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(71) Applicant: **Alpha Brain-World Co.,Ltd**
Osaka-shi, Osaka 542-0081 (JP)

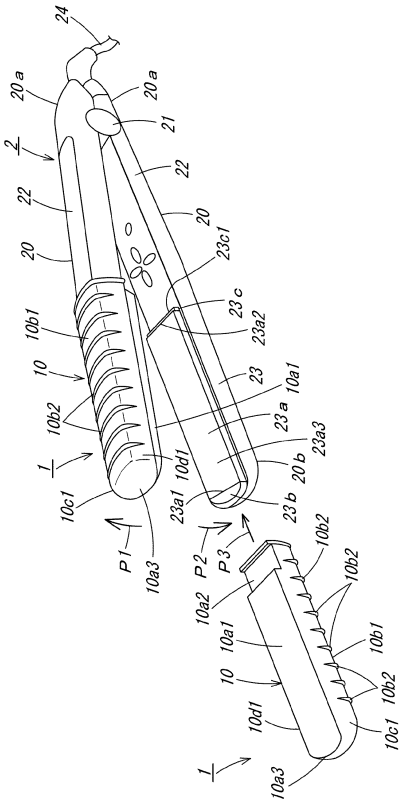
(72) Inventors:
- **SOKOBIKI, Makoto**
  Osaka-shi, Osaka 542-0081 (JP)
- **MIZUNO, Yusuke**
  Osaka-shi, Osaka 542-0081 (JP)

(74) Representative: **Hoffmann Eitle**
Patent- und Rechtsanwälte PartmbB
Arabellastraße 30
81925 München (DE)

(54) HAIR IRON COVER MEMBER AND HAIR IRON

(57) The purpose of the present invention is to provide a hair iron cover member that can be less susceptible to damage. A hair iron cover member 1 comprises a hair iron cover member body 10 that is attached to a heating portion 23 of a hair iron 2, wherein a distal end portion 10a3 of the hair iron cover member body 10 is formed into a flat shape with no steps. Therefore, unlike the prior art, since fitting recessed portions and protruding portions to each other is not necessary, the distal end portion 10a3 of the hair iron cover member body 10 can be less likely to be broken.

FIG.1



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Description

Technical Field

[0001] The present invention relates to a hair iron cover member and a hair iron.

Background Art

[0002] A heat reactive liquid agent for repairing hair has frequently been used in recent years. The liquid agent is used by being applied to the hair and heated by a far-infrared ray warmer.

[0003] However, the far-infrared ray warmer has a problem that heat is transmitted only to the surface of the hair and the repairability is reduced.

[0004] Accordingly, in order to solve such a problem, a hair iron as described in Patent Document 1 is used. When such a hair iron is used, heat is uniformly transmitted to the hair and thus the repairability can be enhanced.

Citation List

Patent Document

[0005] Patent Document 1: Japanese Utility Model Registration No. 3153008

Summary of the Invention

Technical Problem

[0006] Incidentally, in the hair iron as described above, a hair iron cover member (non-metallic pressurizing member) molded of a heat resistant silicone rubber is attached to a heating portion of the hair iron. When such a hair iron cover member is attached to the heating portion of the hair iron, recessed portions provided to both sides of a distal end portion and a rear end portion of the hair iron cover member are respectively inserted with protruding portions provided to both sides of a rod case at a distal end portion and a rear end portion of the heating portion of the hair iron, thereby allowing the hair iron cover member to be attached to the heating portion.

[0007] However, when the recessed portions provided to the distal end portion of the hair iron cover member are inserted with the protruding portions provided to the distal end portion of the heating portion of the hair iron, it is difficult to fit the recessed portions of the distal end portion of the hair iron cover member to the protruding portions provided to the distal end portion of the heating portion of the hair iron, so that there is a problem that the distal end portion of the hair iron cover member may be torn and the hair iron cover member may be damaged.

[0008] Accordingly, in view of the foregoing problem, an object of the present invention is to provide a hair iron cover member and a hair iron capable of reducing damage.

Solution to the Problem

[0009] The foregoing object of the present invention is achieved by the following means. It is noted that reference signs of an embodiment to be described later are added in parentheses, but the present invention should not be limited thereto.

