid construction of the overshoe in Byrne et al would suffer from the same disadvantages discussed above with reference to existing prior art golf shoes.

Disclosure of the Invention

In accordance with the present invention, a golf accessory is provided which is not in the form of an overshoe for existing golf shoes but, instead, forms a slip-on over regular street shoes or running shoes, in the manner discussed above with reference to Byrne et al. However, in contrast with the overshoe of Byrne et al, the accessory of the present invention is of completely integral molded rubber construction. The integral rubber construction allows for easy folding and transportation of the slip-on accessory without risking damage to clothing. In addition, the simple integral rubberized composition may be manufactured at low cost, and covers a wide range of foot sizes. Furthermore, the rubber construction of the accessory allows for easy washing thereof without risk of damaging any leather, metallic or other parts such as found in Byrne et al.

According to an aspect of the invention a slip-on accessory is provided for use with street shoes, comprising an integral upper and sole fabricated from flexible material, integrally formed spikes projecting from said sole, and an integrally formed strap extending from a top portion of said upper on the instep side thereof and having a free end thereof for attachment to the opposite side top portion of said upper.

Brief Description of the Drawings

A preferred embodiment of the invention is disclosed in greater detail below with reference to the following drawings in which:

5 Figure 1A is a side view of the slip-on accessory of the present invention with restraining strap in the closed position;

 Figure 1B is a side view of the slip-on accessory of the present invention with the restraining strap in the
10 open position;

 Figure 2 is a cross sectional view along the lines A-A in Figure 1;

 Figure 3 is a cross sectional view along the lines B-B in Figure 1;

15 Figure 4 is a longitudinal cross sectional view of the slip-on accessory of the present invention; and

 Figure 5 is a bottom view of the slip-on accessory of the present invention.

Best Mode for Carrying Out the Invention

20 Referring to the drawings, the slip-on accessory 1 of the present invention is provided for use with a normal street shoe (not shown). The accessory comprises integral upper 4 and sole 6 portions fabricated from flexible rubber such as is commonly used in the
25 construction of overshoes or rubbers. Other suitable plastic or synthetic waterproof and flexible material may be used. Formed integrally with the sole portion 6 are a plurality of spikes or cleats 3 formed of the same materials such that the entire accessory 1 may be
30 manufactured by injection molding. As seen from the drawings each spike conforms generally to the shape of a frustum of right circular cone.

 As an alternative embodiment, the spikes 3 may be fabricated from a rubber or plasticized material having
35 higher durometer rating than the remainder of the upper 4 and sole 6 portions of the accessory.

The accessory is provided with a strap 5 which, in the closed position of Figure 1A, extends across the top portion of the upper 4 from the arch-side of the wearer's foot and is attachable by means of a Velcro™ or other suitable attachment means 7, as shown in Figure 1B. According to the preferred embodiment, the strap 5 is integrally formed with the upper 4. However, as an alternative, the strap 5 may be separately formed and then affixed to the top portion of upper 4 by stitching, gluing, etc.

The strap 5 is located high on the wearer's instep so as to secure the accessory to the instep portion of the wearer's shoe and thereby ensure a stable and snug fit of the accessory to the wearer's shoe for normal walking as well as walking in muddy or marshy terrain, etc.

The rim portion 9 of the upper 4 is preferably reinforced as shown in Figure 2 and 3 by means of thickening of the rubber in order to provide a snug fit over the wearer's shoe.

The reinforcement 9 serves to constrictively engage the edges of the sole and lower portion of the upper of the wearer's shoe for securing the accessory 1 thereto.

More particularly, the accessory of the preferred embodiment comprises the following dimensions:

thickness of the sole 6 is $t_1 = 2.5$ mm;

the distance which each spike 3 extends below the sole 6 is $t_2 = 5$ to 9 mm;

the approximate length of the heel portion is $S = 80$ mm;

the approximate height of the heel section is $H = 72$ mm;

the approximate height of the heel portion of the sole 6 is $t_3 = 5$ mm;

the thickness of the top portion of the sides of upper 4 is $t_4 = 2.5$ mm;

the thickness of the side portions of upper 4 is

$t_5 = 1.5$ mm;

the thickness of top portion 9 at the toe and heel portions of upper 4 is $t_6 = 3$ mm;

the thickness of upper 4 in the toe and heel regions
5 is $t_7 = 2$ mm;

the combined thickness of sole 6 and spike 3 is
 $t_8 = 5.5$ mm.

