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- (72) Inventor; and
- (71) Applicant: MCGILL, Naomi, Rachael [AU/AU]; 1107 Quay West, The Rocks, NSW 2000 (AU).
- (74) Agent: VARSITY IP; PO Box 391, Varsity Lakes, Queensland 4227 (AU).
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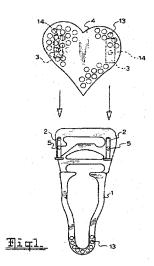
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(57) Abstract: Methods and apparatus for decorating suspender clips comprising attaching a removable shape to said clip and further comprising encrusting of said shape and clip with precious or semi precious stones.



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MEANS FOR DECORATING SUSPENDER CLIPS

FIELD OF THE INVENTION

5 This invention relates to suspender clips and in particular to their decoration.

BACKGROUND OF THE INVENTION

Suspenders and suspender clips, in some form, have been used for many years by men and women to hold up pants, stockings, socks and hosiery.

As originally used, suspenders and clips were of conservative design and colour and clips were constructed of metal. In recent years there has been a market trend towards fashionable and colourful suspenders and clips.

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Accordingly suspender clips are now available in many colours and shapes, including coloured metal clips, coloured plastic clips, clips with engraved patterns or printed images, or clips of novelty shapes such as coins, stars, hands and bears.

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Currently, the adornment of suspender clips cannot be changed and one must purchase each shaped or coloured clip separately. As a result, to save on costs, suspender clips are generally made of low quality materials and tend to break and be replaced regularly.

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There have been numerous patent documents which disclose basic clip design such as GB198959, GB350404, GB484758 and GB650156. However we have not found any documents which address the issue of decoration of the suspender clips. In particular a clip with interchangeable decorative shapes would eliminate the need for purchasing multiple clips and would allow for the clip to be made of higher quality material so as not to break

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OBJECT OF THE INVENTION

It is therefore an object of the present invention to provide means for decorating suspender clips or at least to provide an alternative to current suspender clips.

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STATEMENT OF THE INVENTION

According to the present invention means for decorating suspender clips comprise shapes removably attached to said clips.

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- Preferably the shape is attached to the clip by a stud and clasp mechanism in which one or more clasps are fixed to either the clip or the shape and are secured on one or more mating studs fixed to the other of the clip or shape.
- Preferably, the one or more clasps have a small protrusion which snaps into a corresponding groove in the one or more mating studs to secure the shape on the front of the suspender clip.
- Preferably the shape is removed from the front of the suspender clip by sliding the shape upwards from the clip so that the protrusions leave the grooves and the clasps disengage the studs.
 - Alternatively the shape is attached to the clip by a hinge mechanism in which a central hinge member is fixed to the shape and is retained by a transverse pin located in holes through the sides of the clip and in which one or more studs located on the shape snap into one or more mating grooves in the clip.
 - Preferably the shape can be removed from the front of the suspender clip by rotating the shape away from the clip until the studs disengage the grooves and then removing the pin from the holes in the clip.

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Preferably the attachment of the shapes allows for adjustment of suspender straps.

Preferably the means also involves encrusting the clip and/or the shape with precious or semi precious stones.

Preferably the means also involves manufacturing the clip and/or the shape from precious metals such as gold, silver or platinum.

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BRIEF DESCRIPTION OF THE DRAWINGS

An embodiment of the invention is now described by way of example only with reference to the accompanying drawings in which:

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Fig 1 is a front elevation of a suspender clip adapted to receive a removable heart shape attachment

- Fig 2 is a plan view from above of the suspender clip of Fig 1 with heart shape attached
- Figs 3 is a side elevation of the suspender clip of Fig 1 with heart shape attached Fig 4 is a front elevation of a suspender clip with an alternative mechanism for attaching a removable heart shape shown above the clip Fig 5 is a plan view from above of the suspender clip of Fig 4 with heart shape
 - attached and
- 25 Fig 6 is a side elevation of the suspender clip of Fig 4 with heart shape attached.