[0010] A hair iron cover member (1) according to the first aspect is characterized by including a hair iron cover member body (10) attached to a heating portion (23) of a hair iron (2),
wherein the hair iron cover member body (10) has a distal end portion (10a3) formed into a flat shape with no steps.

[0011] According to the second aspect of the present invention, the hair iron cover member (1) according to the foregoing first aspect is characterized in that ridge portions (10b2) are provided on an outer peripheral surface (lower surface 10b1) of the hair iron cover member body (10) at appropriate intervals along the width direction of the hair iron cover member body (10).

[0012] Further, according to the third aspect of the present invention, the hair iron cover member (1) according to the foregoing first aspect is characterized in that the hair iron cover member body (10) has a shape having an upper portion (10a), a lower portion (10b), and side portions (a left side portion 10c and a right side portion 10d), and
the side portions (the left side portion 10c and the right side portion 10d) of the hair iron cover member body (10) have a thickness (t1) formed so as to be thicker than a thickness (t2) of the upper portion (10a) and the lower portion (10b) of the hair iron cover member body (10).

[0013] On the other hand, according to the fourth aspect of the present invention, there is provided a hair iron (2) using the hair iron cover member (1) according to the foregoing first aspect.

Advantageous Effects of the Invention

[0014] Next, advantageous effects of the present invention will be described with reference signs in the drawings. It is noted that reference signs of an embodiment to be described later are added in parentheses, but the present invention should not be limited thereto.

[0015] According to the first aspect of the present invention, the distal end portion (10a3) of the hair iron cover member body (10) is formed into a flat shape with no steps, so that there is no need to fit recessed portions and protruding portions as in the conventional case. Therefore, the situation in which the distal end portion (10a3) of the hair iron cover member body (10) is torn can be reduced.

[0016] Thus, according to the present invention, damage can be reduced.

[0017] In addition, according to the second aspect of the present invention, the ridge portions (10b2) are pro-

vided on the outer peripheral surface (lower surface 10b1) of the hair iron cover member body (10) along the width direction of the hair iron cover member body (10) at appropriate intervals, so that when the treatment of inward or outward curling is performed, the treatment can be performed smoothly while adjusting hair tips.

[0018] Further, according to the third aspect of the present invention, the side portions (the left side portion 10c and the right side portion 10d) of the hair iron cover member body (10) have a thickness (t1) formed so as to be thicker than a thickness (t2) of the upper portion (10a) and the lower portion (10b) of the hair iron cover member body (10), so that the situation in which a person to be treated feels uncomfortable or uneasy can be reduced.

[0019] On the other hand, according to the fourth aspect of the present invention, the hair iron (2) using the hair iron cover member (1) according to the foregoing first aspect is provided, so that the same advantageous effects as those of the hair iron cover member (1) according to the foregoing first aspect can be exerted.

Brief Description of the Drawings

[0020]

FIG. 1 is a partially exploded perspective view in which a hair iron cover member according to an embodiment of the present invention is to be attached to a heating portion of a hair iron.

FIG. 2(a) is a longitudinal sectional view of the hair iron cover member according to the same embodiment and FIG. 2(b) is a view of the hair iron cover member according to the same embodiment viewed from an opening side.

FIG. 3(a) is a perspective view showing a state in which wet hair is to be treated by a hair iron attached with the hair iron cover members according to the same embodiment and FIG. 3(b) is a perspective view showing a state in which wet hair in a predetermined bundle is placed between a plurality of ridge portions when the hair iron shown in FIG. 3(a) is rotated.

Description of the Embodiments

[0021] Hereinafter, an embodiment of a hair iron cover member according to the present invention will be described specifically with reference to the drawings. It is noted that when vertical and horizontal directions are indicated, it shall mean vertical and horizontal directions when viewed from the front of the figure.

[0022] As shown in FIG. 1 and FIG. 2, a hair iron cover member 1 has a hair iron cover member body 10 having a substantially vertically long semicircular shape in a longitudinal sectional view, in particular, as shown in FIG. 2(a). The hair iron cover member body 10 is formed of an elastically deformable member (for example, heat resistant silicone rubber, etc.), formed into a hollow shape as shown in FIG. 2(a), and has a rear part formed with an opening 11. Further, as shown in FIG. 2(a), an upper surface 10a1 of an upper portion 10a of the hair iron cover member body 10 is formed with a recessed step portion having a step at a rear end portion 10a2, and from the rear end portion 10a2 having the recessed step portion to a distal end portion 10a3, a flat portion with no steps is formed. That is, the distal end portion 10a3 of the hair iron cover member body 10 is formed into a flat shape with no steps.

