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(71) Applicant: **Fast Retailing Co., Ltd.**
Yamaguchi-shi, Yamaguchi 754-0894 (JP)

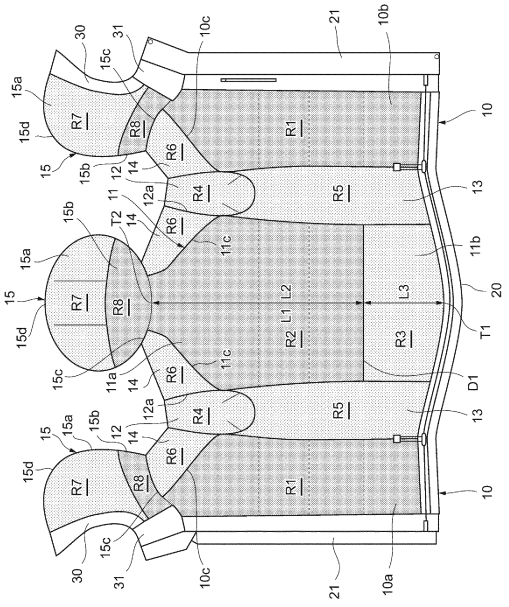
(72) Inventors:
- **MATSUMOTO, Daisuke**
  Yamaguchi-shi, Yamaguchi 754-0894 (JP)
- **KUBOSHITA, Akira**
  Yamaguchi-shi, Yamaguchi 754-0894 (JP)

(74) Representative: **Mewburn Ellis LLP**
Aurora Building
Counterslip
Bristol BS1 6BX (GB)

(54) **COAT**

(57) The present invention provides an outerwear that offers a slender silhouette to a wearer with a light weight and a high degree of protection against cold. The outerwear (1) of the present invention includes a front (10), a back (11), sleeve parts (12), and side parts (13). The front (10), the back (11), the sleeve parts (12), and the side parts (13) are provided with cold protection regions (R1, R2, R4, R5) filled with a cold-proof material. The front (10) includes a down region (R1) filled with down in the upper part of the front. The back (11) includes a down region (R2) filled with down in the upper part of the back. The sleeve part (12) includes a cotton region (R4) filled with a cotton material over the sleeve part. The side part (13) includes a cotton region (R5) filled with a cotton material in the lower part of the side part.

[FIG. 3]



EP 3 977 880 A1

Description

Technical Field

[0001] The present invention relates to an outerwear.

Background Art

[0002] An outerwear for protection against cold is, for example, a down jacket. A typical down jacket is filled with down over the front, the back, and the sleeve parts (see Patent Documents 1 and 2). Such a down jacket is lightweight and provides a high degree of protection against cold.

Citation List

Patent Document

[0003]

Patent Document 1: Japanese Patent No. 5951679

Patent Document 2: Japanese Patent No. 6182617

Summary

Technical Problem

[0004] However, the sleeve parts of such a down jacket are expanded by inner down, so that the arms of a wearer look considerably thicker than actual sizes. The side parts of the jacket are also expanded by inner down, making it difficult to tightly press the arms to the body of the wearer, and the arms tend to be separated from the body. Thus, it is difficult to keep a slender shape (silhouette) with such a down jacket.

[0005] The present invention has been devised in view of the problem. An object of the present invention is to provide an outerwear that offers a slender silhouette to a wearer with a light weight and a high degree of protection against cold.

Solution to Problem

[0006] An outerwear (1) according to an aspect of the present invention includes a front (10), a back (11), sleeve parts (12), and side parts (13), wherein the front (10), the back (11), the sleeve parts (12), and the side parts (13) are provided with cold protection regions (R1, R2, R4, R5) filled with a cold-proof material, the front (10) includes a down region (R1) filled with down in the upper part of the front, the back (11) includes a down region (R2) filled with down in the upper part of the back, the sleeve part (12) includes a cotton region (R4) filled with a cotton material over the sleeve part, and the side part (13) includes a cotton region (R5) filled with a cotton material in the lower part of the side part.

Advantageous Effects of Invention

[0007] The present invention can provide an outerwear that offers a slender silhouette to a wearer with a light weight and a high degree of protection against cold.

Brief Description of Drawings

[0008]

FIG. 1 is a front view illustrating an outerwear according to an example of the configuration of the outerwear;

FIG. 2 is a rear view illustrating the outerwear according to the example of the configuration of the outerwear;

FIG. 3 is an explanatory drawing illustrating a development of the outerwear;

FIG. 4 is an enlarged view of shoulder parts;

FIG. 5 is an explanatory drawing illustrating a development of an outerwear according to another aspect; and

FIG. 6 is an explanatory drawing illustrating a development of an outerwear according to another aspect.

Description of Embodiments

[0009] A preferred embodiment of the present invention will be described below with reference to the accompanying drawings. The same elements are indicated by the same reference numerals and an explanation thereof is omitted. Dimensional ratios are not limited to ratios in the drawings. The following embodiment is merely an example for explaining the present invention. The present invention is not limited to the embodiment.

[0010] FIG. 1 is a front view of an outerwear 1 illustrated as a configuration example according to the present embodiment. FIG. 2 is a rear view of the outerwear 1. The outerwear 1 is, for example, a parka, a jacket, or a coat.

[0011] The outerwear 1 includes, for example, a front 10, a back 11, sleeve parts 12, side parts 13, shoulder parts 14, and a hood 15.

