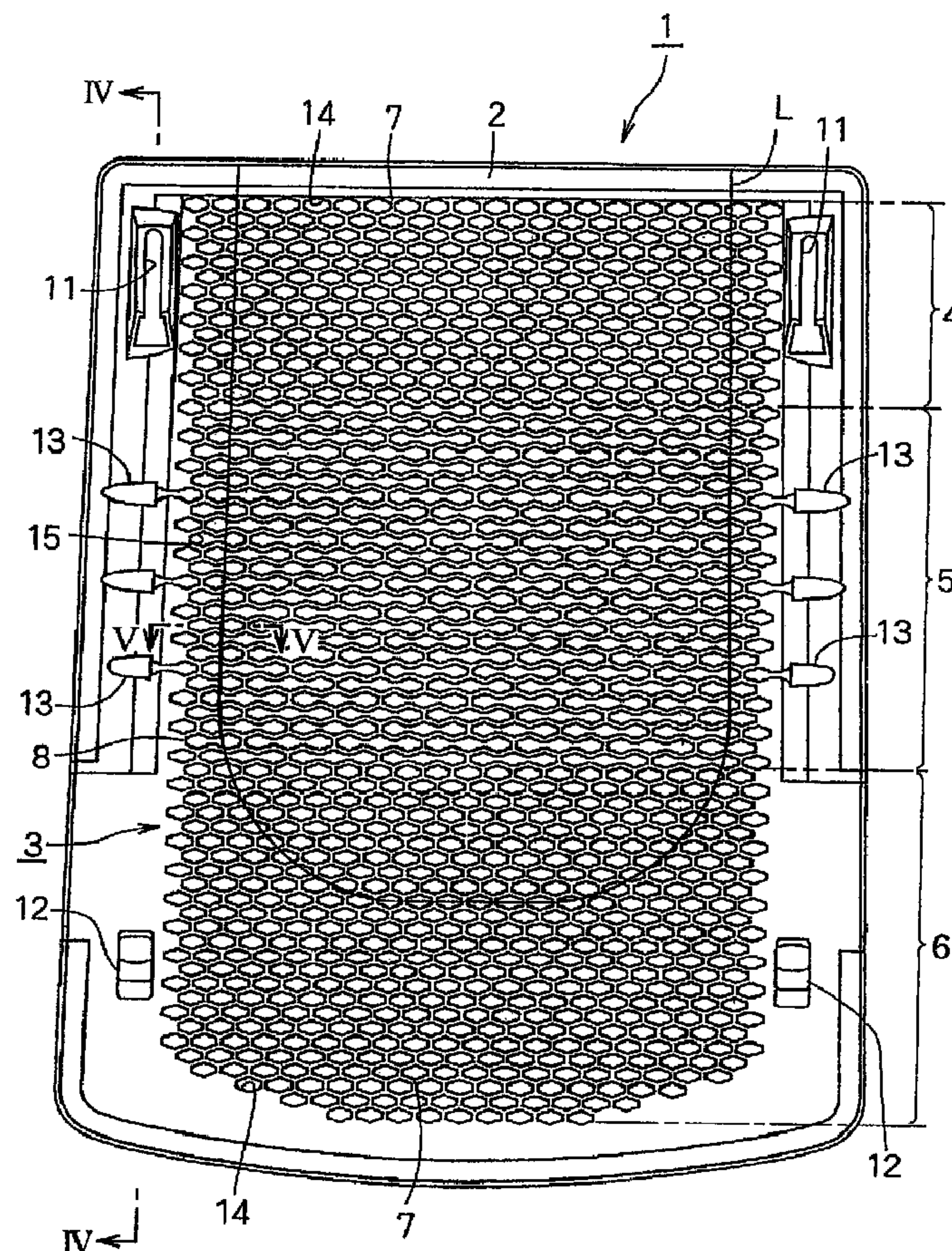




(86) Date de dépôt PCT/PCT Filing Date: 2006/11/02
(87) Date publication PCT/PCT Publication Date: 2007/05/18
(45) Date de délivrance/Issue Date: 2014/07/22
(85) Entrée phase nationale/National Entry: 2008/05/14
(86) N° demande PCT/PCT Application No.: JP 2006/321943
(87) N° publication PCT/PCT Publication No.: 2007/055145
(30) Priorité/Priority: 2005/11/14 (JP2005-328348)