[0023] On the other hand, as shown in FIG. 2(a), ridge portions 10b2 are integrally formed on an outer peripheral surface (lower surface 10b1) of a lower portion 10b of the hair iron cover member body 10 along the width direction of the hair iron cover member body 10 at predetermined intervals toward the outward direction.

[0024] On the other hand, as shown in FIG. 2(b), a left side portion 10c and a right side portion 10d of the hair iron cover member body 10 have a thickness t1 formed so as to be thicker than a thickness t2 of the upper portion 10a and the lower portion 10b of the hair iron cover member body 10. Specifically, the thickness t1 is formed to be about 0.9 mm and the thickness t2 is formed to be about 0.5 mm.

[0025] Thus, the hair iron cover member 1 formed as above is attached to a hair iron 2 to be used as shown in FIG. 1.

[0026] The hair iron 2 has a pair of long substantially rectangular rods 20 as shown in FIG. 1, and the pair of rods 20 have rear end portions 20a mutually connected and can be rotated around a hinge portion 21 in directions of arrows P1 and P2.

[0027] On the other hand, as shown in FIG. 1, the rod 20 is provided with a grip portion 22 which can be gripped by a user on the rear end portion 20a side and provided with a heating portion 23 on a distal end portion 20b side. The heating portion 23 is provided with a heater (not shown) inside, and a rectangular metal heating plate 23a heated by transmitting the heat energy of the heater is provided. The heating plate 23a has a distal end portion 23a1 supported by a first support portion 23b and has a rear end portion 23a2 supported by a second support portion 23c as shown in FIG. 1. The first support portion 23b is formed so as to be flush with an upper surface 23a3 of the heating plate 23a and formed into a thick semicircular shape as shown in FIG. 1 and FIG. 2(a). On the other hand, the second support portion 23c is formed so that an upper surface 23c1 comes to a position lower than the upper surface 23a3 of the heating plate 23a and formed into a thick rectangular shape as shown in FIG. 1 and FIG. 2(a). As a result, a step portion is generated between the rear end portion 23a2 of the heating plate 23a and the upper surface 23c1 of the second support portion 23c. The heater (not shown) generates heat by electric energy supplied from a power supply cord 24 connected to a commercial power source (not shown).

[0028] Thus, in each of the pair of rods 20 of the hair iron 2 formed in this manner, as shown in FIG. 1, the hair

iron cover member 1 is attached to the heating portion 23 (distal end portion 20b) of the rod 20. More specifically, the hair iron cover member body 10 is inserted with the distal end portion 20b of the rod 20 from the opening 11 formed in the rear part of the hair iron cover member body 10 (see arrow P3). As a result, as shown in FIG. 2(a), the recessed step portion formed at the rear end portion 10a2 of the hair iron cover member body 10 is closely fitted to the step portion generated between the rear end portion 23a2 of the heating plate 23a and the upper surface 23c1 of the second support portion 23c, and the hair iron cover member 1 is attached to the heating portion 23 (distal end portion 20b) of the rod 20.

[0029] At this time, since the distal end portion 10a3 of the hair iron cover member body 10 is formed into a flat shape with no steps, there is no need to fit recessed portions and protruding portions as in the conventional case. Therefore, the situation in which the distal end portion 10a3 of the hair iron cover member body 10 is torn can be reduced.

[0030] In this respect, to the distal end portion 20b of the rod 20 located at the upper part shown in FIG. 1, a hair iron cover member 1 obtained by rotating 180 degrees the hair iron cover member 1 attached to the distal end portion 20b of the rod 20 located at the lower part shown in FIG. 1 is attached.

[0031] Thus, the hair iron 2 to which the hair iron cover members 1 are attached to the heating portions 23 (distal end portions 20b) of the rods 20 in this manner is used as shown in FIG. 3. That is, as shown in FIG. 3(a), mainly, a heat reactive liquid agent for repairing hair is applied to wet hair H, and the wet hair H to which the liquid agent is applied is sandwiched between the upper surfaces 10a1 of the pair of rods 20 attached with the hair iron cover members 1 and is heated. As a result, treatment such as a permanent wave can be performed.