[0012] The front 10, the back 11, the sleeve parts 12, the side parts 13, the shoulder parts 14, and the hood 15 have cold protection regions filled with a cold-proof material.

[0013] FIG. 3 is a development illustrating the interior of the opened outerwear 1. FIG. 3 illustrates the cold protection regions provided in the parts of the front 10, the back 11, the sleeve parts 12, the side parts 13, the shoulder parts 14, and the hood 15. The cold protection regions in the parts are filled with down or a cotton material that is a cold-proof material.

[0014] For example, air gaps provided in the lining of the outerwear 1 are filled with down and are enclosed by sewing or the like. A cotton material is, for example, a sheet-type material that is interposed between the outer side and the lining of the outerwear 1 and is enclosed by sewing. In the present specification, "top", "bottom", "vertical", and "horizontal" are directions with respect to the outerwear 1 illustrated in FIGS. 1 to 3.

[0015] Down is a material containing at least one of down feathers and hard feathers. A cotton material is a material containing cotton or chemical fibers having substantially the same property as cotton, for example, rayon fibers, polyester fibers, polyolefin fibers, acrylic fibers, and acrylate fibers. Down retains heat well with a lighter weight than a cotton material, whereas a cotton material has higher strength than down and is resistant to water. Moreover, hygroscopic and heating cotton of functional cotton may be used as a cotton material.

[0016] As illustrated in FIG. 3, the front 10 has down regions R1 filled with down. The down region R1 is provided for each of a right front 10a and a left front 10b. The down region R1 is a substantially rectangular region vertically extended in each of the right front 10a and the left front 10b.

[0017] The down regions R1 are provided substantially over the front 10 including the upper part and the lower part except for, for example, a hem 20 of the front 10 and a facing part (a part having buttons and a zipper that join and fix the right front 10a and the left front 10b, the part being vertically extended on a central end between the right front 10a and left front 10b) 21. The down regions R1 are provided over the chest, the belly, and the underbelly of a wearer of the outerwear 1.

[0018] The back 11 has, for example, an upper part 11a covering the back of the wearer of the outerwear 1 and a lower part 11b covering the hip of the wearer. The back 11 has a down region R2 filled with a down material in the upper part 11a and a cotton region R3 filled with a cotton material in the lower part 11b.

[0019] The down region R2 is disposed in the substantially square region of the upper part 11a of the back 11 and the cotton region R3 is disposed in the substantially square region of the lower part 11b of the back 11.

[0020] The cotton region R3 is provided in a region from a lower end T1 to a boundary line D1 in the lower part 11b of the back 11 except for the hem 20. The boundary line D1 between the down region R2 and the cotton region R3 horizontally extends like a straight line.

[0021] The boundary line D1 is separated from the lower end T1 toward an upper end T2 so as to be located at 10% to 60%, preferably 15% to 40% of a total length L1 of the back 11 in the vertical direction. A total length L2 of the down region R2 in the vertical direction is set at, for example, 35 to 70 cm, preferably 45 to 60 cm. A total length L3 of the cotton region R3 in the vertical direction is set at, for example, 10 to 40 cm, preferably 15 to 35 cm.

[0022] The total length ratio (L2:L3) of the down region R2 and the cotton region R3 in the back 11 is set at, for example, 6 to 0.8:1.

[0023] In the overall sleeve part 12 illustrated in FIGS. 1 and 2, a cotton region R4 (illustrated in FIG. 3) filled with a cotton material is provided. "The overall sleeve part 12" may be a substantially overall region of the sleeve part 12, for example, at least 90% of the surface area of the sleeve part 12.

[0024] The side part 13 in FIG. 3 is disposed between the front 10 and the back 11 in the horizontal direction and is located under the sleeve part 12. In the overall side part 13, a cotton region R5 filled with a cotton material is provided.

[0025] "The overall side part 13" may be a substantially overall region of the side part 13, for example, at least 90% of the surface area of the side part 13. For example, the cotton region R5 may not be provided in the hem 20 of the side part 13. The cotton region R5 is disposed in a substantially rectangular region that is vertically extended and is surrounded by the front 10, the back 11, and the sleeve part 12.

[0026] The shoulder part 14 is formed like a belt from a proximal edge 12a of the sleeve part 12 to a collar. As illustrated in FIG. 4, the shoulder part 14 has an outer edge including, for example, a front/back edge 14a near the front 10 and the back 11, an upper edge 14b near the hood 15, and a lower edge 14c near the sleeve part 12.

[0027] The front/back edge 14a corresponds to an upper edge 10c of the front 10 and an upper edge 11c of the back 11, the upper edge 14b corresponds to a lower edge 15c of a collar 15b, which will be described later, and the lower edge 14c corresponds to the proximal edge 12a of the sleeve part 12.

[0028] The front/back edge 14a of the shoulder part 14 connects the proximal edge 12a of the sleeve part 12 and the lower edge 15c of the collar 15b located at the center of the outerwear 1 and is diagonally extended so as to gradually rise from the proximal edge 12a to the lower edge 15c. In the overall shoulder part 14, as illustrated in FIG. 3, a cotton region R6 filled with a cotton material is provided.

[0029] As illustrated in FIG. 3, the hood 15 has a body 15a and the collar part 15b. The body 15a includes at least a top 15d that is dome-shaped to cover the head of the wearer.

