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(54) **UNISEX GARMENT FOR THE PHYSICALLY AND MENTALLY DISABLED**

(57) The invention relates to a unisex garment for the physically and mentally disabled to be used preferably by people who find it difficult to dress and/or undress themselves or require the assistance of others thereto. Said garment consist of a top part or T-shirt (2) and a lower part or undershorts (3), both parts being joined by a transversal zipper (4) thereby forming a single outfit, whereby both parts can be separated by opening the zipper. The T-shirt (2) has a central and longitudinal zipper (5) running from the neck (6) to the lower part, enabling it to be opened lengthwise. The garment fabric has longitudinal folds (11) corresponding to the fastening strips of the zippers (4 and 5), said folds (11) overlapping strips (12) of the same fabric, concealing the zipper teeth. The garment comprises elastic and gathered segments (8 and 9) on the side of the zipper and pertaining means for fastening (10).

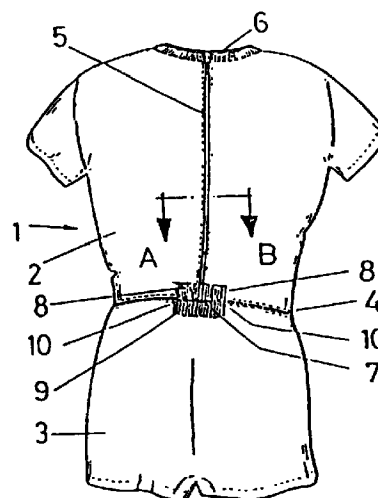


FIG. 1

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Description

OBJECT OF THE INVENTION

[0001] The invention refers to a unisex garment with a special application for those persons or users with difficulties for dressing/undressing by themselves, it is also applicable for people who need another person to put on and take off their clothes for them.

[0002] The garment is made up by a top part or T-shirt and lower part or undershorts joined together by means of a transversal zipper, forming a whole or sole garment with the possibility of opening the part corresponding to the T-shirt, as well as freeing that part of the top part or T-shirt from the part of the undershorts, thus making it easier to perform the operation of dressing/undressing and even for changing absorbent nappies without the need to undress.

BACKGROUND FOR THE INVENTION

[0003] Although unisex garments for undershorts and/or external use are well known that combine in a single set or garment the T-shirt and the pertinent undershorts or trousers, they are usually come in complete sets that cannot be used in certain cases, specifically by those people with difficulties for dressing/undressing, that is to say for the physically or mentally disabled, who sometimes even need the help of another person to perform these functions.

[0004] Nevertheless, these people, also in certain circumstances, places and situations, it would be convenient for them to have a unisex undergarment and/or external garment that might join together the T-shirt and the undershorts or trousers, that is to say, that the said two garments, which are normally independent from each other, should be joined together forming a continuous garment between them so as to avoid, for example, the T-shirt from riding up and the risk of catching a chill, or otherwise to avoid the shifting of a nappy intended to collect and absorb the urine in the case of incontinence.

DESCRIPTION OF THE INVENTION

[0005] The unisex garment that is advocated is meant to solve the problem set out above, since it forms a T-shirt and lower part or undershorts in a single outfit, which are linked by means of a transversal zipper that may be closed and opened in order to separate the undershorts to be separated from the T-shirt and therefore allow these kinds of people or the physically and mentally disabled to be able to dress and undress with greater comfort, or else another person, if required, may dress and undress them, also with greater ease and comfort. We should add to this the fact that the T-shirt also has a lengthways zipper which allows it to be full opened in order to facilitate the dressing/undressing

operation.

[0006] More specifically, the unisex garment which shall preferentially be made of a cotton fabric or similar material, so as to prevent allergies and which will be comfortable for the people who have to use it, presents the special feature that on the one hand the part that makes up the T-shirt, as was said earlier, has a lengthways zipper that runs from the neck down to the bottom line, allowing the complete opening of the zipper, which may remain located, as shall be set out later, both in line with the back part and in line with the front part, since this T-shirt is linked to the part that forms the undergarment by means of a zipper which is totally removable by fully opening the said zipper, which make it possible for the T-shirt to be placed with the zipper facing forwards or with the zipper facing backwards, in the first case so as to allow the user to dress/undress himself/herself and in the second case when such an operation is to be performed by another person

[0007] The zippers meet in their closing position in a central and intermediate area where an opening is to be found, which is partially closed as a result of the fact that in that area there are some elasticised strips that tend to close the pertinent open part, though the elasticized parts in question will have conventional fastening devices which will allow, at any time, to close that opening starting in the junction between the zippers, and specifically in the central area, either in the front part or in the rear part, depending on the assembly of the T-shirt with respect to the undergarment.

