Title: APPAREL WITH DISCREET POCKET

Abstract: Underwear having a concealed pocket for securely and safely holding valuables and other items therein and including underwear for males having improved design for health and comfort.
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(b))
TITLE: Apparel with discreet pocket

DESCRIPTION:

The present invention relates to apparel or clothing having pockets and, more particularly, to underwear having; a discreet concealed pocket for securely and safely holding valuables and other items therein; in relation to underwear for males improved support for male genitalia providing improvements in health and comfort.

BACKGROUND TO THE INVENTION:

There exists prior art in relation to the design and manufacture of clothing and underwear and including pockets, such as for example US Patents Nos. 7,231,672 (Thomas), 8,321,964 (Gernes), 7,926,123 (Walburg), 6,353,940 (Lyden) and 7,676,853 (Cutlip).

One problem that exists in our society today wherein we seek to direct the attention especially of the younger generations to the use of condoms for “safe sex”, we find that at least some of the younger generation are embarrassed to carry condoms because the condoms may become visible to their peers or elders such as in a wallet or handbag.

Another problem that exists with prior art apparel pockets is that the pockets and their contents tend to bunch up tending to become more visible and uncomfortable when the wearer transitions from a standing to a seated position. Also, flexing of individual condom packets can contribute to degrading the effectiveness of the condom.

Another problem that exists in relation to prior art underwear is that there is a need to maximise the comfort to the wearer without unduly constraining the body and to avoid increasing temperature of body parts which can have or at least contribute to deleterious effects, including deleterious effects on male fertility.

It is an object of the present invention to provide items of clothing including a discreet and secure pocket means of carrying at least a condom and having an improved design to eliminate or at least minimise aspects deleterious to male fertility.

Whereas the aforesaid art is directed to the formation of various pocket-equipped garments and in some instances concealed pockets, no effort has been made to form a garment pocket, having due regard to the locus of the inguinal creases, and the pocket opening such that the garment pocket and contents thereof will not bunch up and will be urged to, without crushing bending or folding, lie mostly against either the lower torso or
the upper leg when the wearer of the garment is in sitting position. This invention, as will be noted, is directed to the latter, in distinction over the prior art.

SUMMARY OF THE INVENTION:

Any discussion of the prior art throughout this specification should in no way be considered as an admission that such prior art is widely known or forms part of common general knowledge in the field.

Pockets in outer and underwear can present an unattractive view and can be uncomfortable to the wearer when the wearer transitions from an upright to a seated position, whereby the pocket and contents become folded or are urged to become a more visible protrusion deleterious to the comfort of, or annoying to, the wearer. The folding or compressing of pocket and contents especially in a sitting position depends mainly on the design and positioning of the pocket so that it is not folded in the inguinal creases as the wearer transitions from a standing to a sitting position. Said inguinal creases normally being located on the body of a person at or in close proximity to the juncture between the lower torso and uppermost area of each leg so that a theoretical line drawn from the end of each of the 2 inguinal creases would meet and form a ‘V’ at the groin of the wearer.

Present social mores direct attention especially of the younger generations to the use of condoms for “safe sex”. However, it can often be embarrassing to the younger generations to visibly carry such items.

It is an object of the present invention to provide a discreet pocket, in clothing including underwear, to contain at least one or more of a condom or a credit card or money and to at least improve the comfort of the wearer and minimise the visual discernibility of the pocket on the garment.

In one preferred embodiment the present invention underwear pants, being described in the normal position of a wearer who is standing upright, are made of preferably a stretch fabric containing at least 3% spandex and having a pocket formed so that the said pocket is attached to or spaced apart from or immediately adjacent to the lower edge a waistband of thicker elasticised material on the internal front wall of said underwear pants by affixing by known means a piece of similar fabric having at least a portion of the edge of the fabric not affixed so as to create an opening to the pocket and disposed so that in the process of the wearer transitioning from a standing position to a seated position the pocket and contents thereof are urged to lay flat against the lower torso or to lay flat against or form a discrete fold lying flat against the upper leg of the wearer below the inguinal crease. Additionally, Said underwear pants also may be sold to consumers together with a condom in the said pocket.