(51) Cl.Int./Int.Cl. *A47C 7/40* (2006.01)
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(54) Titre : PLAQUE DE FOND POUR SIEGE
(54) Title: BASE PLATE FOR A CHAIR



(57) Abrégé/Abstract:

A flexible base board for a chair, easily bends into a desirable shape. The base board fits more appropriately to the body of a person seated on the chair following the shape of the person's body without pressing the back etc., thereby providing the person



(57) **Abrégé(suite)/Abstract(continued):**

with good sitting comfort. The flexible base board is used for the backrest etc. of a chair. The base board has an upper shell (4), an intermediate shell (5), and a lower shell (6). A large number of holes (14) having substantially the same size are substantially uniformly formed in the entire surfaces of the upper shell (4) and of the lower shell (6). Also, a large number of holes (15) are formed in the entire surface of the intermediate shell (5), and each hole (15) has a greater transverse width than a hole (14) in the upper shell (4) and the lower shell (6).

(12) 特許協力条約に基づいて公開された国際出願

(19) 世界知的所有権機関
国際事務局(43) 国際公開日
2007 年 5 月 18 日 (18.05.2007)

PCT

(10) 国際公開番号
WO 2007/055145 A1(51) 国際特許分類:
A47C 7/40 (2006.01)

(21) 国際出願番号: PCT/JP2006/321943

(22) 国際出願日: 2006 年 11 月 2 日 (02.11.2006)

(25) 国際出願の言語: 日本語

(26) 国際公開の言語: 日本語

(30) 優先権データ:
特願 2005-328348

2005 年 11 月 14 日 (14.11.2005) JP

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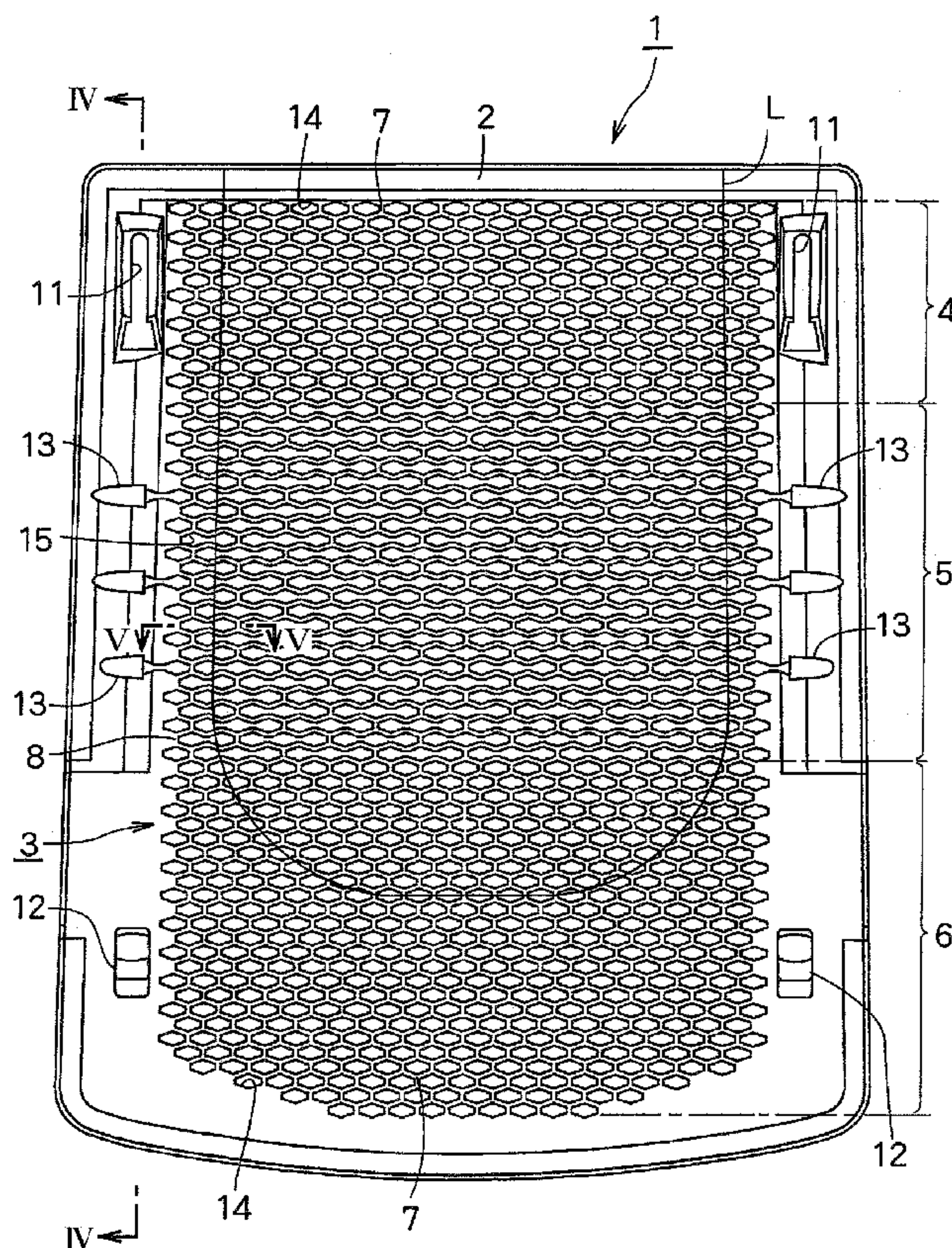
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ワビル Tokyo (JP).(81) 指定国 (表示のない限り、全ての種類の国内保護
が可能): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG,
BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK,
DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR,
KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG,
MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM,
PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL,
SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
VC, VN, ZA, ZM, ZW.(84) 指定国 (表示のない限り、全ての種類の広域保護が可
能): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD,