[0030] The collar 15b is a part surrounded by the front 10, the back 11, the shoulder part 14, and the body 15a and is shaped like a belt covering the neck of the wearer. The body 15a has a cotton region R7 filled with a cotton material. The collar 15b has a down region R8 filled with a down material.

[0031] The cold protection region may not be formed in an edge 30 and a front part 31 of the hood 15. The hood 15 may be detachable from the body of the outerwear 1 or may be always fixed to the body of the outerwear 1.

[0032] As illustrated in FIG. 3, the cotton region R3 of the back 11 is connected to the cotton regions R5 of the

right and left side parts 13, and the cotton regions R5 of the right and left side parts 13 are connected to the cotton regions R4 of the right and left sleeve parts 12, respectively. Furthermore, the cotton regions R4 of the right and left sleeve parts 12 are each connected to the cotton regions R6 of the right and left shoulder parts 14.

[0033] This connects the cotton region R3 of the back 11, the cotton regions R5 of the side parts 13, the cotton regions R4 of the sleeve parts 12, and the cotton regions R6 of the shoulder parts 14.

[0034] The down region R1 of the front 10 is connected to the down region R8 of the collar 15b, and the down region R8 of the collar 15b is connected to the down region R2 of the back 11. This connects the down region R1 of the front 10, the down region R8 of the collar 15b, and the down region R2 of the back 11.

[0035] According to the present embodiment, the front 10, the back 11, the sleeve parts 12, and the side parts 13 have the cold protection regions filled with a cold-proof material, and the front 10 and the back 11 have the down regions R1 and R2, which are filled with down used as a cold-proof material, at least in the upper parts of the front 10 and the back 11. This ensures a heat retaining property on the back and chest of the wearer of the outerwear 1 and a light weight of the outerwear 1.

[0036] The cotton region R4 filled with a cotton material used as a cold-proof material is provided over the sleeve part 12. The cotton region R5 filled with a cotton material used as a cold-proof material is provided at least in the lower part of the side part 13. Thus, the arms of the wearer of the outerwear 1 look slender and the wearer can sufficiently press the arms to the body with ease. This achieves a slender silhouette (shape) for the wearer of the outerwear 1. Hence, the wearer of the outerwear 1 can obtain a slender silhouette (shape) with a high degree of protection against cold and a light weight of the outerwear 1.

[0037] The cotton region R3 filled with a cotton material is provided in the lower part 11b of the back 11. The cotton material has higher strength than down. Thus, for example, even if the lower part 11b of the back 11 is pressed by the hip of the wearer each time the wearer of the outerwear 1 sits down, a deterioration of the cold protection of the outerwear 1 and deformation of the outerwear 1 can be suppressed.

[0038] The cotton material has higher resistance to water than down. Thus, even if the wearer sits on a wet place, a deterioration of the cold protection and durability of the outerwear 1 can be suppressed. This configuration is particularly suitable for the outerwear 1 for outdoor use and sports such as skiing and skateboarding.

[0039] Since the cotton region R5 of the side part 13 and the cotton region R3 of the back 11 are connected to each other, the cotton regions R5 and R3 act as a part of the frame of the outerwear 1, thereby improving the strength of the outerwear 1. Moreover, the cotton material can be more easily packed in the outerwear 1.

[0040] The cotton region R5 is provided in the overall side part 13, allowing the wearer of the outerwear 1 to sufficiently press the arms to the body. This achieves a slenderer silhouette for the wearer of the outerwear 1.

[0041] The hood 15 is configured such that the cotton region R7 filled with a cotton material is provided at least in the body 15a including the top 15d. Thus, even if the hood 15 is wetted by rain or snow, a deterioration of the cold protection of the hood 15 can be suppressed as compared with down.

[0042] The collar 15b of the hood 15 has the down region R8 filled with down, ensuring the cold protection and light weight of the hood 15.

[0043] The shoulder part 14 includes the cotton region R6 filled with a cotton material. Thus, even if the shoulder part 14 is wetted by rain or snow, a deterioration of the cold protection of the shoulder part 14 can be suppressed as compared with down. Moreover, a deterioration of the cold-proof material of the shoulder part 14 due to a strap of a rucksack can be suppressed. This configuration is particularly suitable for the outerwear 1 for outdoor use and sports such as skiing and skateboarding. The shoulder part 14 may be made of a mesh material, for example, double raschel mesh.

[0044] Since the cotton region R6 of the shoulder part 14 and the cotton region R4 of the sleeve part 12 are connected to each other, the cotton regions R6 and R4 act as a part of the frame of the outerwear 1, thereby improving the strength of the outerwear 1.

[0045] In the embodiment, the down region R2 filled with down may be provided over the back 11 as illustrated in FIG. 5. Specifically, the upper part 11a and the lower part 11b of the back 11 constitute the same down region R2 without the cotton region R3. In this case, the outerwear 1 can have an improved heat retaining property and a lighter weight.

[0046] In the embodiment of FIGS. 1 to 5, the shoulder part 14 may include a down region instead of the cotton region R6. The body 15a and the collar 15b of the hood 15 may be provided as the cotton regions R7 or the down regions R8.

[0047] As illustrated in FIG. 6, the outerwear 1 may be configured such that the front 10 includes upper parts 10d and lower parts 10e, the down region R1 is disposed in the upper part 10d, and a cotton region R10 is disposed in the lower part 10e. The upper part 10d is, for example, a part covering the chest and belly of the wearer of the outerwear 1 and the lower part 10e is a part covering the underbelly of the wearer of the outerwear 1.