[0032] Incidentally, at this time, in the hair iron 2 to which the hair iron cover members 1 are attached, the heating plates 23a are heated by heaters (not shown) and the heat of the heating plates 23a is transmitted to the hair iron cover members 1 attached to the heating portions 23 (distal end portions 20b) of the rods 20. As a result, when the wet hair H is sandwiched between the upper surfaces 10a1 of the pair of rods 20 attached with the hair iron cover members 1 and is heated, the heat of the heating plates 23a is not directly transmitted to the wet hair H, but is transmitted via the hair iron cover members 1. Thus, even if the wet hair H is sandwiched between the upper surfaces 10a1 of the pair of rods 20 attached with the hair iron cover members 1 and is heated, an instantaneous evaporation phenomenon does not occur and the heat is uniformly transmitted to the hair. As a result, the repairability of the hair H can be enhanced.

[0033] Incidentally, when the wet hair H is sandwiched between the upper surfaces 10a1 of the pair of rods 20 attached with the hair iron cover members 1 and is heated, water droplets W of the wet hair H are attached on an outer peripheral surface 10c1 of the left side portion 10c or an outer peripheral surface 10d1 of the right side portion 10d of the hair iron cover member body 10 as shown in FIG. 3(a). At this time, when the heat of the heating plates 23a is transmitted to the hair iron cover members 1, the water droplets W are evaporated by the heat, and the sizzling sound at the time of the evaporation may make the person to be treated feel uncomfortable or uneasy.

[0034] Accordingly, in the present embodiment, in order to reduce the situation in which the person to be treated feels uncomfortable or uneasy, as shown in FIG. 2(b), the left side portion 10c and the right side portion 10d of the hair iron cover member body 10 have the thickness t1 formed so as to be thicker than the thickness t2 of the upper portion 10a and the lower portion 10b of the hair iron cover member body 10. As a result, when the heat of the heating plate 23a is transmitted to the hair iron cover member 1, the heat is less likely to be transmitted to the outer peripheral surface 10c1 of the left side portion 10c and the outer peripheral surface 10d1 of the right side portion 10d of the hair iron cover member body 10 by the increased thickness. Therefore, as shown in FIG. 3(a), even if the water droplets W of the wet hair H are attached on the outer peripheral surface 10c1 of the left side portion 10c or the outer peripheral surface 10d1 of the right side portion 10d of the hair iron cover member body 10, the water droplets W are less likely to be evaporated, so that the situation in which the person to be treated feels uncomfortable or uneasy can be reduced.

[0035] On the other hand, when the wet hair H is sandwiched between the upper surfaces 10a1 of the pair of rods 20 attached with the hair iron cover members 1 and is heated, the treatment of inward or outward curling may be performed. Therefore, in the present embodiment, in order that the treatment can be performed smoothly while adjusting the hair tips when the treatment of inward or outward curling is performed, ridge portions 10b2 are integrally formed on the outer peripheral surface (lower surface 10b1) of the lower portion 10b of the hair iron cover member body 10 along the width direction of the hair iron cover member body 10 at predetermined intervals toward the outward direction as shown in FIG. 1 and FIG. 2(a). That is, for example when performing the treatment of inward curling, as shown in FIG. 3(a), the hair iron 2 is rotated in the direction of arrow P4 with the wet hair H sandwiched between the upper surfaces 10a1 of the pair of rods 20 attached with the hair iron cover members 1. As a result, as shown in FIG. 3(b), the ridge portions 10b2 formed on the outer peripheral surface (lower surface 10b1) of the lower portion 10b of the hair iron cover member body 10 cut in between the wet hair H. Then, as the ridge portions 10b2 cut in between the hair H, the wet hair H in a predetermined bundle Ha is placed between a plurality of ridge portions 10b2. Thus, the wet hair H in the predetermined bundle Ha is placed between the plurality of ridge portions 10b2 in this manner, so that the treatment of inward curling can be performed smooth-

ly while adjusting the hair tips. In this respect, when performing the treatment of outward curling, the hair iron 2 is only required to be rotated in the direction opposite to the direction of arrow P4 shown in FIG. 3(a).

