(12) **PATENT** (11) Application No. AU 199864872 B2 **AUSTRALIAN PATENT OFFICE** (10) Patent No. 751401 (19) (54)Underwear for men  $(51)^7$ International Patent Classification(s) A41B 009/02 Application No: 199864872 (21) (22)Application Date: 1998.05.13 Priority Data (30)(31)Number (32) Date (33) Country PO6766 1997.05.13 ΑU Publication Date: (43)1998.11.19 Publication Journal Date: 1998.11.19 (43)(44)Accepted Journal Date: 2002.08.15 (71) Applicant(s) **Bonds Industries Limited** (72)Inventor(s) **David Thompson** (74)Agent/Attorney FREEHILLS CARTER SMITH BEADLE, Level 43,101 Collins Street, MELBOURNE VIC 3000 (56)Related Art EP 0448772

#### **Abstract**

Underwear for men having a body portion 12 terminating in an elasticised waistband 14, the body portion also having a front panel 18. The front panel 18 has a pouch 16 formed therein to accommodate the genitals of the wearer with the pouch 16 being formed with no seams and no joins.

### **EDITORIAL NOTE-NO.64872/98**

There are 2 pages of drawings in this specification, containing figures 1 to 3

**AUSTRALIA** 

Patents Act 1990

# ORIGINAL COMPLETE SPECIFICATION STANDARD PATENT

Invention Title:

**Underwear for men** 

The following statement is a full description of this invention, including the best method of performing it known to me/us:

#### UNDERWEAR FOR MEN

#### Field of the invention

This invention relates to underwear for men and refers particularly, though not exclusively, to underwear for men in which there is a pre-formed pouch to accommodate male genitalia.

#### 5 Background of the invention

Underwear for men have been produced in many forms, shapes and styles. Many of these styles such as the traditional boxer shorts are quite spacious or roomy and thus there is no tendency of the garment itself to provide pressure onto the genitals of the wearer, which pressure may cause pain or irritation. Other forms such as the slim-line briefs provide a quite compact garment which may cause such pressure and which may therefore cause pain and/or discomfort to the wearer.

Other forms of underwear for men have included in them a pouch for the accommodation of the genitals of the wearer. However, this has always been formed by the use of extra material. This has been made possible by use of a panel which is added to an opening in the existing garment. This requires the use of seams and joins. Those seams and joins have provided irritation, discomfort and even pain to wearers. They have also increased manufacturing costs.

It is therefore the principal object of the present invention to provide underwear for men with a pouch for the genitalia, with there being no seams or joins.

#### 20 Brief description of the invention

With the above and other objects in mind the present invention provides underwear for men having formed therein a pouch to accommodate genitalia, the pouch being formed from the material of the garment without joins or seams.

#### Brief descriptions of the drawings

In order that the invention may be fully understood there shall now be described by way of non-limitative example only preferred embodiments of underwear for men incorporating the principal features of the present invention, the description being with reference to the accompanying illustrative drawings in which:

Figure 1 is a perspective view of a first embodiment;

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Figure 2 is a front view of a second embodiment; and

Figure 3 is a front view of the first embodiment.

#### **Description of preferred embodiment**

The underwear for men illustrated in Figures 1 and 3 is in the form of relatively tight-fitting boxer shorts, of a style which have become popular of late. They have longer legs 10 which extend down part of the way of the thighs of a wearer but are not loose as in traditional boxer shorts, and are designed to be somewhat of a close or tight fitting.

They also have a body portion 12 terminating in an elasticised waistband 14. The body portion 12 is again intended to be relatively tight. However, this form of underwear is by no means limitative and traditional forms of underwear such as full boxer shorts, slim-line briefs, and so forth may be used.

The garment has a pouch 16 formed on the front panel 18 so as to accommodate the genitals of the wearer. The pouch is formed to be of sufficient size to accommodate the normal size of genitalia, although pouches of varying sizes may be made in different garments so as to allow for varying sizes of genitalia, if desired. The pouch is formed with no seams, and no joins. The pouch has a larger lower portion 20 and a more elongate top portion 22. The top portion 22 may be tapered if desired.