In summary, the accessory of the present invention provides a spiked overshoe which is of light weight, and
10 which is characterized by better ventilation than most existing golf shoes, and may be easily slipped over a regular, comfortable, pair of shoes, thereby eliminating the requirement for uncomfortable and ill fitting expensive spiked golf shoes. The accessory, being
15 fabricated entirely from highly elastic rubberized or other suitable material, may be stretched to constrictively engage shoes of various sizes and may be folded for compact storage in a pocket or suitcase, etc.

Other modifications and variations of the invention
20 are possible. For example, the spikes or cleats 3 may include internal reinforcement studs if required for improving the wearer's purchase on slippery surfaces. Also, the sole 6 of the accessory 1 may be provided with a plurality of apertures for reducing the weight of the
25 accessory as well as for providing for increased air circulation and consequent cooling of the wearer's feet. These modifications and others are believed to be within the sphere and scope of the present invention as defined by the claims appended hereto.

I CLAIM

1. A slip-on accessory for use with street shoes, comprising an integral upper and sole fabricated from flexible material, integrally formed spikes projecting
5 from said sole, and a strap extending from a top portion of said upper on the instep side thereof and having a free end thereof for attachment to the opposite side top portion of said upper.
- 10 2. The slip-on accessory of claim 1, wherein said flexible material is soft gum rubber.
3. The slip-on accessory of claim 1, wherein said flexible material is waterproof plastic.
15
4. The slip-on accessory of claim 1, wherein said flexible material is waterproof synthetic.
5. The slip-on accessory of claim 1, wherein said
20 flexible material is latex.
6. The slip-on accessory of claim 1, further comprising attachment means for securing said integrally formed strap to said opposite side top portion of said upper.
25
7. The slip-on accessory of claim 6, wherein said attachment means comprises a Velcro™ fastener.
8. The slip-on accessory of claim 1, wherein said upper
30 further includes a toe portion adapted to fit over the toe of said street shoes and a heel portion adapted to receive the heel of said street shoes.
9. The slip-on accessory of claim 8, wherein said top
35 portion of the upper is reinforced to provided a secure fit over said street shoes.

10. The slip-on accessory of claim 9, wherein said upper is approximately 1.5 mm thick on the sides thereof, approximately 2 mm thick in said toe portion and said heel portion, and an additional 1 mm thicker around said top portion of said upper.
11. The slip-on accessory of claim 1, wherein said sole is approximately 2.5 mm thick.
12. The slip-on accessory of claim 1, wherein each of said spikes is in the shape of a frustum of right circular cone extending approximately 5 to 9 mm from said sole and having an outer diameter of approximately 6 mm and inner diameter of approximately 4 mm.
13. The slip-on accessory of claim 1, wherein said strap is integrally formed with said upper.
14. The slip-on accessory of claim 1, wherein said strap is separately formed and attached to said top portion of said upper.

AMENDED CLAIMS

[received by the International Bureau on 9 September 1991 (09.09.91);
original claims 6 and 7 cancelled; original claim 1 amended;
claims 8-14 renumbered as claims 6-12;
other claims unchanged (2 pages)]

1. A slip-on accessory for use with street shoes,
comprising an integral upper and sole, integrally formed
spikes projecting from said sole, and a strap extending
5 from a top portion of said upper on the instep side
thereof and having a free end thereof for attachment to
the opposite side top portion of said upper; said
integral upper and sole, integrally formed spikes and
said strap being of single mold construction fabricated
10 from flexible material, and further comprising attachment
means for securing said integrally formed strap to said
opposite side top portion of said upper, and wherein said
attachment means comprises a Velcro™ fastener.
- 15 2. The slip-on accessory of claim 1, wherein said
flexible material is soft gum rubber.
3. The slip-on accessory of claim 1, wherein said
flexible material is waterproof plastic.
- 20 4. The slip-on accessory of claim 1, wherein said
flexible material is waterproof synthetic.
5. The slip-on accessory of claim 1, wherein said
25 flexible material is latex.
6. The slip-on accessory of claim 1, wherein said upper
further includes a toe portion adapted to fit over the
toe of said street shoes and a heel portion adapted to
30 receive the heel of said street shoes.
7. The slip-on accessory of claim 6, wherein said top
portion of the upper is reinforced to provided a secure
fit over said street shoes.
- 35 8. The slip-on accessory of claim 7, wherein said upper
is approximately 1.5 mm thick on the sides thereof,

9.

approximately 2 mm thick in said toe portion and said heel portion, and an additional 1 mm thicker around said top portion of said upper.