[0036] Thus, if the ridge portions 10b2 are integrally formed on the outer peripheral surface (lower surface 10b1) of the lower portion 10b of the hair iron cover member body 10 along the width direction of the hair iron cover member body 10 at predetermined intervals toward the outward direction, the treatment can be performed smoothly while adjusting the hair tips when the treatment of inward or outward curling is performed.

[0037] Thus, according to the present embodiment described above, damage to the hair iron cover member 1 can be reduced.

[0038] It is noted that the shape and the like shown in the present embodiment are merely examples, and various modifications and changes can be made within the scope of the gist of the present invention described in the claims. For example, the example in which the ridge portions 10b2 of the hair iron cover member 1 are formed at predetermined intervals is shown. However, without being limited thereto, the ridge portions 10b2 may be formed at random. Further, the example in which the ridge portions 10b2 are integrally formed with the hair iron cover member body 10 is shown. However, without being limited thereto, the ridge portions 10b2 may be formed separately. Further, the example in which the ridge portions 10b2 are formed on the outer peripheral surface (lower surface 10b1) of the lower portion 10b of the hair iron cover member body 10 is shown. However, without being limited thereto, the ridge portions 10b2 may be formed on an outer peripheral surface (upper surface 10a1) of the upper portion 10a of the hair iron cover member body 10.

[0039] On the other hand, the hair iron 2 shown in the present embodiment is merely an example. When the hair iron cover member 1 is attached, it may be attached to any hair iron.

[0040] Further, in the present embodiment, the example in which the hair iron 2 attached with the hair iron cover members 1 is used for the wet hair H is shown. However, without being limited thereto, it may be used for dry hair.

Reference Sings List

[0041]

1	Hair iron cover member
2	Hair iron
10	Hair iron cover member body
10a	Upper portion (of hair iron cover member body)
10a3	Distal end portion (of hair iron cover member body)
10b	Lower portion (of hair iron cover member body)
10b1	Lower surface (outer peripheral surface) (of lower portion)
10b2	Ridge portion
10c	Left side portion (side portion) (of hair iron cover member body)
10d	Right side portion (side portion) (of hair iron cover member body)
23	Heating portion
t1, t2	Thickness