DETAILED DESCRIPTION OF THE INVENTION

In Fig 1 suspender clip 1 has stude 2 adapted to receive metal clasps 3 fixed to the underside of removable shape 4. Clasps 3 have small protrusions 14 which snap into grooves 5 in stude 2 thereby securing removable shape 4 on the front of suspender clip 1 as shown in Figs 2 and 3. Shape 4 can be detached from clip

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1 simply by sliding shape 4 upwards from clip 1 so that protrusions14 leave grooves 5 and clasps 3 disengage studs 2. The attachment of shape 4 to clip 1 allows adjustment of suspender strap (now shown).

- Fig 4 shows a suspender clip 1 with an alternative hinge attachment mechanism.

 Central hinge member 7 is fixed to underside of shape 4 and sides 6 of clip1 have holes 8 so that pin 9 is inserted through holes 8 and hinge member 7 thereby hinging shape 4 to clip 1.
- 10 Shape 4 pivots about pin 9 to allow adjustment of the suspender strap (not shown) within receiving slots 10. Shape 4 also has stude 11 adapted to snap into grooves 12 on top of clip 1 thereby securing shape 4 on the front of clip 1 as shown in Figs 5 and 6. Removable shape 4 is detached from suspender clip 1 by rotating shape 4 away from clip 1 until stude 11 disengage grooves 12 and by removing pin 9 from holes 8.

Suspender clip 1 and removable shape 2 are made from high quality materials such as gold, silver or platinum and further decorated by encrusting precious stones 13 as shown in Figs 1 through 6. Suspender clip 1 may also be rhodium, gold or silver plated and decorated with Swarovski crystals or cubic zirconium. Clips 1 have a cross section thick enough to allow for the stones to be pressed into their outer surfaces during production.

ADVANTAGES

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It will be obvious that these methods of construction of clips 1 allow a range of ornamental shapes to be removably attached to them. Accordingly the basic clip can be made from valuable materials such as gold, silver and platinum and encrusted with precious stones and sold with custom made interchangeable shapes. This results in clips which are high fashion accessories and not just a functional suspension device such as existing clips.

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VARIATIONS

It will be realized that the foregoing has been given by way of illustrative example only and that all other modifications and variations as would be apparent to persons skilled in the art are deemed to fall within the broad scope and ambit of the invention as herein set forth.

Throughout the description and claims of this specification the words "comprise" and variations of that word such as "comprises" and "comprising" are not intended to exclude other additives components integers or steps.

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CLAIMS

1. Means for decorating suspender clips comprising shapes removably attached to said clip.

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2. The means of claim 1 in which the shape is attached to the clip by a stud and clasp mechanism in which one or more clasps is fixed to either the clip or the shape and are secured on one or more mating studs fixed to the other of the clip or shape.

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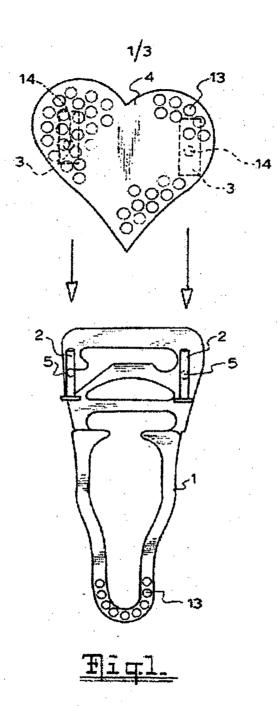
- 3. The means of claim 2 wherein the one or more clasps have a small protrusion which snaps into a corresponding groove in the one or more mating studs to secure the shape on the front of the suspender clip.
- 4. The means of claim 3 wherein the shape is removed from the front of the suspender clip by sliding the shape upwards from the clip so that the protrusions leave the grooves and the clasps disengage the studs.
- 5. The means of claim 1 in which the shape is attached to the clip by a hinge mechanism in which a central hinge member is fixed to the shape and is retained by a transverse pin located in holes through the sides of the clip.
 - The means of claim 5 wherein the shape has one or more studs which snap into one or more mating grooves in the clip to secure the shape on the front of the suspender clip.
 - 7. The means of claim 6 wherein the shape can be removed from the front of the suspender clip by rotating the shape away from the clip until the studs disengage the grooves and then removing the pin from the holes in the clip.
 - 8. The means of claim 1 which allow for adjustment of suspender straps.