5 9. The slip-on accessory of claim 1, wherein said sole is approximately 2.5 mm thick.

10 10. The slip-on accessory of claim 1, wherein each of said spikes is in the shape of a frustum of right circular cone extending approximately 5 to 9 mm from said sole and having an outer diameter of approximately 6 mm and inner diameter of approximately 4 mm.

15 11. The slip-on accessory of claim 1, wherein said strap is integrally formed with said upper.

12. The slip-on accessory of claim 1, wherein said strap is separately formed and attached to said top portion of said upper.

STATEMENT UNDER ARTICLE 19

Claim 1 has been amended to recite that the integral upper and sole, integrally formed spikes, and strap are all made of single mold construction fabricated from flexible material, to distinguish over the cited Adair reference. Adair discloses an overshoe with metal cleats which are threaded into the sole of the overshoe. Adair teaches the use of washers located on the inside which, in turn, are overlaid by separate heel and sole pads which, in turn, are overlaid and by a complete insole. By way of contrast, amended claim 1 recites a slip-on accessory in which the entire accessory is integrally formed using a single mold and is fabricated from a single flexible material. This results in inexpensive yet durable construction.

Claim 1 has been further amended to incorporate the subject matter of claims 6 and 7 to further distinguish from the cited art. These claims are directed to a user-friendly Velcro™-type strap to ensure a secure fit of the slip-on accessory in all golfing manoeuvres.

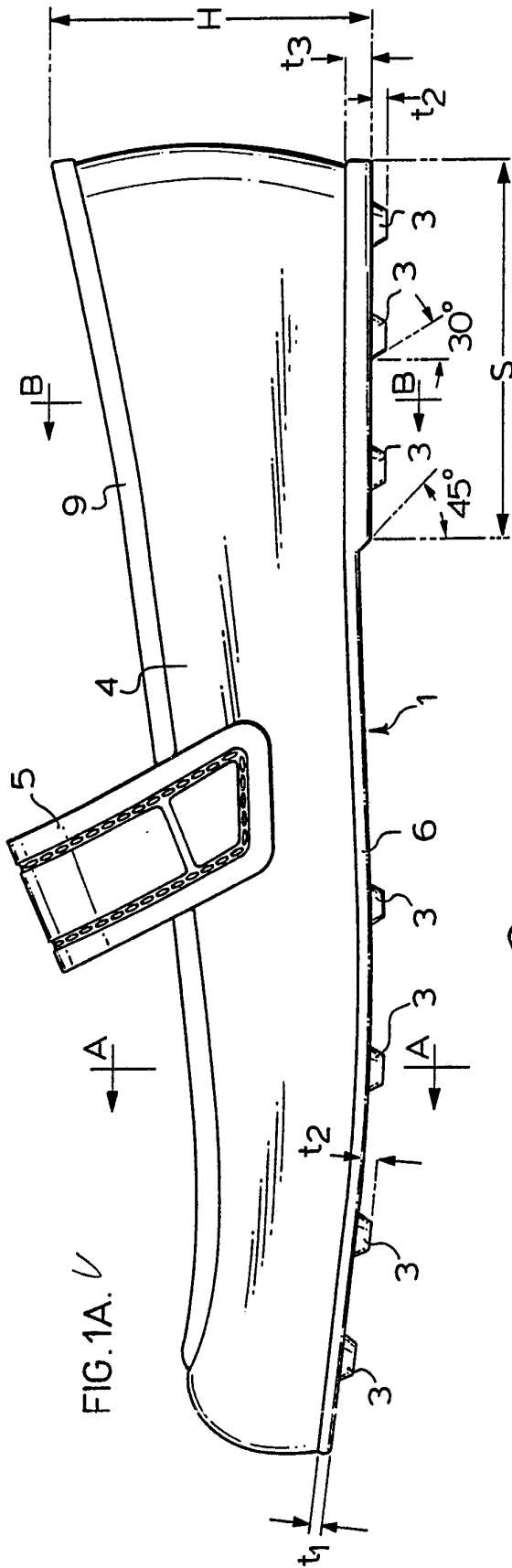


FIG. 1A.