[続葉有]

(54) Title: BASE BOARD FOR CHAIR

(54) 発明の名称: 椅子用基板



(57) Abstract: A flexible base board for a chair, easily bends into a desirable shape. The base board fits more appropriately to the body of a person seated on the chair following the shape of the person's body without pressing the back etc., thereby providing the person with good sitting comfort. The flexible base board is used for the backrest etc. of a chair. The base board has an upper shell (4), an intermediate shell (5), and a lower shell (6). A large number of holes (14) having substantially the same size are substantially uniformly formed in the entire surfaces of the upper shell (4) and of the lower shell (6). Also, a large number of holes (15) are formed in the entire surface of the intermediate shell (5), and each hole (15) has a greater transverse width than a hole (14) in the upper shell (4) and the lower shell (6).

(57) 要約: 好ましい形状に撓み易くし、もって、着座者の背中等を圧迫することなく、着座者の体型に合わせて、より身体にフィットでき、快適な着座感を得ることができるようにした椅子用基板を開示する。椅子の背凭れ部等に使用される可撓性を有する椅子用基板であって、上部シェル 4 と中間シェル 5 と下部シェル 6 とからなり、上部シェル 4 と下部シェル 5 の全面に、ほぼ等寸の多数の孔 14 を、ほぼ均一に設け、かつ中間シェル 5 の全面に、上部シェル 4 と下部シェル 6 の孔 14 よりも横方向の幅が大きい多数の孔 15 を、ほぼ均等に分布して設ける。

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SL, SZ, TZ, UG, ZM, ZW), ユーラシア (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), ヨーロッパ (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

添付公開書類:
— 国際調査報告書

2文字コード及び他の略語については、定期発行される各*PCT*ガゼットの巻頭に掲載されている「コードと略語のガイダンスノート」を参照。

SPECIFICATION

BASE PLATE FOR A CHAIR

TECHNICAL FIELD

[0001]

The present invention relates to a base plate for a chair and particularly to a base plate suitable for the backrest of a chair and variable in shape depending on the back of an occupant who sits on the chair.

BACKGROUND OF THE INVENTION

[0002]

A base plate for the backrest of a chair may preferably have a curved support surface fitting the back of an occupant for a chair. For example, JP2000-270962A and JP2001-128788A disclose a base plate for the backrest of a chair having a flexible curved surface following the back of the occupant.

[0003]

The base plate for the backrest in the Japanese publications is likely to bend depending on the back of the occupant, but it is not sufficient to provide flexibility in the intermediate part mainly supporting the back of the occupant. It is necessary to improve sitting comfort.

SUMMARY OF THE INVENTION

[0004]

In view of the disadvantages above, it is an object of the invention to provide a base plate for a chair, the base plate being flexible when an occupant reclines on the backrest to allow the base plate to fit the body of the occupant without pressurizing the back

thereby providing good sitting comfort.