[0048] In this case, the cotton region R10 is provided in a region from a lower end T3 to a boundary line D2 in the lower part 10e of the front 10 except for the hem 20. The boundary line D2 between the down region R1 and the cotton region R10 horizontally extends like a straight line. The boundary line D2 is separated from the lower end T3 toward an upper end T4 so as to be located at 10% to 60%, preferably 20% to 55% of a total length L4 of the front 10 in the vertical direction.

[0049] A total length L5 of the down region R1 in the

vertical direction is set at, for example, 35 to 70 cm. A total length L6 of the cotton region R10 in the vertical direction is set at, for example, 10 to 60 cm, preferably 20 to 50 cm. The total length ratio (L5:L6) of the down region R1 and the cotton region R10 in the front 10 is set at, for example, 6 to 0.8:1. The boundary line D2 may be disposed on the same straight line as the boundary line D1 of the back 11 of the embodiment.

[0050] As illustrated in FIG. 6, the side part 13 may include an upper part 13a and a lower part 13b, a down region R11 may be disposed in the upper part 13a, and the cotton region R5 may be disposed in the lower part 13b. In this case, a boundary line D3 between the upper part 13a and the lower part 13b may be disposed on the same position as, for example, the boundary line D2 and the boundary line D1 in the vertical direction and on the same straight line as the boundary line D2 and the boundary line D1.

[0051] For example, as illustrated in FIG. 6, the outerwear 1 may not include the shoulder parts 14 distinguished from the front 10 and the back 11. Alternatively, the hood 15 may be detachable from the outerwear 1. FIG. 6 illustrates the outerwear 1 from which the hood 15 is detached. Other configurations of the outerwear 1, for example, the front 10 and the sleeve parts 12 in FIG. 6 may be identical to those of the embodiment illustrated in FIGS. 1 to 5.

[0052] The outerwear 1 of the embodiment may have other shapes. The hood 15 may be provided or omitted. The outerwear 1 may be, for example, a jacket, a coat, or a parka.

Industrial Applicability

[0053] The present invention is useful for providing an outerwear that offers a slender silhouette to a wearer with a light weight and a high degree of protection against cold.

Reference Signs List

[0054]

1	Outerwear
10	Front
11	Back
12	Sleeve parts
13	Side parts
14	Shoulder parts
15	Hood
R1	Down region
R2	Down region
R3	Cotton region
R4	Cotton region
R5	Cotton region

Claims

1. An outerwear (1) comprising a front (10), a back (11), sleeve parts (12), and side parts (13), wherein

   the front (10), the back (11), the sleeve parts (12), and the side parts (13) are provided with cold protection regions (R1, R2, R4, R5) filled with a cold-proof material,
   the front (10) includes a down region (R1) filled with down in an upper part of the front,
   the back (11) includes a down region (R2) filled with down in an upper part of the back,
   the sleeve part (12) includes a cotton region (R4) filled with a cotton material over the sleeve part, and
   the side part (13) includes a cotton region (R5) filled with a cotton material in a lower part of the side part.

2. The outerwear (1) according to claim 1, wherein the back (11) includes a cotton region (R3) filled with a cotton material in a lower part of the back.

3. The outerwear (1) according to claim 2, wherein the cotton region (R5) of the side part (13) and the cotton region (R3) of the back (11) are seamlessly sewn.

4. The outerwear (1) according to any one of claims 1 to 3, wherein
   the side part (13) includes the cotton region (R5) in an upper part of the side part.

5. The outerwear (1) according to any one of claims 1 to 4, wherein
   the front (10) includes a cotton region (R10) filled with a cotton material in a lower part of the front.

6. The outerwear (1) according to any one of claims 1 to 5, further comprising:

   a hood (15), wherein
   the hood (15) includes a cold protection region filled with a cold-proof material and includes a cotton region (R7) filled with a cotton material in a body (15a) including a top (15d).

7. The outerwear (1) according to claim 6, wherein the hood (15) includes a collar (15b), and
   the collar (15b) includes a down region (R8) filled with down.