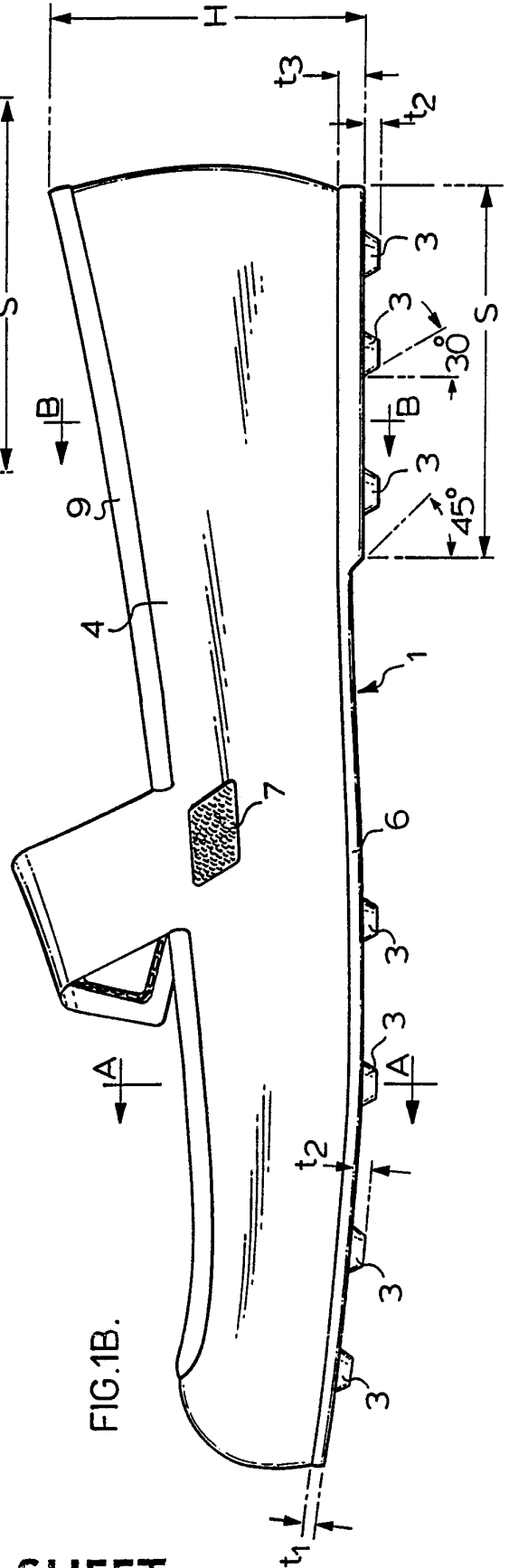
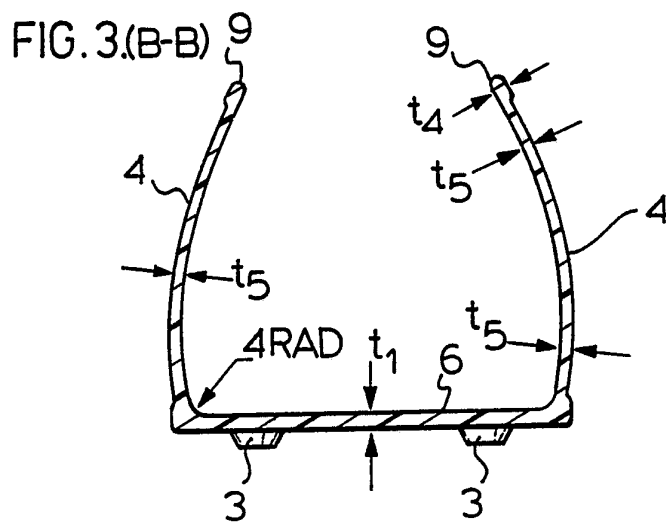
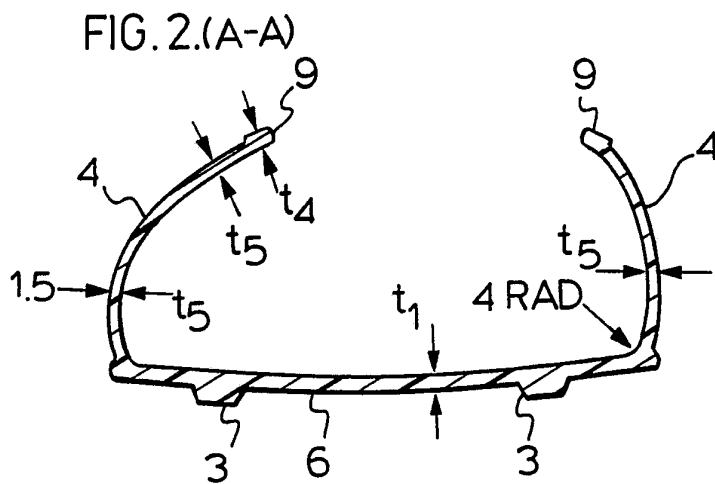
