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(54) Pushup jeans and related production process

(57) The invention provides a pair of pushup jeans and a production process. The pushup jeans comprise jeans and fusible interlining (1), each leg of the jeans comprises a front panel (2) and a back panel (3), a back panel fusible interlining is disposed on the back panel (3) and adhered outside of a hip position; a front panel fusible interlining is disposed on the inside of the front panel (2) and opposite to the back panel fusible interlining; the fusible interlining (1) has an arc-shaped portion (4), and the arc-shaped portion is recessed downwards. The outer edge of the fusible interlining is aligned with the outer edges of the front panel and back panel. The distance between the position extending 2-15cm downwards from the crotch (6) and the lower edge of the waistband (5) is the length of the fusible interlining.

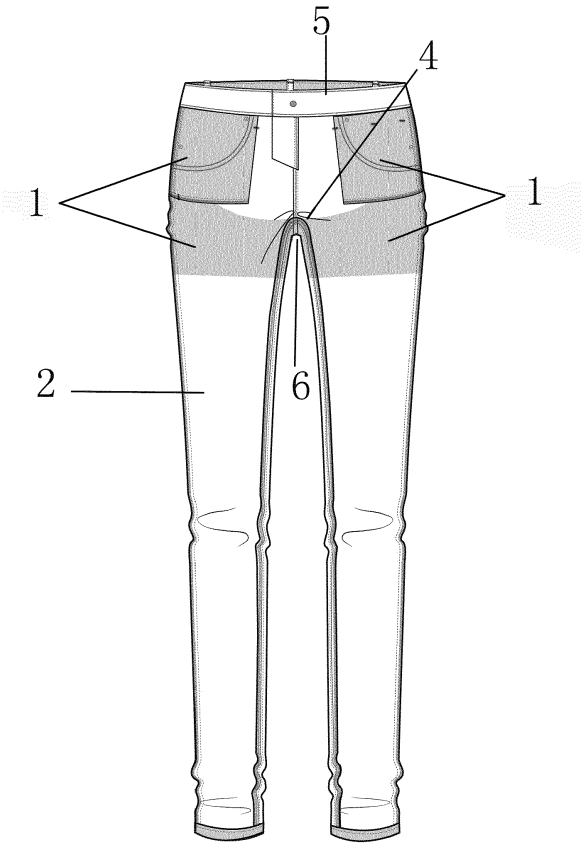

Fig. 1

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Description

CROSS-REFERENCE TO RELATED APPLICATION

[0001] This application claims priority from CN Patent Application Serial No. 2014100309621, filed on January 23, 2014, the entire contents of which are incorporated herein by reference for all purposes.

TECHNICAL FIELD

[0002] The invention is related to the push up jeans and a new production process.

BACKGROUND OF THE INVENTION

[0003] Jeans has been one of fashionable and popular clothing. People at different ages usually have jeans. Since the fabric of jeans is relatively hard, the cutting and styling can show the body shape. But for people with bigger hips, they wish to tighten up the hips to enhance the overall shape.

[0004] Jeans is divided to stretch and non-stretch, and most of them are cut to fit the body shape of lower body. However, for the stretch fabric, the body shape will not come out good for people with poor hip shape, and therefore, these people will choose the loose-fit jeans.

[0005] On the other hand, body shaping jeans are usually produced by sewing a separate elastic / stretching fabric onto the jeans for pushing up the hips effects. If additional fabric is sewn on the jeans, the wearer may feel uncomfortable since the sewn fabric is likely to be folded and moved. In addition, the sewn fabric can easily be dyed or may affect the pattern on the jeans during washing process.

SUMMARY OF THE INVENTION

[0006] The technical problem to be solved by this invention is to provide the pushup jeans and related production process. The structure is simple to use, and can improve the hip shape. Besides, the process is simple to use, and can increase the production efficiency, and reduce the problem of washing streaks during the washing process.