BRIEF DESCRIPTION OF THE DRAWINGS:

[0005]

Fig. 1 is a rear elevational view of a chair comprising one embodiment of a base plate for a chair according to the present invention.

[0006]

Fig. 2 is a side elevational view thereof.

[0007]

Fig. 3 is a front elevational view of a base plate for the chair.

[0008]

Fig. 4 is a vertical sectional side view taken along the line IV-IV in Fig. 3.

[0009]

Fig. 5 is an enlarged horizontal sectional plan view taken along the line V-V in Fig. 3.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENT:

[0010]

A base plate 1 for the backrest of a chair comprises a shell made of metal or synthetic resin with deep drawing. A back support 3 or shell surrounded by a back frame 2 comprises an upper part 4, an intermediate part 5 and a lower part 6.

[0011]

The upper part 4 and lower part 6 comprise a fine mesh, while the intermediate shell 5 comprises a coarse mesh.

[0012]

The base 1 is mounted over the front surface of right and left

side rods 10,10 of the back frame 9 with a pair of upper connectors 11 and a pair of lower connectors 12.

[0013]

The intermediate part 5 supports the middle of the back of an occupant on the chair; the upper part 4 supports the upper back and shoulders; and the lower part 6 supports the lower back.

[0014]

In Fig. 4, three flexible U-like portions 13 connect the side edge of the intermediate part 5 to the side of the back frame 2 to bend, expand and contract connecting parts of the intermediate part with the sides of the back frame 2 about the U-like portions 13.

[0015]

Openings 14 in the mesh 7 of the upper part 4 and lower part 6 are hexagonal and arranged like an X. Thus, the upper part 4 and lower part 6 can be bent depending on the shape of the back of the occupant. The mesh 7 is variable in flexibility depending on its thickness and shape.

[0016]

An opening 15 of the mesh 8 of the intermediate part 5 has a shape in which three openings of the upper and lower parts 4,6 are combined horizontally. The openings 15 are staggered vertically by a half and distributed uniformly. The intermediate part 5 is lower in flexural rigidity than the upper and lower parts 4,6 and is likely to bend. The flexibility of the mesh 8 is variable by changing thickness and the number of connections between the openings 14.

[0017]

In Fig. 3, the part surrounded by a U-like line L is thinner than

the other parts comprising the sides of the upper part 4 and intermediate part 6, and a lower portion of the lower part 5. The part surrounded by the L supports the upper back of the occupant.

[0018]

In this embodiment, in Fig. 5, the thickness t_1 of the part surrounded by the line L is about 3 mm, while the thickness t_2 of the other parts is about 4 mm. The part surrounded by the line L is concave.

[0019]

As described above, in the embodiment, the opening 15 in the intermediate part 5 is longer along a width of the chair than the opening 14 of the upper and lower parts 4, 6 to make coarse mesh. So the intermediate part 5 provides lower flexural rigidity than the upper and lower parts 4,6 and is likely to bend. The part supporting the upper back of the occupant is thinner than the other parts to allow the intermediate part 5 supporting the middle back of the occupant to vary in shape readily depending on the back of the occupant. The upper and lower parts 4,6 which support the shoulders and back of the occupant provide higher flexural rigidity and are unlikely to bend. Thus, the entire back of the occupant can suitably be supported to provide good comfort for sitting.

[0020]

The present invention is not limited to use for the backrest, but may be applied to seats and bases of beds.

