



(22) Date de dépôt/Filing Date: 2008/10/17

(41) Mise à la disp. pub./Open to Public Insp.: 2009/04/23

(45) Date de délivrance/Issue Date: 2017/08/29

(62) Demande originale/Original Application: 2 700 743

(30) Priorité/Priority: 2007/10/19 (US60/981,151)

(51) Cl.Int./Int.Cl. *E04F 13/072* (2006.01),
E04F 13/14 (2006.01), *E04C 1/00* (2006.01)

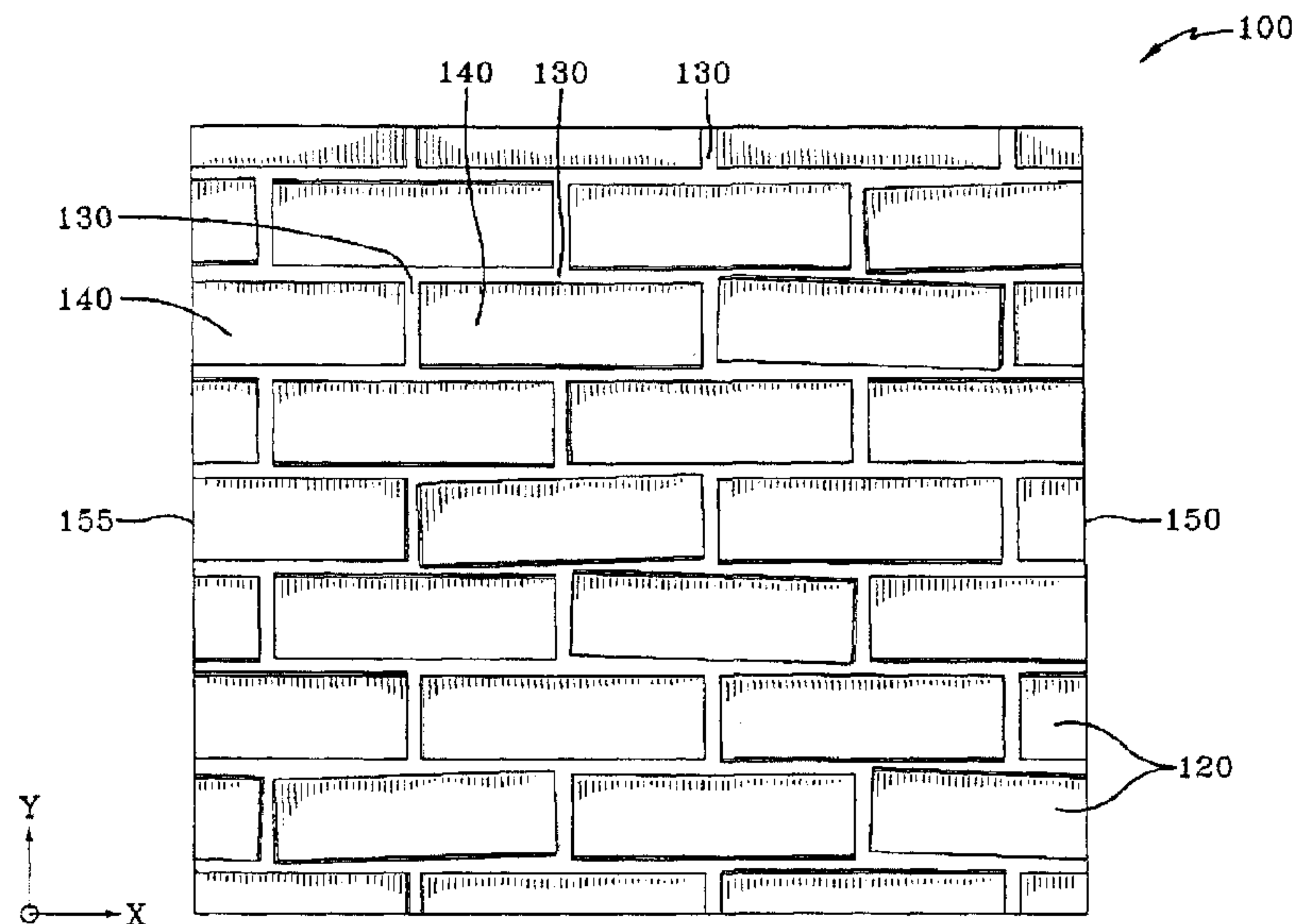
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(54) Titre : INTERIEUR DE FORME A ANGLE VARIABLE ET MOULE MAITRE