[0007] The above objective is achieved by the following technical solution:

[0008] The pushup jeans include jeans and a fusible interlining. Each pant leg of jeans comprises a front panel and a back panel. A back panel fusible interlining is fused onto the back panel and adhered outside of a hip position; at the same time, a front panel fusible interlining is fused onto the inside of the front panel and opposite to the back panel fusible interlining. The fusible interlining has an arc-shaped portion, and the arc-shaped portion is recessed downwards. The outer edge of fusible interlining is aligned with the outer edges of the front panel and back panels. The length of fusible interlining is the distance from the crotch extending downwards 2-15 cm to the lower edge of waistband.

[0009] Preferably, one end of the arc-shaped portion is located at the lower edge of the waistband, and another end of the arc-shaped portion is equal to or higher than the crotch. The bottom of this portion can extend to thigh area.

[0010] In the production process of pushup jeans, the two legs of the pants are formed by sewing the front panel and back panels together, and a back panel fusible interlining is adhered outside of a hip position on the back panel by ironing; and a front panel fusible interlining is disposed at a location within the front panel and opposite to the back panel fusible interlining. The steps for the process are as follows:

a) cutting the fusible interlining, the shape of fusible interlining being matched to the shape on the seams of the leg panels ;

b) laying the fusible interlining onto the panels, the outer edges of both the interlining and jeans panels are aligned;

c) turning the temperature of an iron-pressing machine to 140°C-160°C, and setting a constant temperature after heating;

d) adjusting a pressure parameter of the iron-pressing machine to 2-3.5kg;

e) putting the lain fusible interlining and the panels together into the heated iron-pressing machine for iron-pressing; and

f) sewing the iron-pressed front and back panels to form the legs of the pants.

[0011] Preferably, the iron-pressing machine is a roller-type pressing machine.

[0012] Preferably, the iron-pressing time of the step e) is 10-17 seconds.

[0013] The beneficial effects of the invention are such: the shape and cutting of the fusible interlining designed in this invention is kept away from the position of the hips, such that the hip area is in the elastic fabric; the fusible interlining is used to reduce the elasticity of the stretch denim fabric for tightening up all around of bottom of hips, which enhances the whole body shape more effectively, and whole hips will become more rounded; front panel is also fused with the corresponding fusible interlining, which can effectively tighten up the whole thigh area; the ironing position of the fusible interlining is equal to or higher than the position of the crotch, which is able to tighten up on both sides of the thigh; the design with this production method can greatly improve the production efficiency because it does not need to be stitched by threads or any manual stitching, just need to press the

fusible interlining tightly by iron-pressing. Since the tolerance of the jeans and the fusible interlining are different, so, there is strict control for the pressure, temperature and time for this iron-pressing process, to avoid the damage for fusible interlining; for the jeans produced by such a method, washing streaks will not appear in the washing process, since the edges are smoothly combined with the jean and the interlining is thin, therefore, the pattern will not be affected during the washing process.

BRIEF DESCRIPTION OF THE DRAWINGS

[0014]

Fig. 1 is a reverse-side structural diagram of the front panels of the invention;

Fig. 2 is a reverse-side structural diagram of the back panels of the invention.

DETAILED DESCRIPTION OF THE INVENTION

[0015] In the following the invention will be further described in connection with the drawings.

[0016] As shown in Fig. 1, pushup jeans comprises jeans and a fusible interlining 1, each leg of the jeans comprises a front panel 2 and a back panel 3, the fusible interlining 1 includes a front panel fusible interlining and a back panel fusible interlining. The back panel fusible interlining is disposed on the back panel 3 and adhered outside of the hip position 7 (i.e., the bottom 12 and the side portion 11 outside of the hip position 7); at the same time, the front panel fusible interlining is disposed on inside of front panel 2 and opposite to the back panel fusible interlining; the fusible interlining 1 has an arc-shaped portion 4, and the arc-shaped portion 4 is recessed downwards. The structure of the fusible interlining 1 designed by the invention is kept away from the positions of the hips 7, such that the hips areas 7 are in elastic fabric, and whole hips 7 will become more rounded. The fusible interlining is used to reduce the elasticity on all around and bottom 12 of hips 7. The outer edges of the fusible interlining 1 are aligned with the outer edges of the front panel 2 and the back panel 3. The length of fusible interlining 1 is the distance from the crotch point 6 extending downwards 2-15 cm to the lower edge of waistband 5. The length may help tighten up the shape from the hips 7 to the thighs.