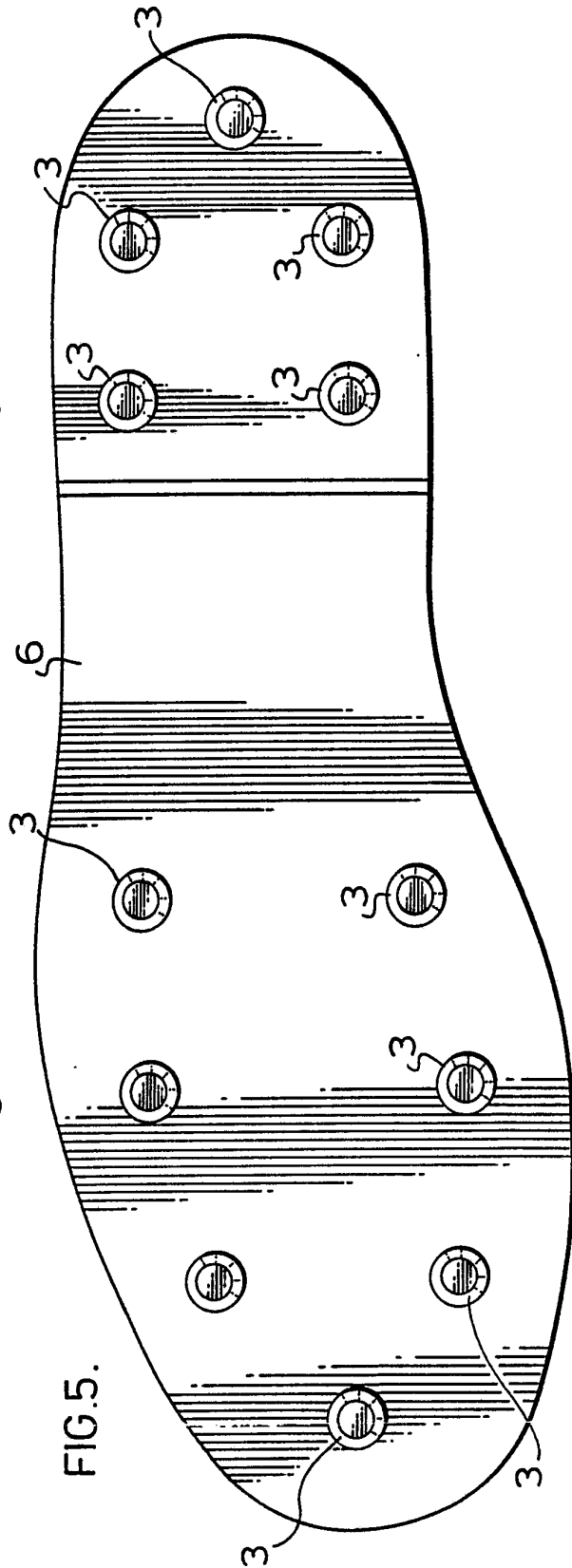
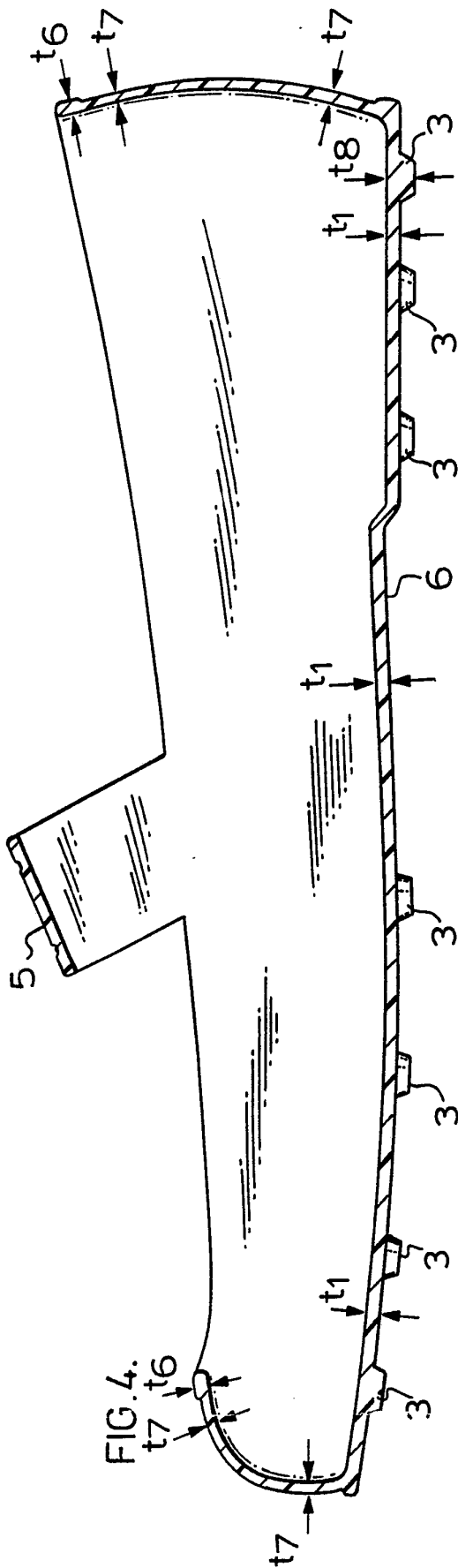