(54) Title: VARIABLE ANGLE FORMLINER AND MASTER MOLD



(57) Abrégé/Abstract:

A non-uniform formliner and master mold are disclosed. The master mold corresponds with the non-uniform formliner, which includes a plurality of courses and a plurality of ridges arranged and disposed to separate the pockets. Application of a cementitious material to the ridges gives the appearance of mortar joint between the decorative bricks in a completed surface. Each course has a plurality of pockets, each pocket sized and configured to receive a decorative brick. The master mold of the present invention comprises a plurality of pocket molds, each pocket mold sized and configured to create a pocket; and a ridge mold lattice arranged and disposed to separate the pocket molds; wherein the master mold is constructed of a rigid foam material arranged and disposed for providing a textured appearance to the formliner.

ABSTRACT

A non-uniform formliner and master mold are disclosed. The master mold corresponds with the non-uniform formliner, which includes a plurality of courses and a plurality of ridges arranged and disposed to separate the pockets. Application of a cementitious material to the ridges gives the appearance of mortar joint between the decorative bricks in a completed surface. Each course has a plurality of pockets, each pocket sized and configured to receive a decorative brick. The master mold of the present invention comprises a plurality of pocket molds, each pocket mold sized and configured to create a pocket; and a ridge mold lattice arranged and disposed to separate the pocket molds; wherein the master mold is constructed of a rigid foam material arranged and disposed for providing a textured appearance to the formliner.

VARIABLE ANGLE FORMLINER AND MASTER MOLD

This application has been divided out of Canadian Patent Application Serial No. 2,700,743 filed internationally on October 17, 2008 as International Patent Application Serial No. PCT/US2008/080355 and published internationally on April 23, 2009 as WO 2009/052414.

FIELD OF THE DISCLOSURE

[0001] The present disclosure relates generally to formliners and formliner master molds. Specifically, the present disclosure relates to formliners with varying angles.

BACKGROUND OF THE DISCLOSURE

[0002] Architectural designs for various types of construction, including buildings and bridges, call for the use of brick in the construction of walls. Although ordinarily of little structural importance in modern construction projects, brick walls continue to be used for decorative architectural purposes. However, making walls entirely of brick and mortar has become relatively expensive in recent years in comparison to poured concrete. One development that has reduced the cost of brick walls has been the use of decorative thin bricks, which are cast into concrete wall panels. Such decorative bricks are significantly thinner than normal bricks and therefore are significantly less expensive than normal bricks per square foot of wall coverage.

[0003] Decorative bricks cannot be made into a regular brick wall. In order to cast the decorative bricks into the concrete walls, polymer brick formliners were developed, which have a plurality of brick-receiving recesses. The brick-receiving recesses are designed to hold the decorative bricks in place during the casting of concrete walls. The brick-receiving recesses are formed into the formliners in regular brick patterns, with each recess having the same depth, so as to create a clean and organized brick appearance in the final panel product. Such formliners are first placed on a surface capable of supporting the weight of the formliners, decorative bricks, and poured concrete. Decorative bricks are then placed into the formliners and concrete is cast on top of the decorative bricks and formliners. After curing, the formliner is removed, revealing the wall having decorative bricks separated by cement mortar joints, ready for use in construction.

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[0004] Unfortunately, the clean and organized appearance of the final brick-lined concrete panel has resulted in an unforeseen aesthetic problem. The use of such formliners in the manufacture of buildings has resulted in a very consistent appearance in such prefabricated wall sections. One purpose that drove the development of brick formliners was the creation of a wall that had the appearance of hand-laid brick, without the extra cost associated with it. However, the regularity and precision of the thin brick placement, which is the result of the use of current brick formliners, has resulted in the mass production of brick lined concrete panels that appear as though they have been manufactured by a machine rather than built up by hand.