[0008] On the other hand, it has been envisaged that the zippers in question will be preferentially made of a soft plastic material with flat teeth, so that the zipper set will be as flat as possible and thereby avoid any type of discomfort for the user, it has also been envisaged that the said zippers will be attached to the fabric both on the undershorts and on the T-shirt, by means of overlaps made of the fabrics themselves, so as to cover the teeth of the zippers and thereby avoid contact of the latter with the user's body, thereby the said contact shall always be made over the fabric and not against the zippers.

[0009] Apart from the fact that the garment in question will make it easier to perform dressing/undressing operations, both for the physically and mentally disabled as well as for other people to dress/undress physically and/or mentally disabled people, in those cases in which they suffer from incontinence, it shall not be necessary to have to fully undress the person in question in order to change the nappy, but rather it shall simply be suffice to open the zipper that joins the lower part or undershorts to the T-shirt and then replace the nappy.

DESCRIPTION OF THE DRAWINGS

[0010] So as to complement the description that is hereby made and in order to help to better understand the characteristics of the invention, in accordance with a

preferential example for the practical performance thereof, a set of drawings is enclosed as an integral part of the said description in which, for illustrative purposes and not intended to limit the description, the following have been sketched out:

Figure 1. - Shows a sketch of the unisex garment made in accordance with the object of the invention, seen from behind.

Figure 2. - Shows the same game garment in the preceding figure, in this case seen from the front.

Figure 3. - Shows a cross-section close-up of one of the zippers, corresponding to the A-B cut line in Figure 1, showing the way for attaching or assembling the said zippers.

Figure 4.- Shows a practical application on a person, of the unisex garment that is the object of the invention, in which the zipper for the T-shirt can be seen partially open and the zipper that joins the said T-shirt to the bottom art or undergarment when fully opened.

PREFERRED EMBODIMENT OF THE INVENTION

[0011] In view of the aforementioned figures, it may be seen how the unisex garment for dressing that is the object of the invention and referred to in general using (1), consists of two parts linked together to form a single set as a garment for dressing as such, so that the upper part constitutes what has come to be called a T-shirt (2), whilst the bottom part constitutes what has come to be called lower part or undershorts (3), though this part may also be made as a panty or even as a long or short-type trousers, in such a way that the claimed unisex garment can be of internal or external use.

[0012] In any case, the T-shirt (2) and the undershorts (3) or the bottom part are linked to each other by means of a transversal zipper (4), in line with the waist of that lower part or undershorts (3), with the specific feature that that zipper (4) may be opened to separate the T-shirt (2) from the undershorts (3), since in the closed position it constitutes the means for joining the two parts to form the single garment for dressing.

[0013] On its part, the T-shirt (2) also has a zipper (5) set out lengthways from the opening (6) or neck down to the lower part.

[0014] The upper edge of the neck (6) of the T-shirt presents, both on one side and on the other side, the same level or height so that the T-shirt (2) in question may be worn with the zipper at the front or with the zipper at the back, at the user's convenience, in accordance with his/her needs.

[0015] In the area where the zippers join together (4) and (5), in their closing position, an open area (7) is formed, as is shown in Figure 1, which tends to close as

a result of the fact that in the sides of the lower part of the zipper (5) and between the ends of the zipper (4), the corresponding elasticized and gathered strips (8) and (9) have been planned, respectively, which tend to close that open area (7), though the total closure of the latter may be achieved using fasteners or conventional devices (10) envisaged both in the elastic parts (8) and (9) referred to earlier.

[0016] On the other hand, both the zipper (4) and the zipper (5) are attached to the pertinent fabric in such a way that they are hidden and prevent direct rubbing between the user's body and the teeth of the zippers, for which purpose and as is shown in Figure 4, in which the zipper belongs to the T-shirt (2), though it could also be the zipper (4) belonging to the undershorts (3), presents the specific feature that the fabric itself for the garment, in this case the T-shirt (2) has a fold (11) that determines the overlap in one strip (12) of the fabric or T-shirt (2) over the zipper itself (5), specifically over the respective side or one of the parts of the zipper, since on the other side or complementary strip of that zipper (5) it would be attached and set out in the same way. That is to say, that each part of the zipper will be attached to a strip (12) that forms an overlap, as from a line of fold (11), made of the material from the garment itself, in order that the teeth of the repeated zipper are kept hidden and no contact is made between the user's body against the afore-said zipper but rather on the pertinent fabric corresponding to the garment for dressing as such.