The pouch 16 is formed by the made garment being placed over an appropriately shaped mould which is placed inside the garment immediately under front panel 18. An external mould is then placed over the front panel 18. The moulds are moved towards each other until both contact the panel 18. The moulds are heated by an electric element to form the pouch. The pouch is then formed permanently. Preferably, the temperature used is approximately 30°C above the finishing temperature of the fabric which, in the instance of one fabric, is 180C.

Most preferably, the garment is held in the mould for a period of time such as, for example, 18 seconds, to assist with the formation of the pouch. At the end of that period, the moulds are removed and the garment passed on for further processing or packaging.

Figure 2 shows a different embodiment which is a form of underwear for men in the style of hipster briefs. The same reference numerals are used for like components, but with the addition of a prefix number 2. As can be seen, the pouch 216 is generally the same as the pouch 16, and is formed in a similar manner.

The material of the garments may be any suitable material. For example, it may be made of a pure cotton material, or a cotton-blend material. Furthermore, other suitable material such as those including wool or other suitable materials may be used. The principal requirement for the material is to have memory so that once the pouch is formed it will retain the shape of the pouch for the life of the garment.

Furthermore, the formation of the pouch should be such that it does not cause a significant weakening of the material at or around the pouch so that unnecessary wear will occur. In this way the integrity of the garment will be retained.

Whilst there has been described in the foregoing description a preferred embodiment of underwear for men it will be understood by those schooled in the art that many variations or modifications in details or design or construction may be made without departing from the essential features of the present invention.

It will be understood that the invention disclosed and defined herein extends to all alternative combinations of two or more of the individual features mentioned or evident from the text or drawings. All of these different combinations constitute various alternative aspects of the invention.

It will also be understood that where the term "comprises" or its grammatical variants, is employed herein, it is equivalent to the term "includes" and is not to be taken as excluding the presence of other elements or features.

#### THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

- 1. Underwear form men having formed therein a pouch to accommodate genitalia, the pouch being formed, from the material of the garment without joins or seams.
- 5 2. Underwear as claimed in claim 1, wherein the pouch is formed on a front panel of the underwear.
  - 3. Underwear as claimed in claim 1 or claim 2 wherein the pouch is formed to be of sufficient size to accommodate the normal size genitalia of a male.
- 4. Underwear as claimed in any one of claims 1 to 3, wherein the pouch has a relatively larger lower portion and a relatively elongate top portion.
  - 5. Underwear as claimed in claim 4, wherein the top portion is tapered away from the lower portion.
  - 6. A method of forming a pouch in an item of underwear for men as claimed in any one of claims 1 to 6, wherein a manufactured garment is placed over an appropriate shaped internal mould which is placed inside the garment immediately under a front panel, an external mould then being placed over the front panel of the two moulds moved towards each other until both contact the panel, the moulds then being heated to form the pouch.
- A method as claimed in claim 6, wherein the moulds are heated to a
   temperature approximately 30 degrees Celsius above a finishing temperature of the fabric.
  - 8. A method as claimed in claim 6 or claim 7, wherein the panel of the garment is held in the moulds for a period of time to assist with the formation of the pouch; at the end of the period of time the moulds being removed.
- 25 9. A method as claimed in claim 8, when the period of time is from 15 to 25 seconds.
  - 10. A method as claimed in claim 8, wherein the period of time is 18 seconds.



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- 11. Underwear for men substantially as hereinbefore described with reference to the accompanying drawings.
- 5 12. A method of forming a pouch in an item of underwear for men substantially as hereinbefore described with reference to the accompanying drawings.

**Bonds Industries Limited** 

by their Registered Patent Attorneys

10 FREEHILLS PATENT ATTORNEYS

13 May, 1998

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