[0005] Furthermore, previous master molds for producing polymer formliners were made from a very dense material, such as aluminum or steel. While this makes it easy to remove the formliner from the master mold during formliner manufacturing, it results in a very unnatural glass smooth joint when the formliners are used in combination with brick and cementitious material to produce wall sections.

[0006] What is needed is a new type of formliner that can be used to manufacture a brick wall which has the appearance that it was built by hand, rather than manufactured with a brick formliner.

SUMMARY OF THE DISCLOSURE

[0007] According to an exemplary embodiment of the disclosure, a formliner comprising: a plurality of courses, each course having a plurality of pockets, each pocket sized and configured to receive a decorative brick; and a plurality of ridges arranged and disposed to separate the pockets, wherein each pocket has an angle of rotation in the range of about -5.0° to about 5.0° , wherein the angle of rotation of a plurality of pockets is other than 0° and wherein the angle of rotation of at least two pockets is not the same, thereby introducing non-uniformity into a brick veneer wall formed using the formliner; wherein the angle of rotation is within any one of a x-y plane, a x-z plane, and a y-z plane, the x-axis being parallel with at least one of the plurality of courses.

[0008] According to another exemplary embodiment of the disclosure, a formliner includes a plurality of courses, each course having a plurality of pockets, each pocket sized and configured to receive a decorative brick, and a plurality of ridges arranged and disposed to separate the pockets. In the embodiment, each pocket has an angle of rotation in the range of about -5.0° to about 5.0° .

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The angle of rotation of at least one pocket is other than 0° . The formliner is arranged and disposed to be positioned adjacent to a second formliner, thereby permitting a completed surface to be the size of the first formliner and the second formliner combined. Also, the formliner is comprised of a thermoplastic or elastomeric material and is textured.

[0009] In a particular embodiment the angle of rotation is within any one of a x-y plane, a x-z plane, and a y-z plane, the x-axis being parallel with at least one of the plurality of courses.

[0010] According to one embodiment of the present invention there is provided, a formliner master mold corresponding to a formliner and including a plurality of pocket molds, each pocket mold sized and configured to create a pocket, and a ridge mold lattice arranged and disposed to separate the pocket molds. In one embodiment the master mold is constructed of a rigid foam material arranged and disposed to provide a textured appearance to the formliner. In the embodiment, each pocket mold has an angle of rotation in the range of about -5.0° to about 5.0° , and the angle of rotation of at least one pocket is other than 0° .

[0011] According to one particular embodiment the invention provides a formliner, comprising: a plurality of courses, each course having a plurality of pockets, each pocket sized and configured to receive a decorative brick; and a ridge lattice arranged and disposed to form the plurality of pockets, wherein the ridge lattice has a first ridge having a dimension that differs from a same dimension of a second ridge substantially parallel to the first ridge prior to receiving a decorative brick such that visible mortar joints in a brick veneer wall formed by the formliner are not uniform with respect to one another; and wherein the dimension that differs is a ridge width.

[0011a] In a further particular embodiment there is provided a formliner, comprising: a plurality of courses, each course having a plurality of pockets, each pocket sized and configured to receive a decorative brick; and a ridge lattice arranged and disposed to form the plurality of pockets, wherein, prior to receiving a decorative brick, the ridge lattice has a first ridge having a dimension that differs from a same dimension of a second ridge substantially parallel to the first ridge such that visible mortar joints in a brick veneer wall formed by the formliner are not uniform with respect to one another; and wherein the dimension that differs is a ridge width.

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[0011b] In a still further embodiment there is provided a formliner, comprising: a plurality of courses, each course having a plurality of pockets, each pocket sized and configured to receive a decorative brick; and a ridge lattice arranged and disposed to form the plurality of pockets, wherein, prior to receiving a decorative brick, the ridge lattice has a first ridge having a dimension that differs from a same dimension of a second ridge substantially perpendicular to the first ridge such that visible mortar joints in a brick veneer wall formed by the formliner are not uniform with respect to one another; and wherein the dimension that differs is a ridge width.