[0017] It is not deemed necessary to extend this description so that any expert on this subject may understand the scope of the invention and the advantages deriving therefrom.

[0018] The materials, shape, size and layout of the parts may be liable to changes provided that this does not mean any alteration of the essential nature of the invention.

[0019] The terms in which this report has been drawn up must always be taken in their widest sense and must not be limited.

Claims

1. UNISEX GARMENT FOR THE PHYSICALLY-MENTALLY DISABLED, which is planned for its use preferentially by people with difficulties for dressing-undressing themselves or that even have to do so with the help of another person, it is characterised because it is constituted by an upper part which acts as a T-shirt (2) and lower part that acts as undershorts (3), trousers or similar, with both parts being joined together by means of a transversal zipper (4) to form a single piece set in which the opening of the join for both parts makes it possible to divide them; with it also being envisaged that the part which constitutes the T-shirt (2) should have a central and lengthways zipper (5) from the neck (6) down to the lower part, thereby making it possible

to open the said T-shirt (2) lengthways to facilitate the dressing/undressing of the user.

2. UNISEX GARMENT FOR THE PHYSICALLY-MENTALLY DISABLED, according to claim 1, characterised because the fabric that makes up the unisex garment has lengthways folds (11) in line with the strips for attaching the zippers themselves (4) and (5), with those folds (11) determining an overlap of strips (12) of the fabric from the garment itself which hide the teeth of the zipper, thereby preventing contact of the latter with the user's body. 5 10
3. UNISEX GARMENT FOR THE PHYSICALLY-MENTALLY DISABLED, according to the previous claims characterised because the upper edge corresponding to the neck (6) of the T-shirt (2) presents approximately the same level at the front and at the back, thereby allowing the positioning of the T-shirt (2) with respect to the undershorts (3) with its zipper at the front or at the back, without any distinction. 15 20
4. UNISEX GARMENT FOR THE PHYSICALLY-MENTALLY DISABLED, according to the previous claims, characterised because in the area where both zippers (4) and (5) are in line an opening (7) is left which is liable to be closed partially by means of the corresponding elasticized and gathered strips (8) and (9) envisaged in the sides of the zipper, belonging to the part corresponding to the T-shirt (2) and in line with the upper or intermediate area corresponding to the lower part or undershorts (3), with those elasticized and gathered strips (8) and (9) having the means (10) for fastening that make it possible for the total closing of that opening. 25 30 35

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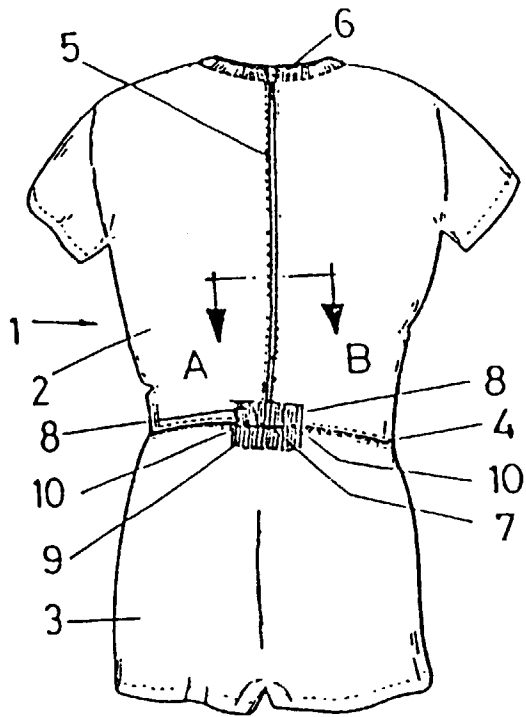