In yet another embodiment of the present invention pants including underwear pants, being described in the normal position of a wearer who is upright, are made of preferably a stretch fabric containing at least 3% spandex and having a pocket formed by affixing by known means a piece of similar fabric having at least a portion of the edge of the fabric
not affixed or alternatively releasably affixed so as to create an opening to the pocket which may be held closed by means such as indicated in US Patents 8,321,964 (Gernes) and 7,926,123 (Walburg) and said pocket being disposed so that the lower edge, being the edge opposite to the opening, is located above the inguinal crease, and further disposed so that in the process of the wearer transitioning from a standing position to a seated position the pocket and contents thereof are urged to remain approximately flat against the lower torso or to lay flat or in close proximity to the surface of the upper leg or form a discrete fold laying flat or in close proximity to the surface of the upper leg.

In another embodiment of the present invention the pocket opening may additionally have a known means to securely close the opening by known means such as by a flap and or zip and or Velcro such as indicated in US Patent 7926123 (Walburg) and said pocket may advantageously be located on the internal front wall of said underwear pants and affixed on, or spaced apart from or immediately adjacent to the lower edge of, a waistband of thicker elasticised material

In another preferred embodiment the present invention pants and pocket, the said pocket consists of a piece of material or fabric releasably affixed to the internal surface of the underpants such that the contents desired to be held in the pocket are held between the releasably affixed fabric and the inner wall of the garment at a desired location. Said releasably affixed fabric may be affixed by any suitable means such as Velcro or gluing as indicated in US Patent 8,321,964 (Gernes). The location of the pocket in pants is defined by the location of the pocket opening in relation to the inguinal crease. The pocket opening being at the upper edge of the pocket when the wearer of the pants is in an upright position.

In another embodiment of the present invention pants with pocket, the pocket consists of front and back walls of material affixed together by known means as indicated in US Patent 7,231,672 (Thomas) leaving an opening at one end and said pocket is affixed to the desired location according to the invention on an inside surface of said pants.

In prior art underwear for men eg Bonds style CL500223 032 and many others the structure of the underwear garment includes an integral frontal "pouch" (Pouch) constructed from shaped pieces of material or cloth or fabric (Material) sewn together to make the Pouch. The said Pouch provides a cover to contain and support male genitals. The shape of said Pouch is determined by the relative measurements and shape of the pieces of Material as cut and the way in which said pieces of Material are sewn together.

In prior art, the ratio of the average width of the top and bottom seams of the Pouch i.e. the sum of the length of the top and bottom seams or edges of the Pouch measured between the edge seams at the top (top meaning at or adjacent to the waist or waistband of the garment and crotch) expressed as a proportion of the width of Pouch at widest part between centres of side edges seams (Widest Width) is less than 2.3 (Ratio A) and the ratio of the Widest Width divided into the length of the vertical centre line of the Pouch is greater than 1.6 (Ratio B).

In a preferred embodiment of the present invention the Ratio A is at least 2.3 and the Ratio B is less than 1.40 or 1.55 or 1.60 and when measured from centres of side seams at, or as close as possible to, 90 degrees to the said edge seams and the garment
unstretched not while someone is wearing them which is the method of measuring used herein.

In yet another preferred embodiment a Pouch may be formed by shaping one or more pieces of fabric or material by known means to adopt a form having dimension whereby the said Ratio A is at least 2.3 and the said Ratio B at least less than 1.48 or 1.55 or 1.60.
BRIEF DESCRIPTION OF THE DRAWINGS

Fig 1. is a front elevation view of a lower torso and upper legs in a standing position wearing pants outlined in dotted lines and including 3 pockets according to the present invention.

Fig 2. is an enlarged sectional view of the invention of Figure 1 taken between the lines 2-2 in Fig 1 but with the wearer of the pants having transitioned from a standing to a sitting position.

Fig. 3. is a front elevation view of a lower torso and upper legs in a standing position showing the approximate location of the inguinal crease and the zones in which a pocket may be located in a preferred embodiment of the present invention.

Fig. 4. is a plan frontal view of elements of pants showing; the disposition of elements consisting a Pouch giving improved and healthy support and less restriction to the male genitals; and the relevant elements relevant to measurements and proportional ratios of the present invention. Element 65 is one of 2 leg accommodating openings.

Fig 5. Is a sectional view, in the direction indicated by dotted line 3 to 3 in Fig 4, of pouch 330 taken through seam 315 between centres of seams or edges 340 and 335 showing the curved form of the Pouch extending from the centre of seam 335 along the whole length of seam 315 to the centre of seam 340.

Fig 6. Is a sectional view of pouch 330 taken through line 4-4 in Fig 4) in a view towards the waistband 60 (not shown) and is the section showing the widest width portion of the Pouch 330 between sides/ seams 345 and 350.