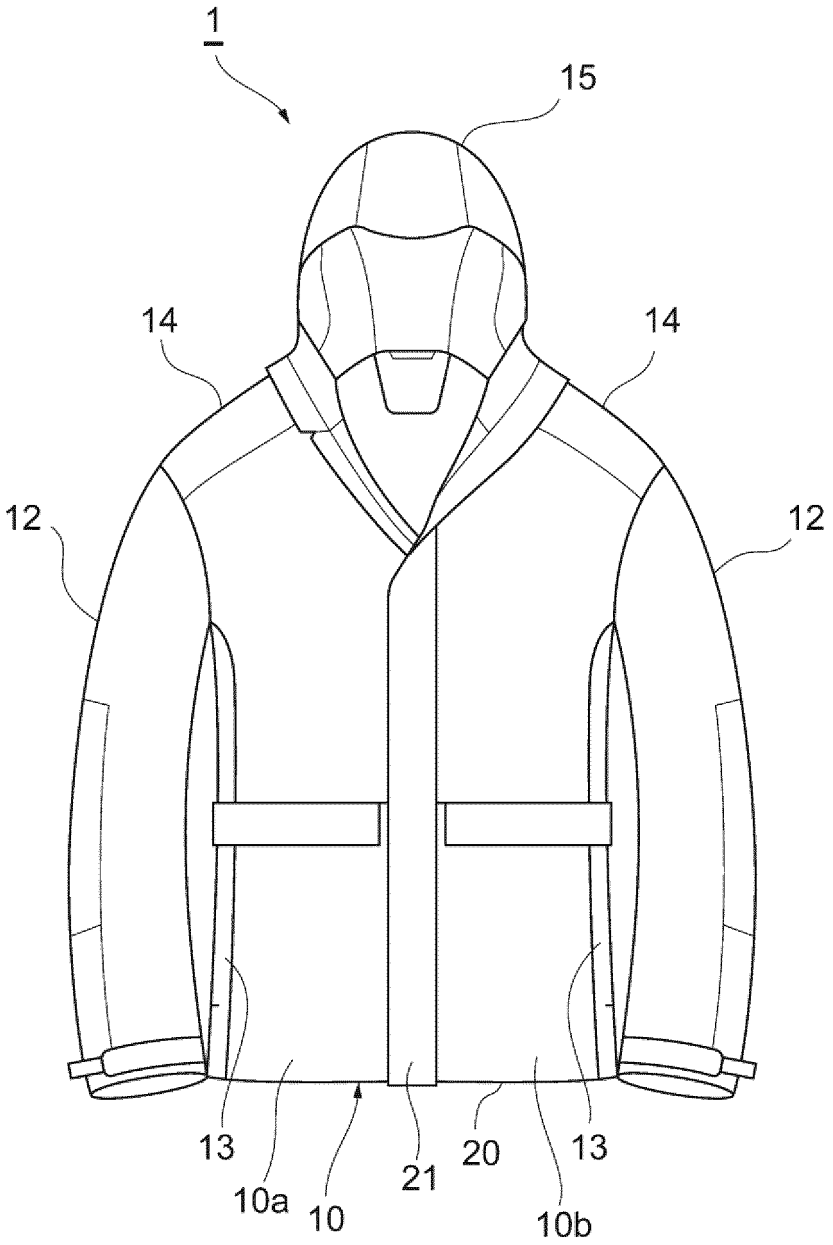
8. The outerwear (1) according to any one of claims 1 to 7, further comprising:

   shoulder parts (14), wherein
   the shoulder part (14) includes a cotton region

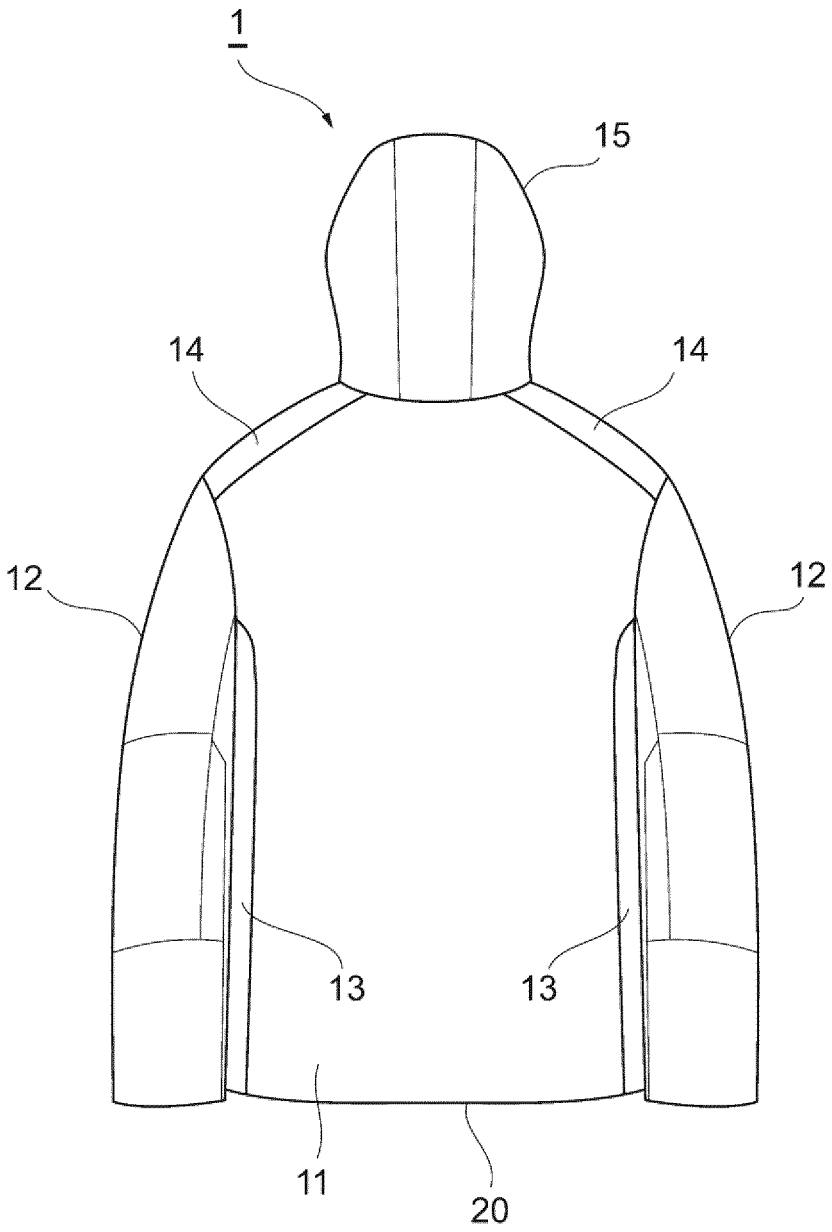
(R6) filled with a cotton material.