Claims

1. A hair iron cover member comprising:

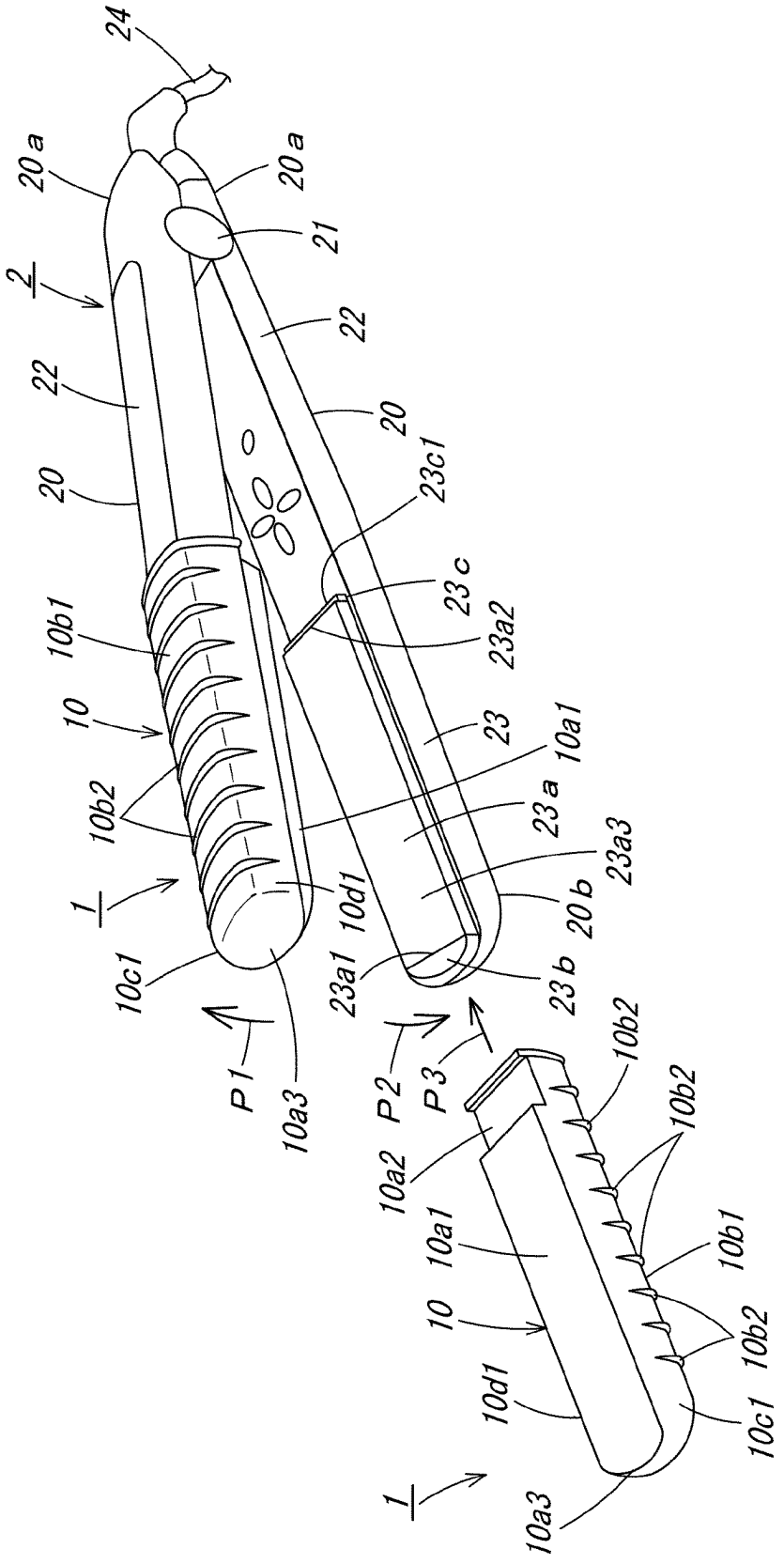
a hair iron cover member body attached to a heating portion of a hair iron,
wherein the hair iron cover member body has a distal end portion formed into a flat shape with no steps.

2. The hair iron cover member according to claim 1, wherein ridge portions are provided on an outer peripheral surface of the hair iron cover member body at appropriate intervals along a width direction of the hair iron cover member body.

3. The hair iron cover member according to claim 1, wherein the hair iron cover member body has a shape having an upper portion, a lower portion, and side portions, and
the side portions of the hair iron cover member body have a thickness formed so as to be thicker than a thickness of the upper portion and the lower portion of the hair iron cover member body.