DESCRIPTION OF PREFERRED EMBODIMENTS

Fig 1. is a front elevation view of a lower torso and upper legs 10 in a standing position and showing the approximate location of the inguinal crease 20. Said inguinal crease has a corresponding mirror image inguinal crease on the opposite side of the body. The said torso is displayed wearing pants 50 of a modified boxer style having a short leg portion 55 and also having one or more of pockets 70, 74 and 78 of the present invention. Said pants and pockets outlined in dotted lines and further showing by dotted lines a waist band 60 made of a thicker more strongly elastic material. Said one or more pocket affixed
or releasably affixed by known means but leaving one end unaffixed to create an opening to said pocket.

Fig. 2 is a sectional view of portion of pants 50 including pocket 74 and waistband 60 along the dotted line 2-2 in Fig. 1 but with the wearer of the said pants represented in a seated position said wearer represented by; the lower torso and upper legs 10; lower torso 12; lower torso surface 15; upper leg 14; and upper leg surface 25. The present invention combination of pants 50 and pocket 74 shows said pocket having; a front wall consisting of portion of pants front wall of 105 affixed by known means to the lower portion of waistband 60; a back wall 150; an optional flap or closure means 160, said pocket depicting contents 170; said pocket and contents and portion of the front wall of the pants 105 laying substantially without twisting or bending or folding of contents 170 together with part of a fold 180 in the said front wall 105 against or in close proximity to the surface 25 of upper leg 14 of the wearer.

Fig 3. Is a representation of a lower torso and upper part of the legs 10 in a standing position and showing the approximate location of the inguinal crease 20 and a triangular area 210 outlined in dotted lines surrounds the preferred area of the body surface adjacent to which at least a major portion of the open end of a pocket formed on pants may be advantageously located when for example pants containing said pocket are worn by a wearer in a standing position. A further triangular area 230 outlined in dotted lines surrounds a second preferred area of the body adjacent to which at least the open end of a pocket may be located with opening to the said pocket being the uppermost portion of the said pocket when pants containing said pocket are worn by a wearer in a standing position. The sides of triangles 210 and 230 adjacent to the inguinal crease 20 are approximately 15 mm apart and parallel. Side 212 of triangle 210 is located between 50 mm and 75 mm from a vertical centerline passing through the umbilicus and shown as a dotted line A A.

The foregoing description applies to both left and right sides of a body and corresponding pants as in a horizontally flipped or reversed image thereby producing a corresponding 2 similarly located triangles on the corresponding opposite side of said body.

Fig. 4. Is a representation of the front portion of pants 50 oriented approximately as the said pants would appear when worn by a person thus having waistband 60 or similar located above the other parts of the said pants. The present invention includes an improved means of covering and supporting male genitals in a cooler more healthy and less constricting way than prior art. In the present embodiment, more than one shaped pieces of stretchable cloth in this example there are 2 pieces 310 and 320 are affixed together at one edge (unnumbered) at seam 315 by known means and further affixed at seams and or edges 335, 340, 345 and 350 to other elements, including crotch piece 329 to form pants having a shaped cover or Pouch 330 bounded by edges and or seams at edges 335, 340, 345 and 350 and having a seam 315 which in this preferred example is a central seam bisecting the said pouch vertically (vertically referring to the orientation of said pants when worn by a wearer.

Alternate arrangements may also be made so that more than 2 pieces of said stretchable cloth may be used in place of said pieces 310 and 320 and may have seams oriented differently to the examples herein. The said shaped pieces of stretchable cloth 310 and
320; are in this example mirror images of each other; and for sake of simplifying drawings the edges numbered 335 and 340 of said pieces 310 and 320 are not separately shown in Fig. 4 but instead the combined edge of joined pieces 310 and 320 are referred to as edges or seams 335 and 340 contiguous across said pieces 310 and 320.

In a preferred embodiment of the present invention, the Widest Width of the Pouch measured between centres of seams/ curved sides 345 and 350 at the intersections with section line 4-4 (also referred to as measurement 328 in Fig. 6) divided by half the sum of the lengths of sides 335 and 340 using the same unit of measure, produces a ratio of at least 2.25 or 2.3 and in the same preferred embodiment the length of curved side or seam 315 measured between seams/sides 335 and 340 and (also referred to as measurement 318 in Fig. 5) divided by the aforesaid Widest Width and using the same units of measure, produce a ratio of less than 1.6 or 1.5 or 1.45. Section line 3-3 has been drawn in Fig 4. slightly apart from seam 315 for reason of visibility but the actual measurement is taken at and section 3-3 shown in Fig 6. is contiguous with seam 315.