[0011c] Another embodiment provides a formliner, comprising: a plurality of courses, each course having a plurality of pockets, each pocket sized and configured to receive a decorative brick; and a ridge lattice arranged and disposed to form the plurality of pockets, wherein the ridge lattice has a first ridge having a dimension that differs from a same dimension of a second ridge substantially parallel to the first ridge prior to receiving a decorative brick such that visible mortar joints in a brick veneer wall formed by the formliner are not uniform with respect to one another; and wherein the first ridge and the second ridge are textured.

[0011d] There is also provided in one embodiment a formliner, comprising: a plurality of courses, each course having a plurality of pockets, each pocket sized and configured to receive a decorative brick; and a ridge lattice arranged and disposed to form the plurality of pockets, wherein, prior to receiving a decorative brick, the ridge lattice has a first ridge having a dimension that differs from a same dimension of a second ridge substantially parallel to the first ridge such that visible mortar joints in a brick veneer wall formed by the formliner are not uniform with respect to one another; and wherein the first ridge and the second ridge are textured.

[0012] An advantage of an exemplary embodiment of the disclosure is that the angle of the pockets are varied, providing a brick veneer wall manufactured with the formliner of the present disclosure with the appearance of hand laid brick.

[0013] An advantage of another exemplary embodiment of the disclosure is that the depth of the pockets may also be varied, further providing a brick veneer wall manufactured with the formliner of the present disclosure with the appearance of hand laid brick.

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[0014] An advantage of yet another exemplary embodiment of the disclosure is that the formliner contains a slightly rough texture, such that mortar joints formed by pouring cementitious material over the formliner provide a sandy, grout-like appearance.

[0015] Other features and advantages of the present disclosure will be apparent from the following more detailed description of the preferred embodiment, taken in conjunction with the accompanying drawings which illustrate, by way of example, the principles of the disclosure.

BRIEF DESCRIPTION OF THE DRAWINGS

[0016] Figure 1 illustrates a front view of a formliner in accordance with an exemplary embodiment of the disclosure.

[0017] Figure 2 illustrates a schematic illustration of a front view of a pocket rotated in an x-y plane.

[0018] Figure 3 illustrates a front view of a plurality of formliners according to an exemplary embodiment of the disclosure.

[0019] Figure 4A illustrates a front view of a plurality of formliners according to another exemplary embodiment of the disclosure.

[0020] Figure 4B illustrates a sectional view of the plurality of formliners in Figure 4A along line 4-4.

[0021] Figure 5A illustrates a front view of a formliner with a plurality of variable angles.

[0022] Figure 5B illustrates a perspective view of the formliner in Figure 5A.

[0023] Figure 6A illustrates a perspective view of a master mold according to an exemplary embodiment of the disclosure.

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[0024] Figure 6B illustrates a sectional view of the master mold in Figure 6A along a line 6-6.

[0025] Wherever possible, the same reference numbers will be used throughout the drawings to represent the same parts.

DETAILED DESCRIPTION OF THE DISCLOSURE

[0026] Figures 1, 2, 3, 4A, 4B, 5A, and 5B illustrate a formliner 100 in accordance with exemplary embodiments of the invention. As will be appreciated, the illustrations are intended to provide an understanding of the principles of formliner 100 in accordance with exemplary embodiments of the disclosure and are not necessarily to scale. Similarly, Figures 6A and 6B illustrate a master mold 600 and are intended to provide an understanding of the principles of master mold 600 in accordance with exemplary embodiments of the disclosure and are not necessarily to scale.

[0027] Referring to Figure 1, formliner 100 has a plurality of courses 120, which may be rows as shown in the running bond pattern depicted in Figure 1. Each course 120 has a plurality of recessed pockets 140 separated by ridges 130. Pockets 140 are sized and configured to receive decorative thin brick or similar veneer products, while ridges 130 are sized and configured to separate pockets 140, such that cementitious material applied over formliner 100 thereby gives the appearance of a mortar joint between the decorative thin bricks in a completed wall made using formliner 100.