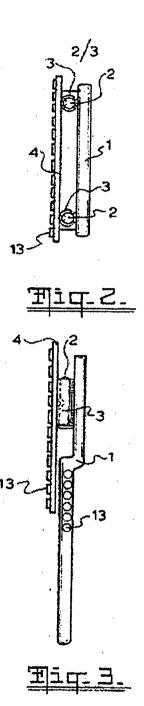
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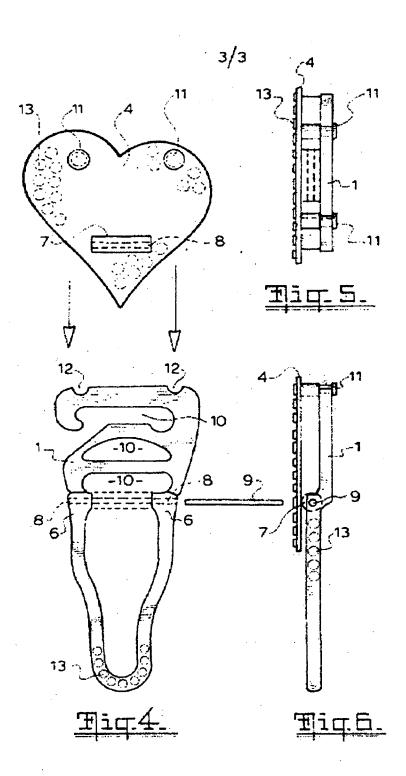
- 9. The means of any of the preceding claims wherein the shape is encrusted with precious or semi precious stones.
- 5 10. The means of any of the preceding claims wherein the suspender clip is encrusted with precious or semi precious stones.
 - 11. The means of any of the preceding claims wherein the shape is manufactured from precious metals.

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- 12. The means of any of the preceding claims wherein the suspender clip is manufactured from precious metals.
- 13. The means of any of the preceding claims wherein the shape is manufactured from gold, silver or platinum.
- 14. The means of any of the preceding claims wherein the suspender clip is manufactured from gold, silver or platinum.
- 20 15. Means for decorating suspender clips comprising precious or semi precious stones encrusted on said clip.







International application No. PCT/AU2010/000884

A. CLASSIFICATION OF SUBJECT MATTER Int. Cl. A44C 1/00 (2006.01) A41F 3/00 (2006.01) A41F 5/00 (2006.01) According to International Patent Classification (IPC) or to both national classification and IPC 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 data base consulted during the internat ional search (name of data base and, where practicable, search terms used) DWPI & EPODOC: A44C1/00, A44B11, 21/00, A41F3, 5/00, 11/14 and Keywords (clip+, clasp+, clamp+, remov+, +chang+, decorat+, shape+, logo+, stud+, pin+, snap+, hing+, pivot+, slid+, rotat+, (+precious_stone+), encrust+, embellish+, gold, silver, platinum and like terms) Google Patents: decorate suspender clip fashion style; USPTO: US Classes 2/336, 2/340, 2/329 C. DOCUMENTS CONSIDERED TO BE RELEVANT Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. US 5054128 A (WIMMER) 8 October 1991 Х Figures 1-5 1, 2, 8, 11-14 9, 10, 15 US 2004/0187194 A1 (GILLIAM) 30 September 2004 X Paragraphs 15, 16, 19 and figure 1 1, 2, 8, 11-14 9, 10, 15 US 6006365 A (STRANDBERG) 28 December 1999 X Column 4 lines 37-48 and figures 2-4 1, 2, 8, 11-14 Y 9, 10, 15 US 5560045 A (ROCKEFELLER) 1 October 1996 X Column 4 lines 42-53, column 5 lines 15-25 and drawings 1, 2, 9-15 9, 10, 15 X X See patent family annex Further documents are listed in the continuation of Box C Special categories of cited documents: "A" document defining the general state of the art which is later document published after the international filing date or priority date and not in not considered to be of particular relevance conflict with the application but cited to understand the principle or theory underlying the invention пЕп earlier application or patent but published on or after the 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 international filing date "L" document which may throw doubts on priority claim(s) document of particular relevance; the claimed invention cannot be considered to or which is cited to establish the publication date of involve an inventive step when the document is combined with one or more other another citation or other special reason (as specified) such documents, such combination being obvious to a person skilled in the art "O" document referring to an oral disclosure, use, exhibition document member of the same patent family document published prior to the international filing date but later than the priority date claimed Date of the actual completion of the international search Date of mailing of the international search report 17 SEP 2010 15 September 2010 Name and mailing address of the ISA/AU Authorized officer S. GHOSH AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA AUSTRALIAN PATENT OFFICE E-mail address: pct@ipaustralia.gov.au (ISO 9001 Quality Certified Service) Facsimile No. +61 2 6283 7999