[0017] Preferably, as shown in Fig. 1 and Fig. 2, one end of the arc-shaped portion 4 is located at the lower edge of the waistband 5, and another end of the arc-shaped portion 4 is equal to or higher than the crotch 6. It is required for the location on the inner thigh where the fusible interlining 1 is disposed by ironing to be equal to or higher than the crotch 6, which may help to tightening up the fat on the inner thigh.

[0018] In a production process of pushup jeans, two pant legs of jeans are formed by sewing the front panels 2 and back panels 3 together, and a back panel fusible interlining is adhered outside of the hip position 7 (i.e., the bottom 12 and the side portion 11 outside of the hip position 7) on the back panel 3 by iron-pressing; and a front panel fusible interlining 1 is disposed at a location within the front panel 2 and opposite to the back panel fusible interlining. The process comprises the steps of:

a) cutting the fusible interlining 1, the shape of fusible interlining 1 being matched to the shape on the seams of the leg panels ; as shown in the figures, since the fusible interlining 1 does not need to be stitched by thread, its outer edges need be aligned with the outer edges of the panel to avoid an uneven situation;

b) laying the fusible interlining 1 on the panels and aligning their outer edges with the panels;

c) turning a temperature of the iron-pressing machine to 140°C-160°C, and setting a constant temperature after heating;

d) adjusting the pressure parameter of the iron-pressing machine to be 2-3.5kg; since the tolerance of the jeans and the fusible interlining 1 are different, there is a strict control for the pressure, temperature and time to avoid damage of fusible interlining 1, wherein generally, the tolerable temperature of the jeans is 120°C-160°C, the tolerable temperature of the fusible interlining 1 is 120°C-160°C; the tolerable pressure of the jeans is 2kg-5kg, that of the fusible interlining 1 is 2kg-3.5kg; if the temperature is to high, the fusible interlining will be melted, and damage the jeans, even if it can be adhered closely to the jeans, the structure will be disrupted and cannot reduce the elasticity of the fabric effectively; as for the tolerable pressure, in order that the adhered fusible interlining 1 is not too thick to affect patterns as appeared in washing process, the pressure of 2kg-3.5kg is constantly adopted;

e) putting the lain fusible interlining 1 with the panels 2 and 3 into the iron-pressing machine for iron-pressing;

f) sewing the ironed front panel 2 or back panel 3 to form the leg of the pants.

[0019] Preferably, the iron-pressing machine is a roller-type pressing machine. A roller-type pressing machine can guarantee an evenly distributed stress and make the whole fusible interlining 1 adhered fully and closely.

[0020] Preferably, the iron-pressing time of the step e) is 10-17 seconds.

[0021] In the above steps, sewing is performed after

iron-pressing, that front panel 2 and back panel 3 can be stitched with fusible interlining 1 at the same time. This can help to reduce the opening of the interlining at the stitched positions during long-term use.

[0022] In summary the invention provides a pair of pushup jeans and a production process. The pushup jeans comprise jeans and fusible interlining 1, each leg of the jeans comprises a front panel 2 and a back panel 3, a back panel fusible interlining is disposed on the back panel 3 and adhered outside of a hip position; a front panel fusible interlining is disposed on the inside of the front panel 2 and opposite to the back panel fusible interlining; the fusible interlining 1 has an arc-shaped portion 4, and the arc-shaped portion is recessed downwards. The outer edge of the fusible interlining is aligned with the outer edges of the front panel and back panel. The distance between the position extending 2-15cm downwards from the crotch 6 and the lower edge of the waistband 5 is the length of the fusible interlining.

[0023] The above description is not intended to make any limitation on the scope of the invention, and any amendments, equivalent variations and modifications made to the above embodiments according to the technical essence of the invention fall into the scope of the technical solutions of the invention.