9. The outerwear (1) according to claim 8, wherein the cotton region (R6) of the shoulder part (14) and the cotton region (R4) of the sleeve part (12) are seamlessly sewn.

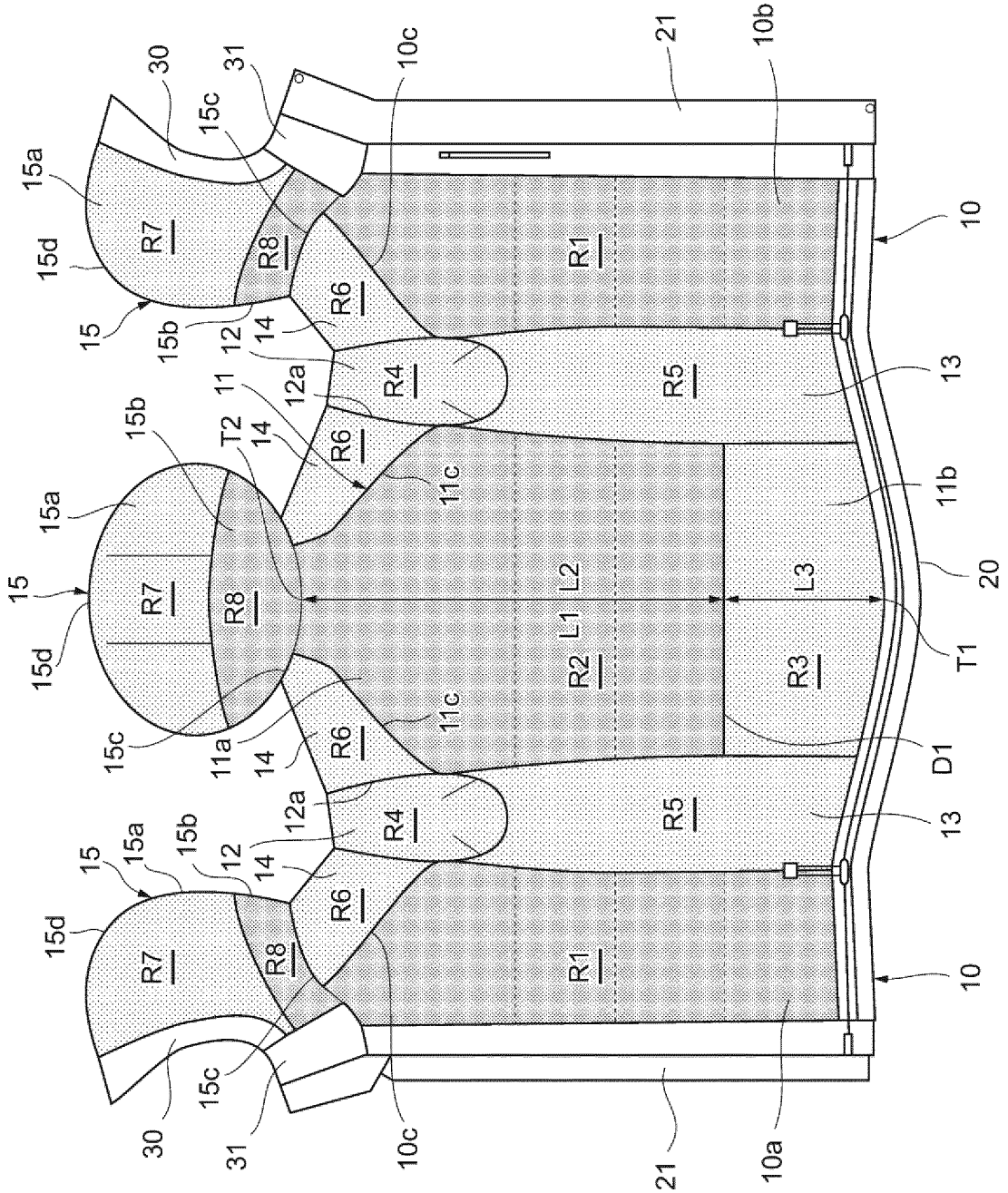
[FIG. 1]



[FIG. 2]