[0028] Pockets 140 may be of any size and may be arranged in any pattern, but generally are sized to receive standard-size thin bricks and generally are arranged in any one of several traditional masonry patterns. Exemplary pocket sizes include pockets 140 sized to receive utility, Norman, modular and closure thin bricks, by way of example only. Exemplary masonry patterns include running bond, soldier course, Flemish bond, stack bond, 1/3 running bond, herringbone, basket weave, offset weave, and combinations thereof, by way of example only.

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[0029] Formliners 100 may be modular in nature, with several formliners 100 smaller than the actual wall size to be formed positioned adjacent one another and/or overlapped. It will be appreciated that some pockets of each formliner may be associated with pre-determined sub-dimensions of brick. For example, as shown in Figure 1, some of pockets 140 are sized to receive full size thin bricks, while others are half-size bricks to permit continuity of the brick pattern in the wall to be formed. Where multiple formliners 100 are positioned adjacent one another to form part of a wall larger than any single formliner 100 (see Figures 3, 4A, 4B, 5, 5B), a full size thin brick may be placed in adjacent half-pockets 140 in the same course 120 of adjacent formliners 100. Similarly, at the wall's edge, half-sized thin bricks may be placed in the half-pockets to give the appearance, for example, of the corner of a masonry wall.

[0030] Formliner 100 may be of any desired dimensions to produce a wall of any size. Alternatively, multiple formliners 100 can be used together to form a wall larger than any single formliner 100 as previously described by aligning a first edge 150 of a first formliner 100 with a second edge 155 of a second formliner 100 in any suitable manner, as illustrated for example, in Figure 3 showing four modular formliners 100 positioned adjacent one another. For modular applications, it will be appreciated that the dimensions of formliner 100 may be adjusted depending on the pattern and brick size according to well-known masonry principles to avoid or reduce the amount of cutting or partial formliners 100 needed for standard size masonry walls. For example, it may be advantageous to produce formliner 100 having dimensions of 2 feet square, 4 feet square or 4 feet by 8 feet, which permit standard size walls to easily be prepared.

[0031] Ridges 130 are formed in a lattice that defines lateral walls between courses 120 as well as longitudinal walls between pockets 140 within the same course 120 to separate the pockets and in order to give the appearance of mortar joints in the completed wall made using formliner 100. The appearance of ridges 130 may be modified by rotating pockets 140. For example, ridges 130 may be narrower or wider in various portions of formliner 100 when pockets 140 in the same portion of

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formliner 100 are rotated (as best seen in Figures 5A and 5B). This varying of ridges 130 may be desirable in creating an aesthetic appearance that the completed section of wall is hand laid because many hand laid walls rely upon mortar joint having a non-uniform appearance, which may include coved or raked surfaces. Similarly, varying the surface of ridges 130, for instance by varying the dimensions (i.e. height or width) or including an inconsistent texture, may result in the completed section of wall appearing to be hand laid.

[0032] As schematically illustrated in the front view of pocket 140 in Figure 2, each pocket 140 in each course 120 has an angle of rotation. For the purposes of this application, the phrase "angle of rotation" refers to the amount by which pocket 140 is rotated out of any one of a x-y plane, a x-z plane, and a y-z plane. The x-axis is a line parallel with any course 120; the y-axis is a line perpendicular to the x-axis; the z-axis is a line perpendicular to both the x-axis and the y-axis. Thus one or more pockets 140 may be rotated so that the bricks within each course and with respect to adjacent courses are not uniformly aligned when the finished wall section is viewed.