Claims

1. A pair of pushup jeans, including jeans and a fusible interlining (1), each pant leg comprises a front panel (2) and a back panel (3);
   wherein a back panel fusible interlining is fused onto the back panel (3) and adhered outside of a hip position (7);
   wherein a front panel fusible interlining is fused onto the inside of the front panel (2) and opposite to the back panel fusible interlining;
   wherein the fusible interlining (1) has an arc-shaped portion (4), and the arc-shaped portion being recessed downwards, an outer edge of the fusible interlining (1) is aligned with outer edges of the front panel (2) and the back panel (3), and a length of the fusible interlining (1) is a distance from a crotch (6) extending downwards two to fifteen cm to a lower edge of waistband (5).

2. The pair of push up jeans according to claim 1, wherein one end of the arc-shaped portion (4) is located at the lower edge of the waistband (5), and another end of the arc-shaped portion (4) is equal to or higher than the crotch (6) and extends down to the thigh area.

3. A production process of pushup jeans, each pant leg of jeans being sewed by a front panel (2) and a back panel (3), and a back panel fusible interlining being disposed on the back panel (3) and adhered outside of a hip position (7) by ironing, and a front panel fusible interlining being disposed at a location within the front panel (2) and opposite to the back panel fusible interlining,
   the process comprising the steps of:

   a) cutting the fusible interlining (1), thereby the shape of fusible interlining (1) being equal to the shape on a sewing thread location of pants;
   b) laying the fusible interlining (1) on the front panel (2) or the back panel (3) and aligning the outer edges of the fusible interlining with the outer edges of the front panel (2) or the back panel (3);
   c) turning the temperature of an iron-pressing machine to 140°C-160°C, and setting a constant temperature after heating;
   d) adjusting a pressure parameter of the heated iron-pressing machine to 2kg-3.5kg;
   e) putting the lain fusible interlining (1), the front panel (2) and the back panel (3) into the heated iron-pressing machine for iron-pressing;
   f) sewing the iron-pressed front panel (2) and back panel (3) to pants.

4. The production process of pushup jeans according to claim 3, wherein the heated iron-pressing machine is a roller-type pressing machine.

5. The production process of pushup jeans according to claim 3 or 4, wherein the iron-pressing time of the step e) is ten to seventeen seconds.