FIG-1

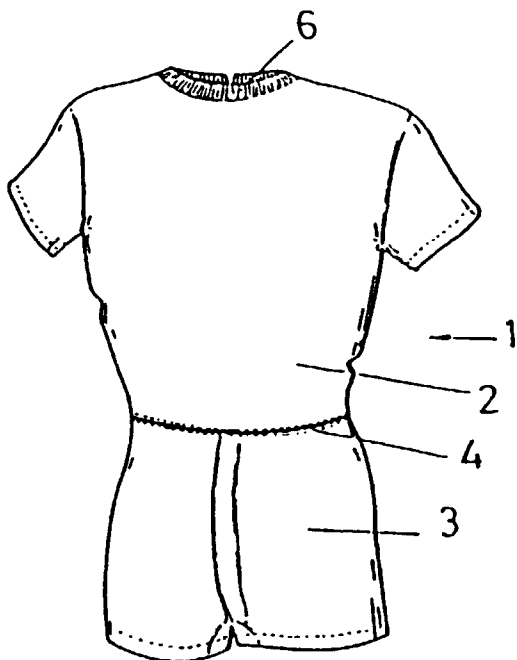


FIG-2

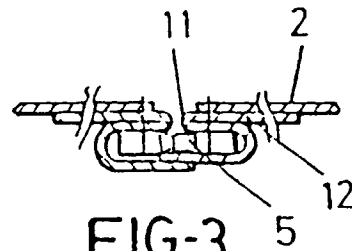


FIG-3
A-B

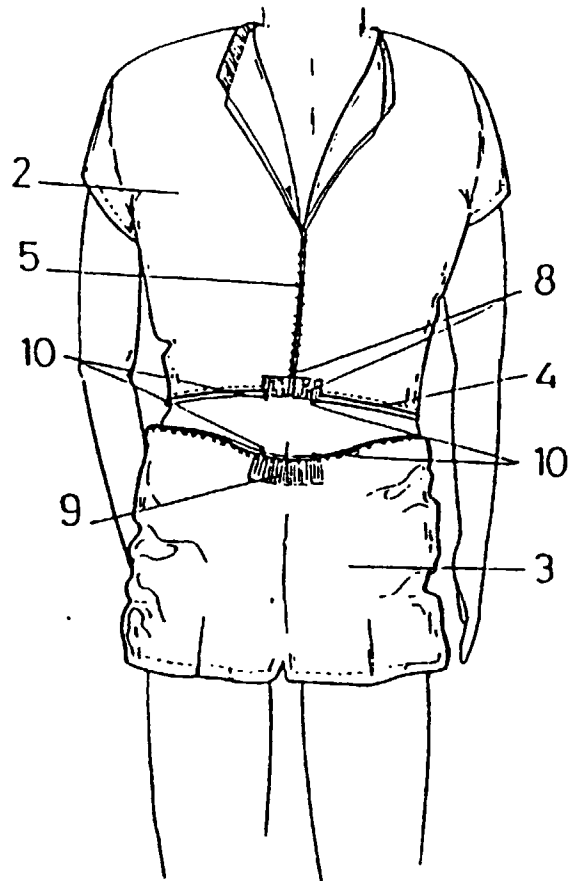


FIG-4

INTERNATIONAL SEARCH REPORT

International application No.

PCT/ES 98/00016

A. CLASSIFICATION OF SUBJECT MATTER

IPC6 A41B 9/08

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)

IPC6 A41B 9/08, A41F 5/00, 19/00, A41D 13/02, 13/12

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

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

CIBEPAT, EPODOC, WPI

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	GB 483.182 A (EHCO) 13 April 1938 (13.04.38), page 1, right-hand column, lines 69-73; page 2, left-hand column, lines 4-10; claims 1-2; figures	1 1,2
P,A	FR 2.745.155 A (CENTRE D'AIDE PAR LE TRAVAIL) 29 August 1997 (29.08.97)	
A	FR 2.140.745 A (BRUNE, L.) 19 January 1973 (19.01.73)	
A	US 5.033.121 A (LARSEN, DOUGLAS S.) 23 July 1991 (23.07.91)	

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

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"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

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"&" document member of the same patent family

Date of the actual completion of the international search

18 May 1998 (18.05.98)

Date of mailing of the international search report

26 May 1998 (26.05.98)

Name and mailing address of the ISA/

S.P.T.O.

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/ES 98/00016

Parent document cited in search report	Publication date	Parent family member(s)	Publication date
GB 483182 A	13.04.38	NL 41427 C	
FR 2745155 A	29.08.97	NONE	
FR 2140745 A	19.01.73	NONE	
US 5033121 A	23.07.91	NONE	

Form PCT/ISA/210 (patent family sheet) (July 1992)