In yet another embodiment (not shown) the Pouch may be formed of one or more pieces of formable fabric by known means such as, being placed or held in a mold or over a shape of the desired proportions of the Pouch and set by known means such as heat so that Pouch is urged to configure to the desired shape and then tend to remain as set until the said fabric is stretched during wearing but when the said fabric returns to an unstretched state, the Pouch re-assume the desired shape of the present invention.

Fig 5. Is a sectional view of pouch 330 taken through seam 315 (also referred to as being the view section line 3-3 in the explanation to Fig 4) between centres of seams or edges 340 and 335 showing the curved form of the Pouch extending as shown by the bracket 318 from the centre of seam 335 joining pouch edge 335 with waistband 60 along the whole length of seam 315 to the centre of seam 340 joining pouch edge 340 to crotch piece 329 (refer Fig 4). Said measurement 318 is also referred to as the measurement of the seam length 315.

Fig 6. Is a sectional view of pouch 330 taken through line 4-4 in Fig 4) in a view towards the waistband 60 (not shown) and is the section showing the widest width portion of the Pouch 330; said Widest Width as depicted by bracket 328 being measurement between centres of seams 345 and 350 or may also be described as measurement between edges 345 and 350 of joined cloth pieces 310 and 320 said join being seam 315.

While there has been shown and described preferred embodiments of apparel with concealed pocket in accordance with the invention, it will be appreciated that many changes and modifications may be made therein without, however, departing from the essential spirit and scope thereof.

All publications, patents, patent applications, and other documents cited in this application are incorporated by reference in their entirety for all purposes to the same extent as if each individual publication, patent, patent application, and/or other document were individually indicated to be incorporated by reference for all purposes.
REFERENCES CITED:

US Patents Nos.

7,231,672 (Thomas),
8,321,964 (Gernes),
7,925,123 (Walburg),
6,353,940 (Lyden)
7,676,853 (Cutlip)
666,246 (Henderson)
2,498,048 (Neinken)
2,544,840 (Kowatsch)
3,137,862 (Mizerak)
3,149,343 (Jacobson)
4,006,494 (Knoppel)
4,068,321 (Chayer)
4,077,067 (Kozdal)
4,139,914 (Tarr)
4,145,762 (Wallach)
5,561,865 (Fielstul)
6,199,215 (Biggerstaff)
CLAIMS:

1. Underwear pants having a pocket, suitable to contain a condom, formed by affixing on the internal front wall of underwear pants, by known means, a piece of fabric forming a pocket and having an opening at the upper edge of the pocket and the pocket located so that, when the wearer is standing, the opening to the pocket is located in a zone defined as commencing at a point nearest to the wearers navel and extending away therefrom and which point is 55mm to 204mm below the navel and 75mm to 205mm away from the theoretical centreline running vertically through the wearers navel AND OR commencing at a point represented by the inguinal crease formed at junction of the upper legs and torso.

2. Underwear pants having a shaped frontal portion or Pouch having an upper and lower edge and 2 side edges wherein the ratio of the average of the width of the top and bottom edges of the Pouch expressed as a proportion of the width of Pouch at widest part is greater than 2.25 or greater than 2.3 and the ratio expressed as the Widest Width when divided into the length of the centre seam of the Pouch is less than 1.5 or 1.6
INTERNATIONAL SEARCH REPORT

International application No. PCT/AU2014/001005

A. CLASSIFICATION OF SUBJECT MATTER

A41D 27/20 (2006.01) A41B 9/02 (2006.01)

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic database consulted during the international search (name of database and, where practicable, search terms used)

1. WPI, EPODOC: IPC, CPC A41B 9/02/low, A41D 27/20/low, A41B 9/00+ and keywords (Pocket, near, navel, juncture, torso, upper-leg, inguinal) and like terms.

2. WPIAP, EPODOC: IPC, CPC A41B 9/02/low, A41B 9/04, A41D 27/20, 2/403/UC, 2/400/UC and key words (Pocket, near, navel, juncture, torso, upper-leg, inguinal) and like terms.