[FIG. 3]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12a
T2
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R3
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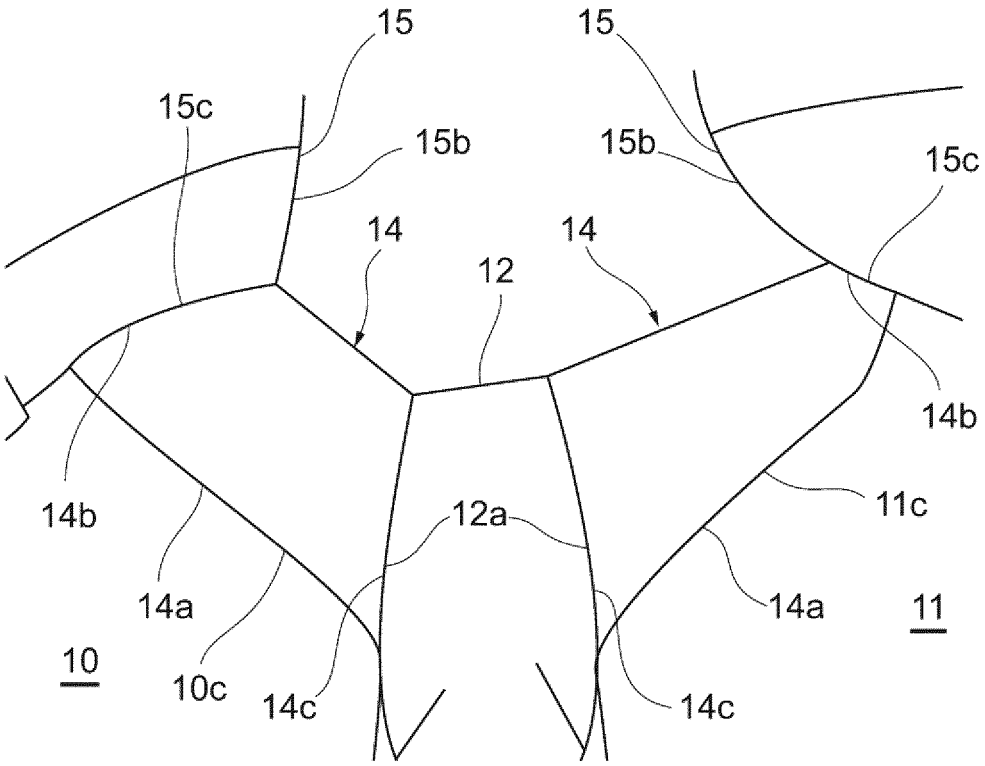
10a

[FIG. 4]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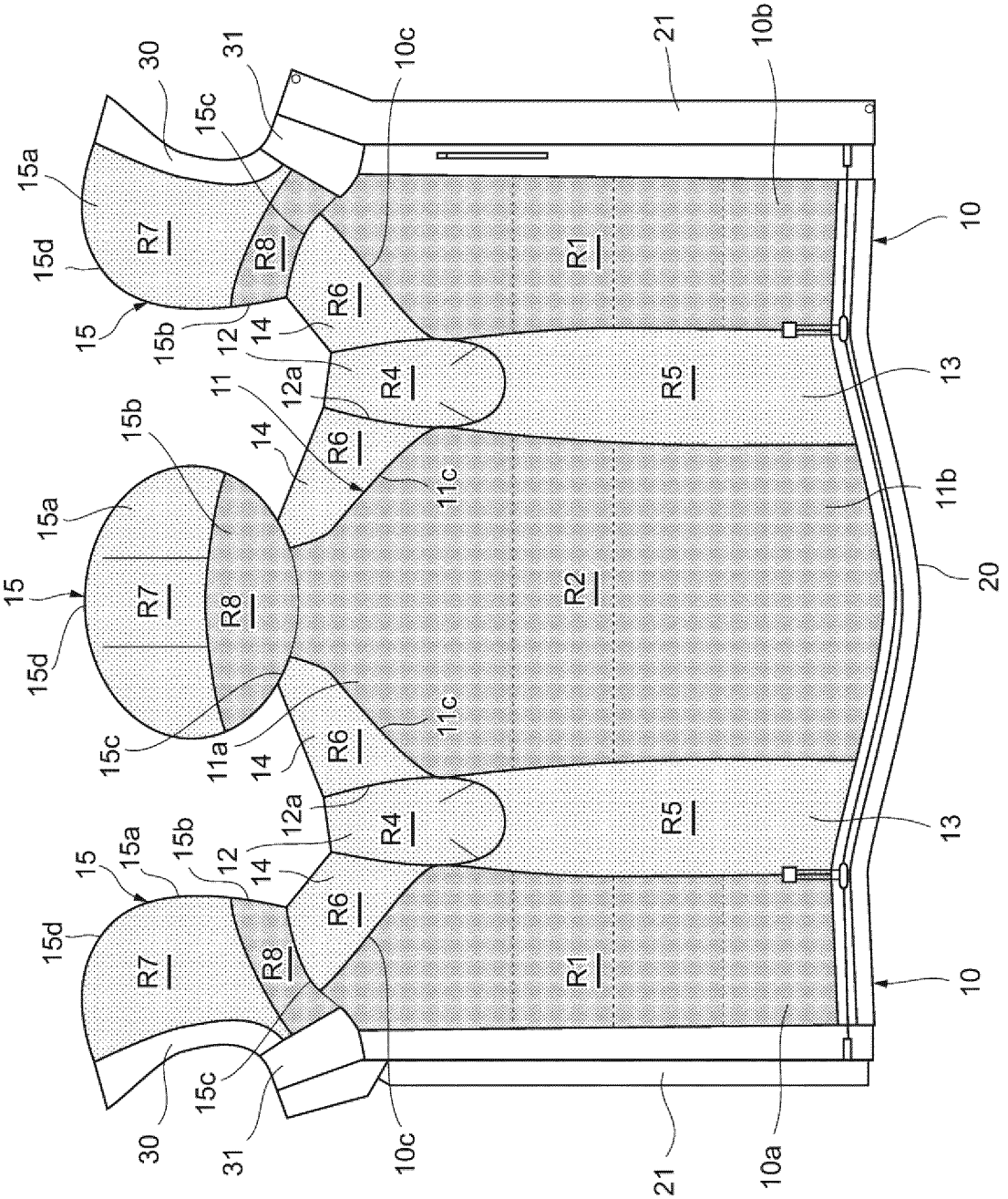
[FIG. 5]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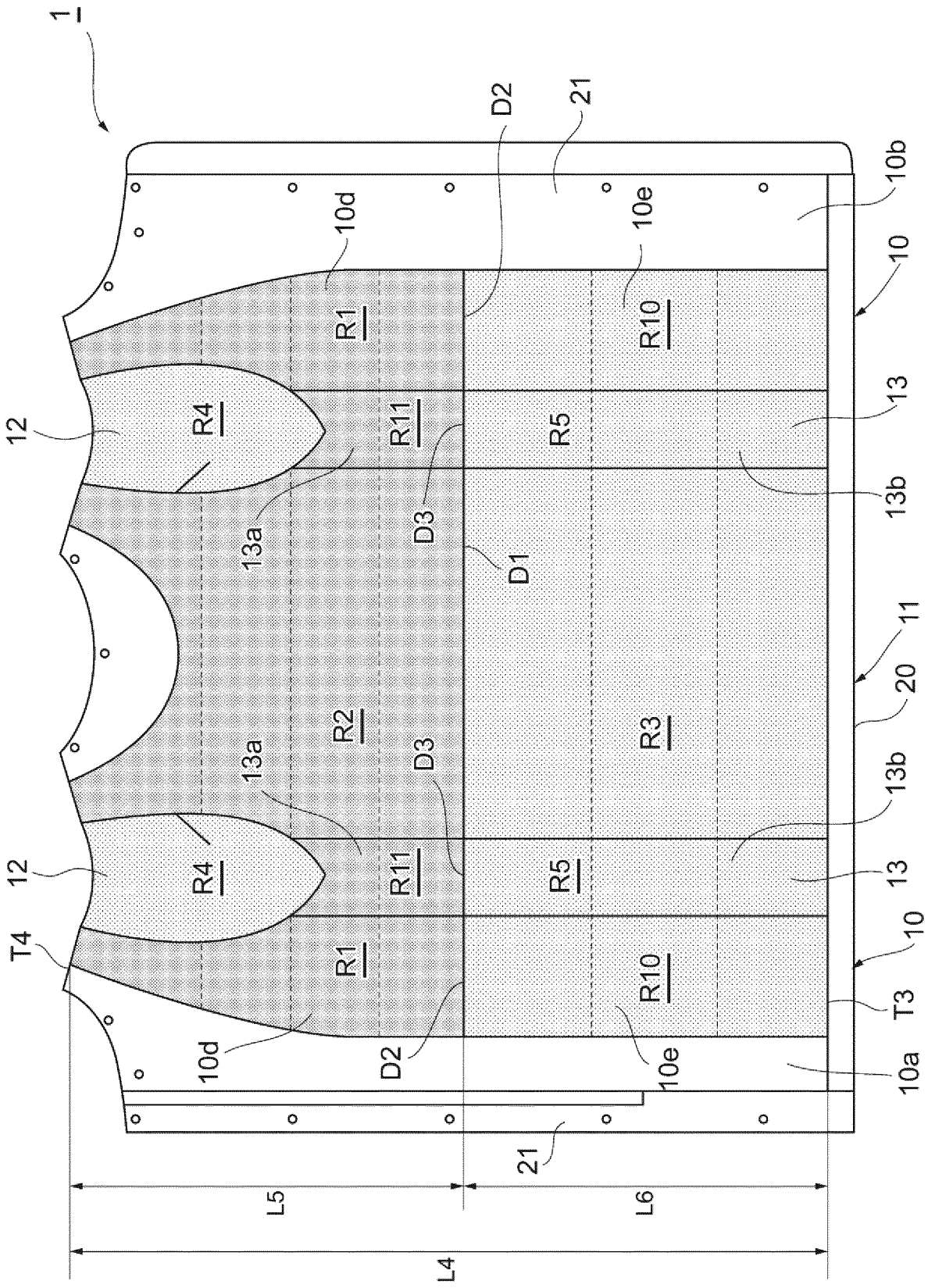
[FIG. 6]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11
20
R2
R3
T4
T3
10a
L5
L6
L4