4. A hair iron using the hair iron cover member according to claim 1.

FIG.1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23a
23a3
1
10d1
20b
10c1
23a1
23b
P1
P2
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10d1
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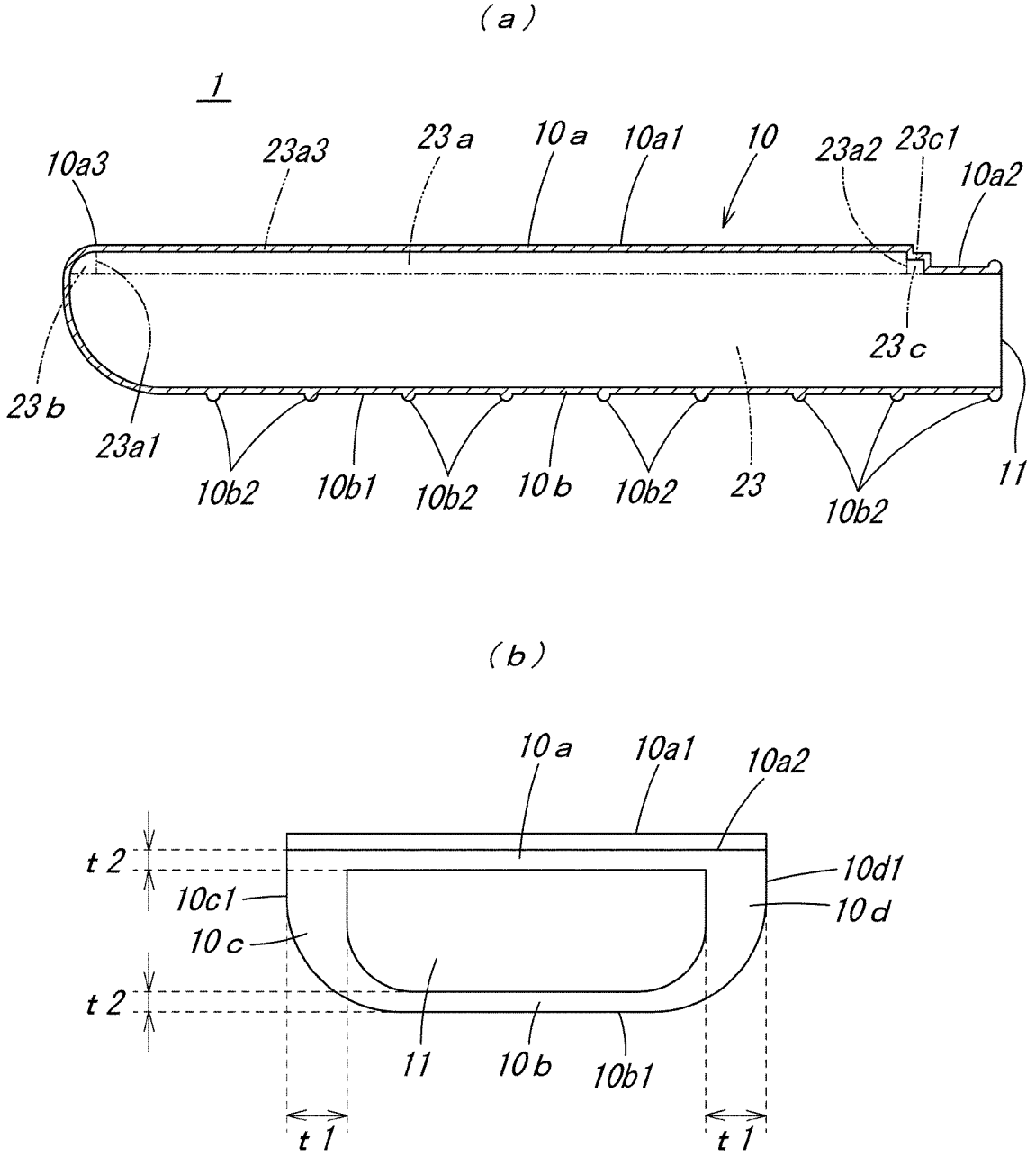
1
10a3