FIG. 1B.





INTERNATIONAL SEARCH REPORT

International Application No PCT/CA 91/00121

I. CLASSIFICATION OF SUBJECT MATTER (if several classification symbols apply, indicate all) *		
According to International Patent Classification (IPC) or to both National Classification and IPC		
IPC ⁵ : A 43 B 5/18		
II. FIELDS SEARCHED		
Minimum Documentation Searched ⁷		
Classification System	Classification Symbols	
IPC ⁵	A 43 B	
Documentation Searched other than Minimum Documentation to the Extent that such Documents are Included in the Fields Searched ⁸		
III. DOCUMENTS CONSIDERED TO BE RELEVANT ⁹		
Category ⁹	Citation of Document, ¹¹ with indication, where appropriate, of the relevant passages ¹²	Relevant to Claim No. ¹³
X	US, A, 3643352 (R. ADAIR) 22 February 1972 ---	1, 2
A	US, A, 4010558 (J. SLUSHER) 8 March 1977 ---	1-6, 14
A	US, A, 2102601 (G. MURBER) 21 December 1937 ---	1
A	US, A, 1841710 (E. BYRNE) 19 January 1932 cited in the applicaiton -----	1
<p>* Special categories of cited documents: ¹⁰</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>"&" document member of the same patent family</p>		
IV. CERTIFICATION		
Date of the Actual Completion of the International Search	Date of Mailing of this International Search Report	
11th June 1991	10 JUL 1991	
International Searching Authority	Signature of Authorized Officer	
EUROPEAN PATENT OFFICE	MISS T. TAZELAAR	

ANNEX TO THE INTERNATIONAL SEARCH REPORT
ON INTERNATIONAL PATENT APPLICATION NO.

CA 9100121
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned international search report. The members are as contained in the European Patent Office EDP file on 27/06/91. The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US-A- 3643352	22-02-72	None	
US-A- 4010558	08-03-77	None	
US-A- 2102601		None	
US-A- 1841710		None	