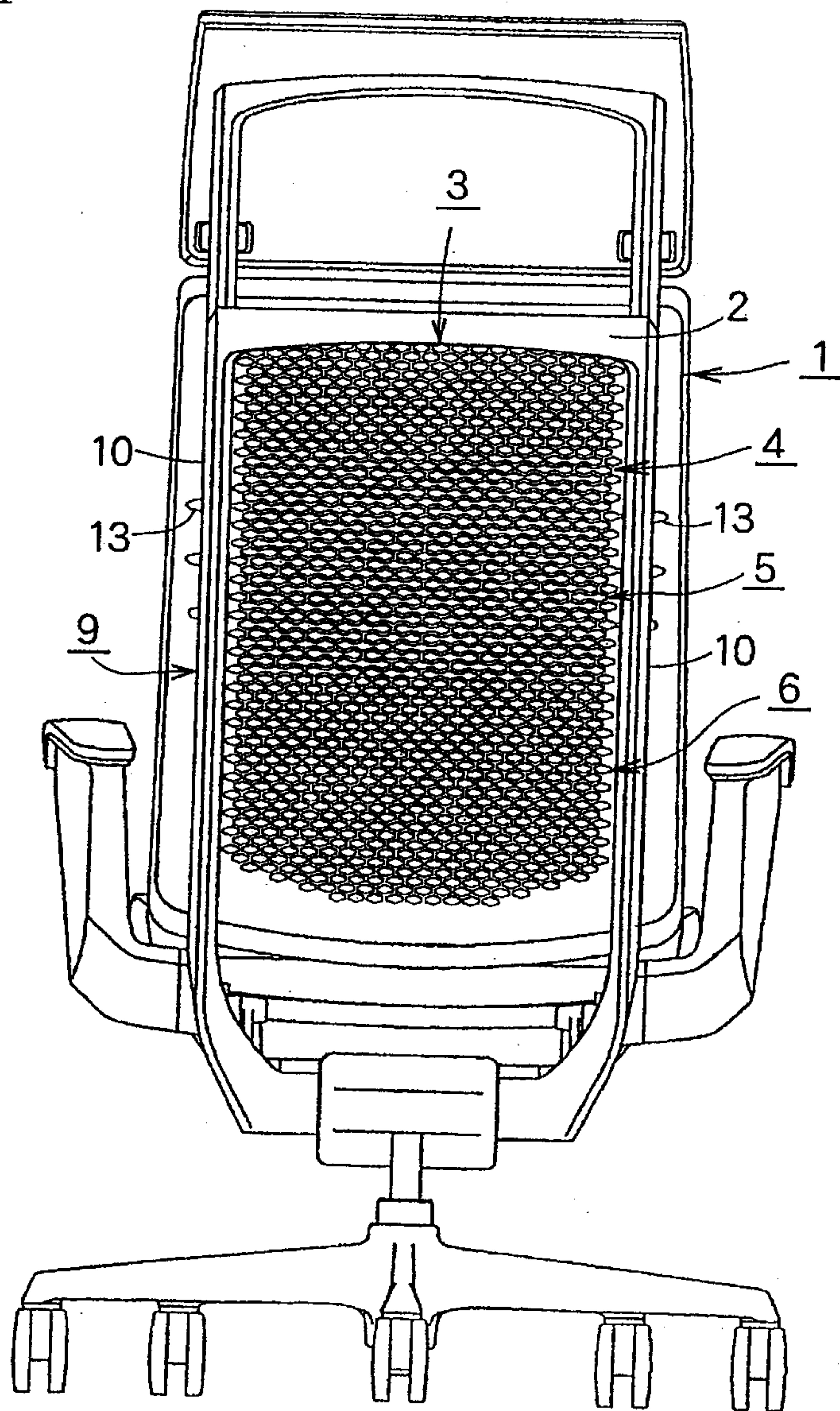
CLAIMS:

1. A base plate for a chair, comprising:
an upper part having a plurality of first openings;
a lower part having a plurality of second openings; and
an intermediate part between the upper part and the lower part, and the intermediate part having a plurality of third openings each of which is horizontally longer than each of the plurality of first and second openings; wherein an upper middle part is thinner than parts comprising sides of the upper part, sides of the intermediate part and a lower portion of the lower part.
2. The base plate of claim 1, wherein a plurality of flexible U-shaped portions connect a side edge of the intermediate part to a back frame surrounding the base plate.