FIG.2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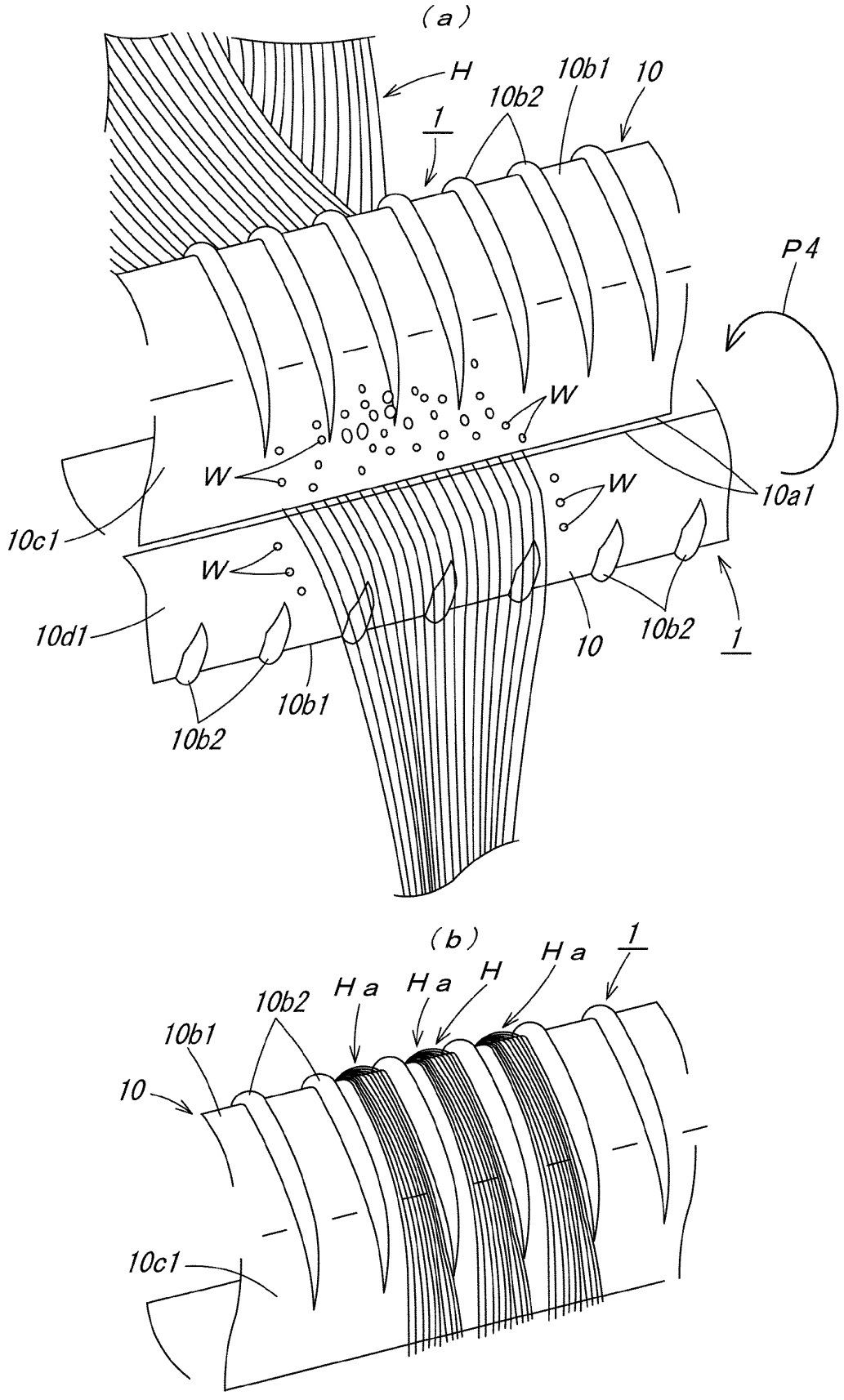
10b
10b1
t 1
t 1

FIG.3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(b)
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Ha
H
Ha
1
10b2
10b1
10
10c1

INTERNATIONAL SEARCH REPORT

International application No.
PCT/JP2019/022348

A. CLASSIFICATION OF SUBJECT MATTER
Int.Cl. A45D1/00(2006.01)i, A45D1/04(2006.01)i

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)
Int.Cl. A45D1/00, A45D1/04

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	1971-2019
Registered utility model specifications of Japan	1996-2019
Published registered utility model applications of Japan	1994-2019

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.
X Y A	JP 3164594 U (CREATE ION) 09 December 2010, paragraphs [0032]-[0037], fig. 1-3 (Family: none)	1, 4 2 3
Y A	JP 2009-273900 A (FUTEK INC.) 26 November 2009, paragraph [0038], fig. 6 & US 2009/0032048 A1, paragraph [0058], fig. 6 & KR 10-2009-0013682 A	2 1, 3, 4

☒ 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
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"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
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Date of the actual completion of the international search	Date of mailing of the international search report
28 June 2019 (28.06.2019)	06 August 2019 (06.08.2019)

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

International application No.
PCT/JP2019/022348

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 3204499 U (HAMAMOTO, Atsushi) 02 June 2016, entire text, all drawings (Family: none)	1-4
A	JP 2002-78523 A (PHILD CO., LTD.) 19 March 2002, entire text, all drawings & US 2002/0194846 A1, entire text, all drawings & DE 60105706 D & KR 10-2002-0062783 A	1-4
A	JP 3153008 U (MIZUNO, Keisuke) 20 August 2009, entire text, all drawings (Family: none)	1-4
A	KR 10-2005-0075942 A (LEE, Dae-Beom) 26 July 2005, paragraph [0047] (Family: none)	1-4
A	KR 10-2014-0031579 A (LEE, Man-Taek) 13 March 2014, paragraph [0020] (Family: none)	1-4

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

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- JP 3153008 U **[0005]**