3. Google Patents and Espacenet: Keywords (brief, pocket, condom, inguinal) and like terms.

4. AUSPAT, Espacenet for Applicant’s and Inventor’s names (Adriaanse, Annelise; Higgins, Christopher).

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
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<tr>
<th>Category*</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
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<td>Documents are listed in the continuation of Box C</td>
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 Further documents are listed in the continuation of Box C  See patent family annex

* Special categories of cited documents:
  "A" document defining the general state of the art which is not considered to be of particular relevance
  "E" earlier application or patent but published on or after the international filing date
  "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)
  "O" document referring to an oral disclosure, use, exhibition or other means
  "P" document published prior to the international filing date but later than the priority date claimed

"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

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"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

"&" document member of the same patent family

Date of the actual completion of the international search: 19 March 2015

Date of mailing of the international search report: 19 March 2015

Name and mailing address of the ISA/AU

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Authorised officer

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AUSTRALIAN PATENT OFFICE
(ISO 9001 Quality Certified Service)
Telephone No. 0262223642

Form PCT/ISA/210 (fifth sheet) (July 2009)
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<td>GB 2440711 A (WILLIAM McCREADY) 13 February 2008 Figure 2, page 1</td>
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<tr>
<td>X</td>
<td>FR 2686778 A1 (COLESNICENCO NICULAE) 06 August 1993 Figure 3, Machine Translation</td>
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<td>DE 102005027857 A1 (SVECHNIKOV VADYM) 29 June 2006 Figures 3,4, Machine Translation</td>
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<td>X</td>
<td>DE 10225792 A1 (HOEFELE JOSEF) 08 January 2004 Figure, Machine Translation</td>
<td>1</td>
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<td>A</td>
<td>US 5172430 A (LERMA-SOLIS) 22 December 1992 Whole document</td>
<td>1</td>
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<td>A</td>
<td>US 5067178 A (KATCHKA) 26 November 1991 Whole document</td>
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## INTERNATIONAL SEARCH REPORT

### Box No. II  Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. **☐** Claims Nos.:
   - because they relate to subject matter not required to be searched by this Authority, namely:
     the subject matter listed in Rule 39 on which, under Article 17(2)(a)(i), an international search is not required to be carried out, including

2. **☐** Claims Nos.:
   - because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. **☐** Claims Nos.:
   - because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

### Box No. III  Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

**See Supplemental Box for Details**

1. **☐** As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. **☐** As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.
3. **☐** As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. **X** No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1

### Remark on Protest

- **☐** The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- **☐** The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- **☐** No protest accompanied the payment of additional search fees.

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Form PCT/ISA/210 (third sheet) (July 2009)
Continuation of: Box III
This International Application does not comply with the requirements of unity of invention because it does not relate to one invention or to a group of inventions so linked as to form a single general inventive concept.

This Authority has found that there are different inventions based on the following features that separate the claims into distinct groups:

- Claim 1 is directed to underwear pants having a pocket, suitable to contain a condom, "formed by affixing on the internal front wall of underwear pants, by known means, a piece of fabric forming a pocket and having an opening at the upper edge of the pocket and the pocket located so that, when the wearer is standing, the opening to the pocket is located in a zone defined as commencing at a point nearest to the wearer's navel and extending away therefrom and which point is 55mm to 204mm below the navel and 75mm to 205mm away from the theoretical centreline running vertically through the wearer's navel AND OR commencing at a point represented by the inguinal crease formed at juncture of the upper legs and torso". It is considered that the feature in italics within inverted commas comprises a first distinguishing feature.

- Claim 2 is directed to underwear pants having a shaped frontal portion or Pouch "having an upper and lower edge and 2 side edges wherein the ratio of the average of the width of the top and bottom edges of the Pouch expressed as a proportion the width of Pouch at widest part is greater than 2.25 or greater than 2.5 and the ratio expressed as the Widest Width when divided into the length of the centre seam of the Pouch is less than 1.5 or 1.6." It is considered that the feature in italics within inverted commas comprises a second distinguishing feature.

PCT Rule 13.2, first sentence, states that unity of invention is only fulfilled when there is a technical relationship among the claimed inventions involving one or more of the same or corresponding special technical features. PCT Rule 13.2, second sentence, defines a special technical feature as a feature which makes a contribution over the prior art.

When there is no special technical feature common to all the claimed inventions there is no unity of invention.

In the above groups of claims, the identified features may have the potential to make a contribution over the prior art but are not common to all the claimed inventions and therefore cannot provide the required technical relationship. The only feature common to all of the claimed inventions is underwear. However it is considered that this feature is generic in this particular art.

Therefore this common feature cannot be a special technical feature. Hence there is no special technical feature common to all the claimed inventions and the requirements for unity of invention are consequently not satisfied a priori.
This Annex lists known patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

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