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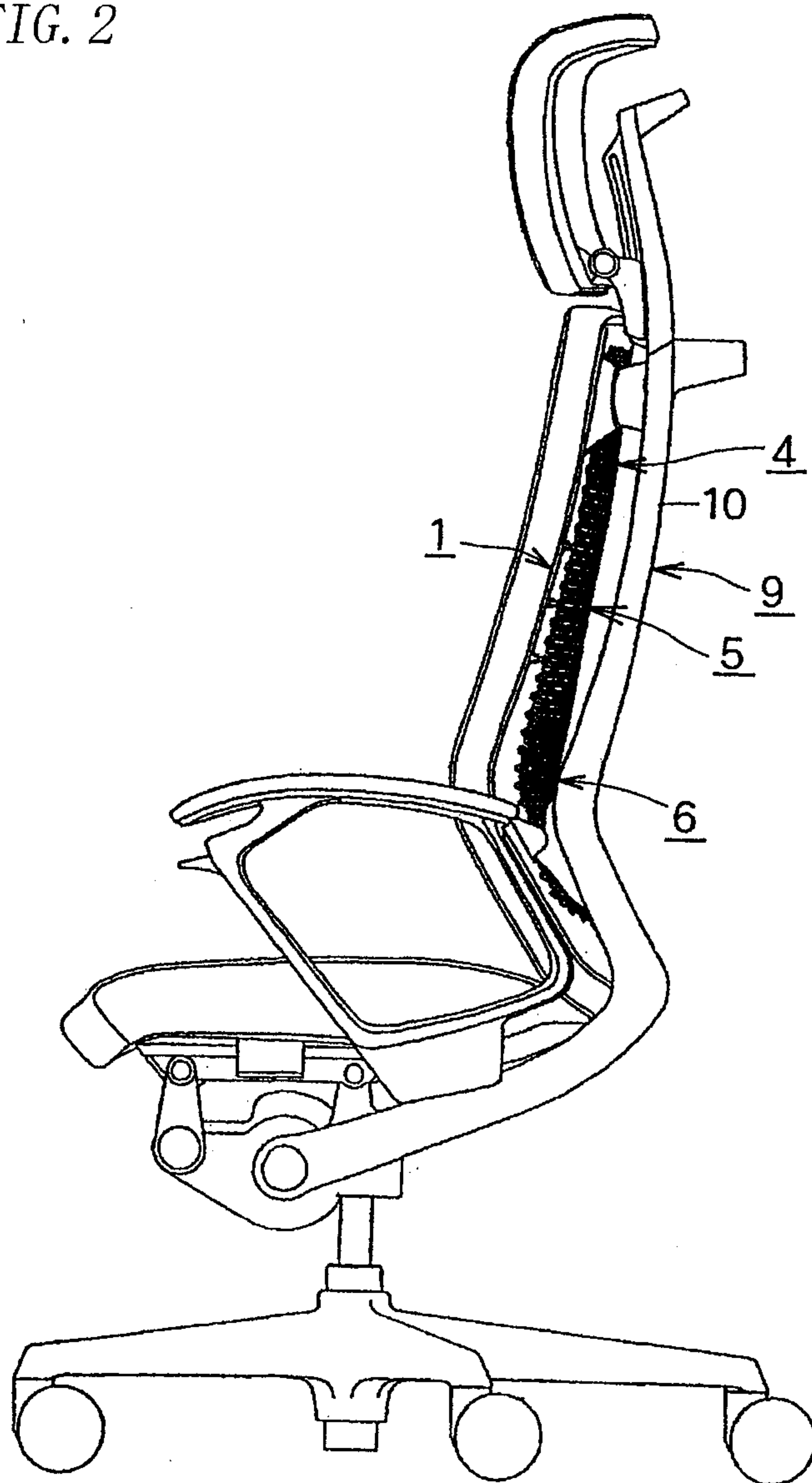
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FIG. 1