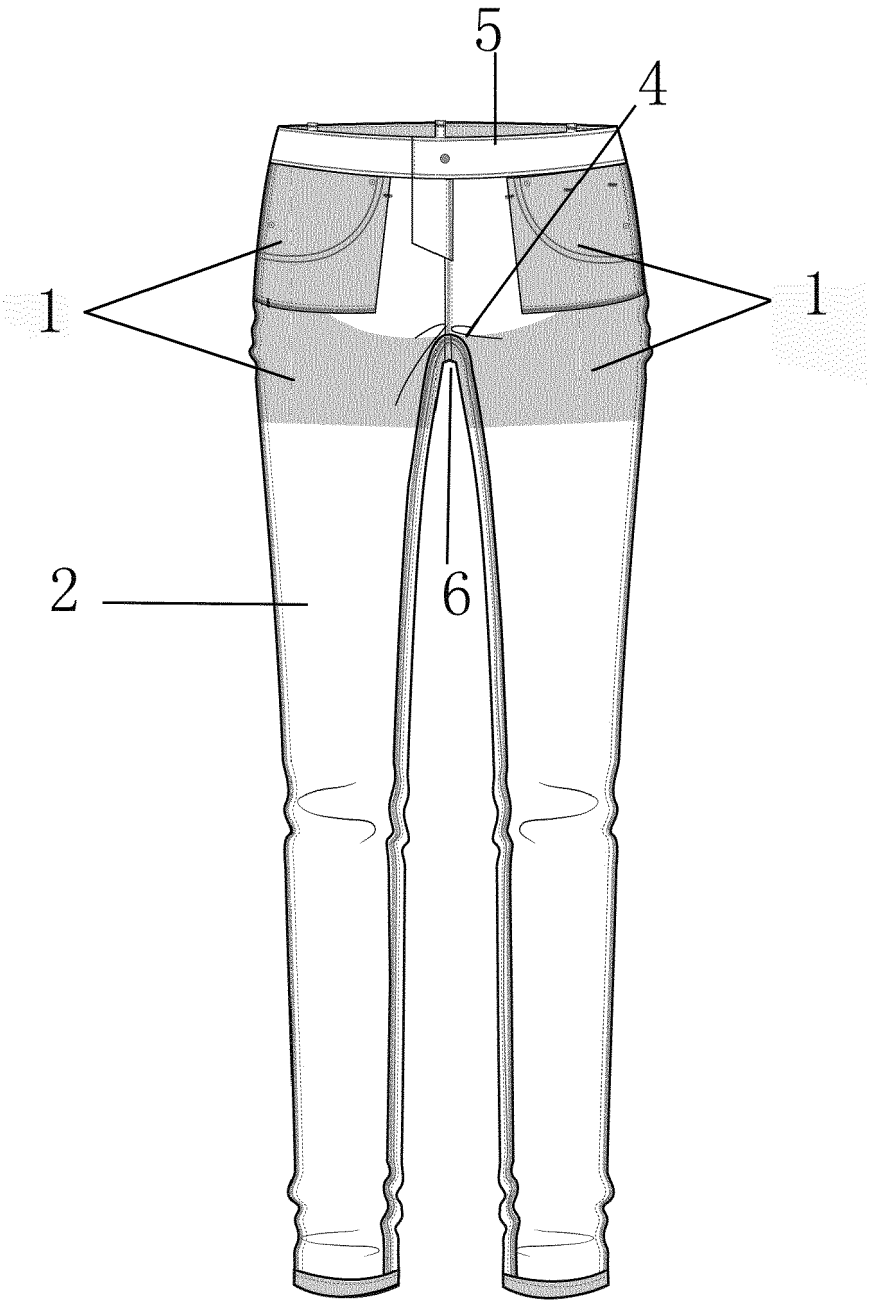

Fig. 1

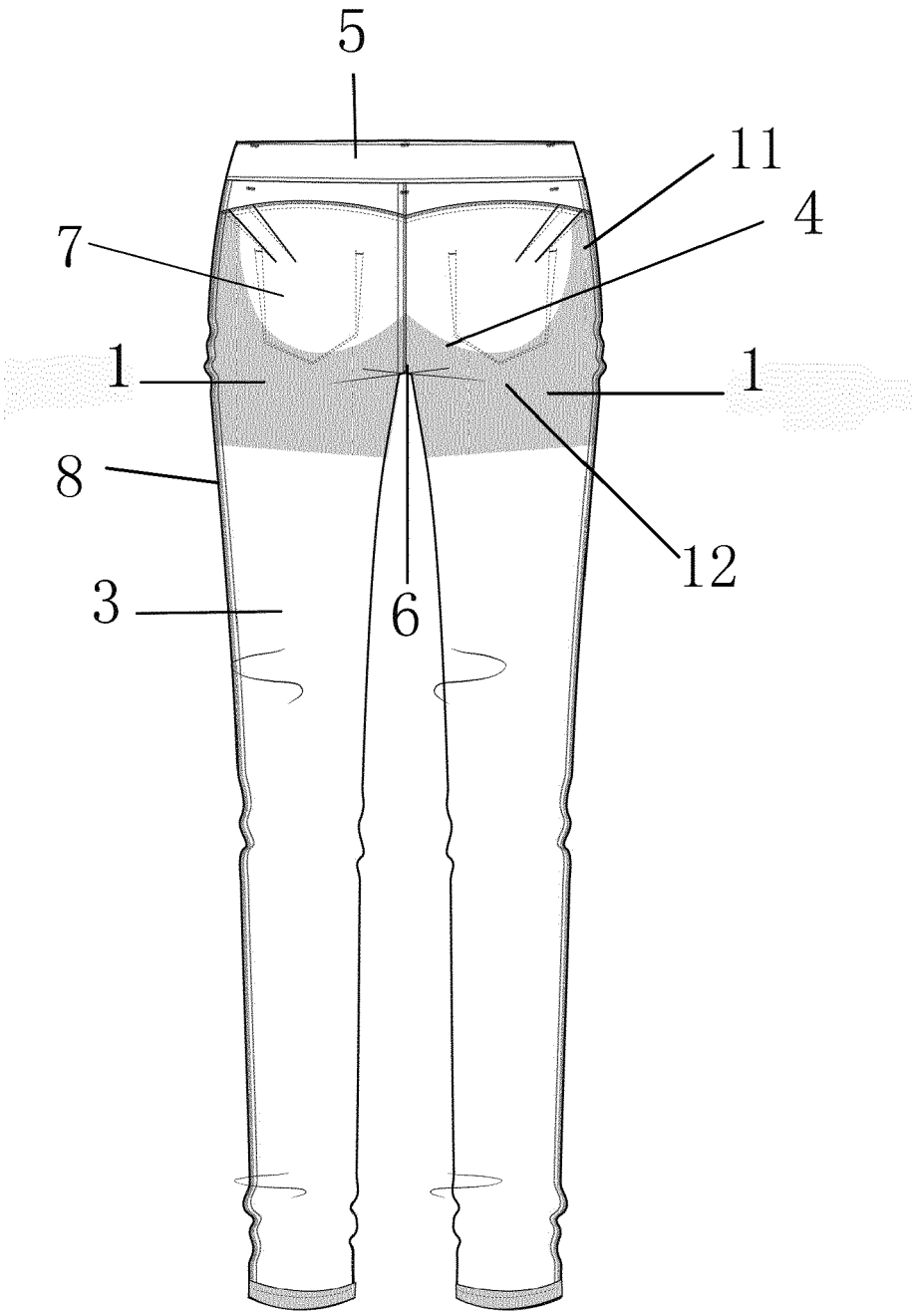

Fig. 2

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EUROPEAN SEARCH REPORT

Application Number
EP 14 18 7007

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	GB 2 453 436 A (KATO KOJI [JP]) 8 April 2009 (2009-04-08) * page 18 - page 21; figures 1-4 * -----	1-5	INV. A41D1/06 A41D27/06
A	US 2011/197342 A1 (LEE SUNG WOO [KR]) 18 August 2011 (2011-08-18) * abstract; claims 1-12 * -----	1-5	
A	WO 99/29198 A1 (WILLIAM CLARK & SONS LIMITED [GB]; JUDD PETER THOMAS [GB]; MCCORD ROBE) 17 June 1999 (1999-06-17) * abstract; figure 1 * -----	1-5	
A	JP H06 316875 A (PICARDIE LAINIERE) 15 November 1994 (1994-11-15) * abstract * -----	1-5	

TECHNICAL FIELDS SEARCHED (IPC)

A41D
D06M

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	7 May 2015	Fonseca Fernandez, H

CATEGORY OF CITED DOCUMENTS

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 14 18 7007

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07-05-2015