INTERNATIONAL SEARCH REPORT

International application No.
PCT/JP2020/019935

A. CLASSIFICATION OF SUBJECT MATTER
A41D 3/00(2006.01)i; A41D 31/02(2019.01)i
FI: A41D3/00 C; A41D3/00 K; A41D31/02 E
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)
A41D3/00; A41D31/02

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

Published examined utility model applications of Japan	1922-1996
Published unexamined utility model applications of Japan	1971-2020
Registered utility model specifications of Japan	1996-2020
Published registered utility model applications of Japan	1994-2020

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 2002-69716 A (TAKEDA SHOTEN KK) 08.03.2002 (2002-03-08)	1-9
A	JP 2015-218399 A (DESCENTE LTD.) 07.12.2015 (2015-12-07)	1-9

☐ 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
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"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	Date of mailing of the international search report
20 July 2020 (20.07.2020)	04 August 2020 (04.08.2020)

Name and mailing address of the ISA/	Authorized officer
Japan Patent Office 3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan	Telephone No.

Form PCT/ISA/210 (second sheet) (January 2015)

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application no.
PCT/JP2020/019935

Patent Documents referred in the Report	Publication Date	Patent Family	Publication Date
JP 2002-69716 A	08 Mar. 2002	(Family: none)	
JP 2015-218399 A	07 Dec. 2015	(Family: none)	

Form PCT/ISA/210 (patent family annex) (January 2015)

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- JP 5951679 B **[0003]**
- JP 6182617 B **[0003]**