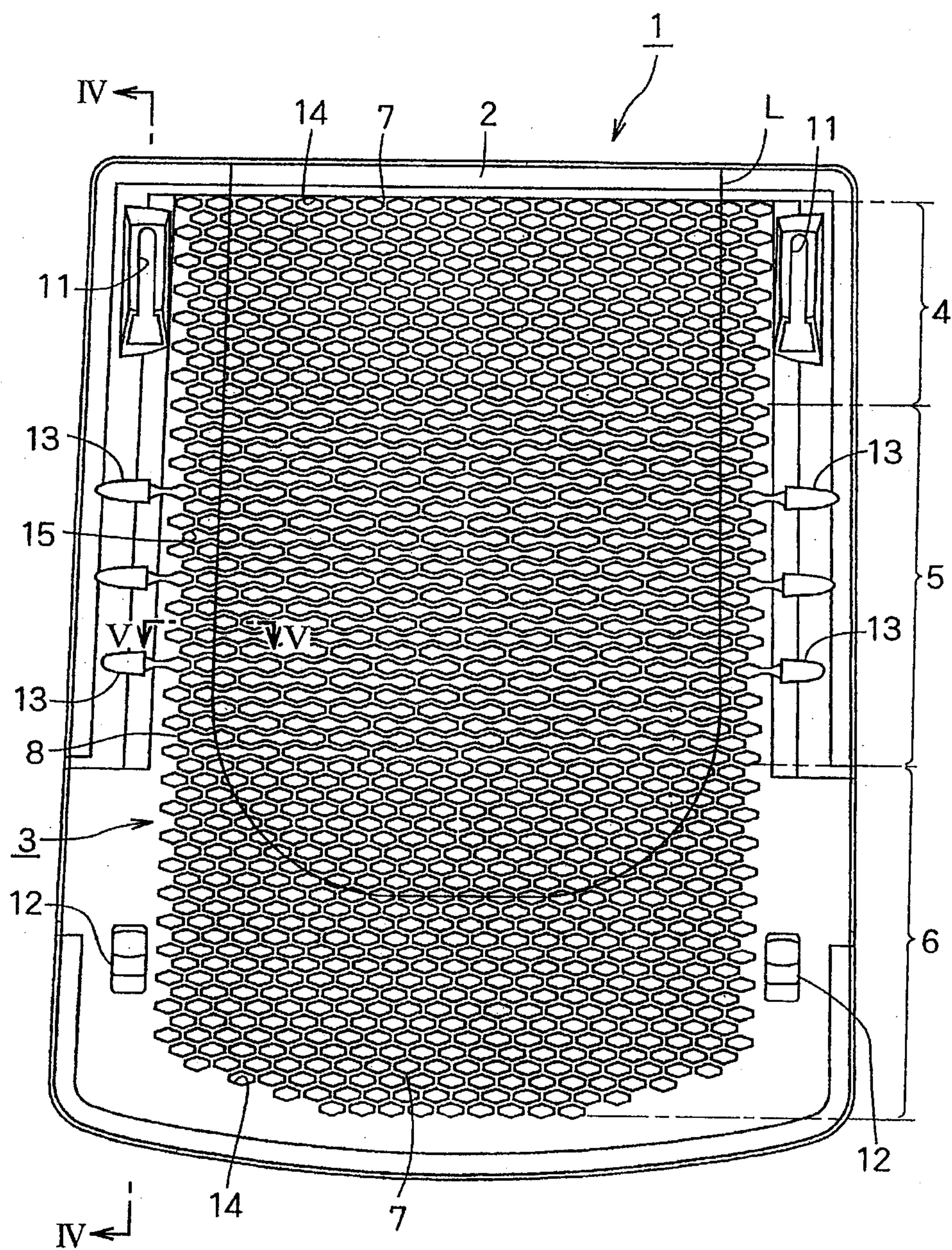
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FIG. 2



3/4

FIG. 3



4/4

FIG. 4

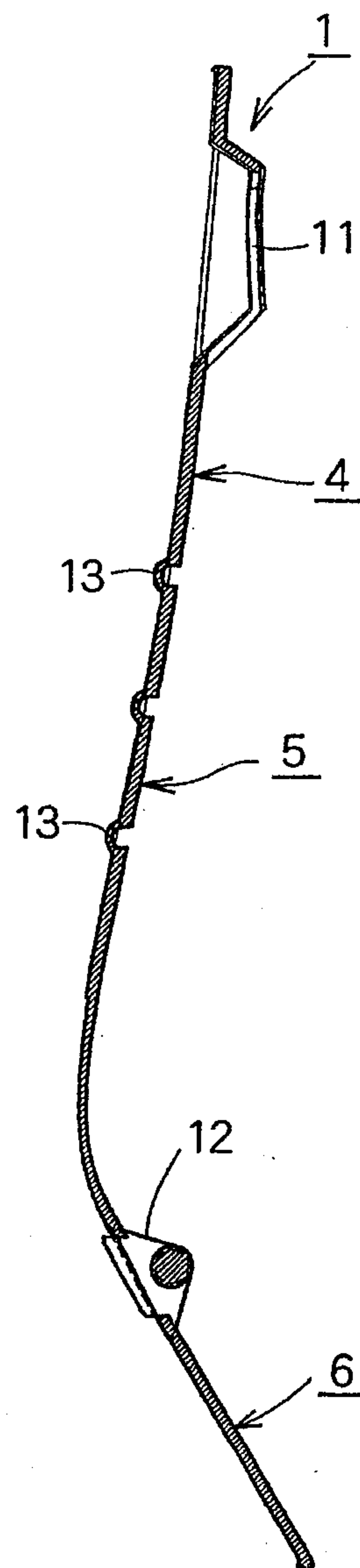


FIG. 5