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
GB 2453436 A	08-04-2009	GB 2453436 A	08-04-2009
		US 2009126080 A1	21-05-2009
US 2011197342 A1	18-08-2011	CN 1989916 A	04-07-2007
		EP 1787535 A2	23-05-2007
		JP 4669978 B2	13-04-2011
		JP 5050212 B2	17-10-2012
		JP 2007138376 A	07-06-2007
		JP 2010106431 A	13-05-2010
		US 2007118954 A1	31-05-2007
		US 2011197342 A1	18-08-2011
WO 9929198 A1	17-06-1999	AU 1496499 A	28-06-1999
		EP 1037541 A1	27-09-2000
		JP 2001525503 A	11-12-2001
		WO 9929198 A1	17-06-1999
JP H06316875 A	15-11-1994	AT 133990 T	15-02-1996
		CA 2093586 A1	11-10-1993
		DE 69301488 D1	21-03-1996
		DE 69301488 T2	05-09-1996
		DK 0565394 T3	17-06-1996
		EP 0565394 A1	13-10-1993
		ES 2085732 T3	01-06-1996
		FI 931148 A	11-10-1993
		FR 2689899 A1	15-10-1993
		GR 3019465 T3	30-06-1996
		JP 3251695 B2	28-01-2002
		JP H06316875 A	15-11-1994
		NO 931345 A	11-10-1993
		RU 2104158 C1	10-02-1998
		US 5439737 A	08-08-1995

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- CN 2014100309621 **[0001]**