Telephone No: +61 2 6283 2163

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C (Continuation	on). DOCUMENTS CONSIDERED TO BE RELEVANT	
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 7412730 B2 (SCHROEDER) 19 August 2008	
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Box No.	Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)
This inter	national search report has not been established in respect of certain claims under Article 17(2)(a) for the following
1.	Claims Nos.:
	because they relate to subject matter not required to be searched by this Authority, namely:
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.	II Observations where unity of invention is lacking (Continuation of item 3 of first sheet)
·	
	national Searching Authority found multiple inventions in this international application, as follows:
See E	xtra Sheet
1.	As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. · X	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.	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.:
Remark o	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.

International application No.

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Supplemental Box

(To be used when the space in any of Boxes I to IV is not sufficient)

Continuation of Box No: 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.

In assessing whether there is more than one invention claimed, I have given consideration to those features which can be considered to potentially distinguish the claimed combination of features from the prior art. Where different claims have different distinguishing features they define different inventions.

This International Searching Authority has found that there are different inventions as follows:

- Claims 1 to 14 are directed to a means for decorating suspender clips comprising shapes removably attached to said clip. It is considered that the shapes that are removably attached to the suspender clip comprise a first distinguishing feature.
- Claim 15 is directed to a suspender clip comprising precious or semi-precious stones encrusted on said clip. It is considered that the feature of the precious or semi-precious stones being encrusted on said clip 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.

Each of the abovementioned groups of claims has a different distinguishing feature and they do not share any feature which could satisfy the requirement for being a special technical feature. Because there is no common special technical feature it follows that there is no technical relationship between the identified inventions. Therefore the claims do not satisfy the requirement of unity of invention a priori.

It is also noted that the only common feature between claims 1 and 15 relates to the suspender clip(s) which is/are generic in the art.

Furthermore, the only common feature between claims 10 and 15 is the suspender clip being encrusted with precious or semi-precious stones. However this concept is not novel in light of:

US 5560045 A (ROCKEFELLER) 1 October 1996.

This means that the common feature can not constitute a special technical feature within the meaning of PCT Rule 13.2, second sentence, since it makes no contribution over the prior art.

Because the common feature does not satisfy the requirement for being a special technical feature it follows that it cannot provide the necessary technical relationship between the inventions defined in claims 1 and 15 and claims 10 and 15. Therefore claims 1, 10 and 15 also do not satisfy the requirement of unity of invention *a posteriori*.

Information on patent family members

International application No. PCT/AU2010/000884

This Annex lists the known "A" publication level 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.

Patent Document Cited in Search Report		Patent Family Member					
5054128	NONE		· · · · · · · · · · · · · · · · · · ·	······································			
2004187194	US	2004243325	US	7161455	US	2004225471	
	US	7274553	ÚS	2004222782	US	7417419	
6006365	NONE				•		
5560045	NONE						
7412730	US	2006272076					
	Search Report 5054128 2004187194 6006365 5560045	Search Report 5054128 NONE 2004187194 US US 6006365 NONE 5560045 NONE NONE	Search Report 5054128 NONE 2004187194 US 2004243325 US 7274553 6006365 NONE 5560045 NONE	Search Report 5054128 NONE 2004187194 US 2004243325 US US 7274553 US 7274553 US 6006365 NONE 5560045 NONE	Search Report 5054128 NONE 2004187194 US 2004243325 US 7161455 US 7274553 US 2004222782 6006365 NONE 5560045 NONE	Search Report 5054128 NONE 2004187194 US 2004243325 US 7161455 US US 7274553 US 2004222782 US 6006365 NONE 5560045 NONE	

Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.

END OF ANNEX