[0033] The angle of rotation for each pocket 140 may be from about -5.0° to about 5.0° in each of the three planes. Preferably, the angle of rotation is in the range of about -2.0° to about 2.0° and more preferably from about -1.0° to about 1.0° . The angle by which each pocket 140 is rotated may be random within the range. In one embodiment, pockets 140 are oriented at one of five different angles of rotation: -1.0° , -0.5° , 0° , 0.5° and 1.0° . The number of bricks at each angle within formliner 100 may be varied randomly or according to a predetermined pattern, which may be selected, for example, because the pattern gives the appearance of being random or otherwise appears non-uniform in a manner that is aesthetically appealing. In an alternate embodiment, the distribution of the angles of rotation may be arranged in a predetermined pattern that does not appear non-uniform or random. In this alternate embodiment, varying angles may be used for additional aesthetic purposes, such as to create designs.

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[0034] While some or all of pockets 140 are rotated from level (i.e. have an angle of rotation other than 0°), each of the corners of formliner 100 itself are preferably square to achieve a better modular fit when multiple formliners are positioned adjacent one another.

[0035] While Figure 2 illustrates pocket 140 rotated within the x-y plane, it is to be understood that the rotation may be within the x-y plane, the x-z plane, the y-z plane, and/or any combination thereof.

[0036] Figures 5A and 5B illustrate formliner 100 with pockets 140 rotated within the x-y plane, the x-z plane, the y-z plane, and combinations thereof. Rotation of pockets 140 permits a side of pocket 140 to be partially seen in the front view of Figure 5A. As illustrated in Figure 5A, the side visible depends upon which direction pocket 140 is rotated. For pockets 140 that are rotated in multiple directions, multiple sides are visible from the front view of Figure 5A. By way of example, pocket 502 is rotated within the y-z plane thereby permitting the lateral sides 500 of the pocket to be visible in Figure 5A. By way of example, pocket 504 is rotated in the x-z plane thereby permitting the longitudinal sides 510 of the pocket to be visible. By way of example, pocket 506 is rotated in the x-y plane thereby orienting the pocket so that it is not parallel along course 120. By way of example, in formliner 100 illustrated in Figures 5A and 5B, pockets 508 are rotated in combinations of directions.

[0037] According to another embodiment of the disclosure, the depth of the pocket may also be varied, as described, for example, in U.S. Publication 2006/0091282. This varying depth may be combined with the varying angles according to the exemplary embodiments of the present disclosure.

[0038] Referring to Figures 4A and 4B, the varying depths combined with varying angles of rotation may be utilized to further enhance the realistic appearance of a wall produced by formliner 100. As illustrated, each pocket 140 has a bottom surface that is a plane at one of three different depths, α , β , γ , in which the different depths are illustrated with different cross-hatchings. The α pockets have a first predetermined

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depth, as measured from any suitable plane of reference. In one embodiment, the reference plane is the plane encompassing the highest point of ridges 130 (i.e., the apex of the ridge for a coved joint or the top plane of the ridge for a raked joint). The β pocket has a second predetermined depth, which in the illustrated embodiment is $3/16$ in. less than the α pockets. Similarly, in the illustrated embodiment, the γ pockets have a third predetermined depth $3/8$ in. less than the α pockets (and, thus, $3/16$ in. less than the β pockets).

[0039] Where multiple pocket depths are employed, the number of different pocket depths may be as few as two and as great as the number of pockets 140 in formliner 100. In embodiments in which the pocket depths are varied, the difference in pocket depths may vary from about 0.01 in. to about 0.25 in., and more typically may vary from about $1/16$ in. to about $3/8$ in. Like the distribution of the angles of rotation, the distribution of pocket depths within formliner 100 may be substantially random. In other embodiments, the distribution of pocket depths may be arranged in a predetermined pattern, which may be selected, for example, because it gives the appearance of being random or otherwise gives the appearance of being non-uniform in a manner that is aesthetically appealing. It will be appreciated that pockets may be random within a formliner but identical to pockets in an identical formliner. In an alternate embodiment, the distribution of pocket depths may be arranged in a predetermined pattern that does not appear non-uniform or random. In this alternate embodiment, varying depths may be used for aesthetic purposes, such as to create designs.

[0040] Formliner 100 may be manufactured from any suitable material, for instance a resilient polymer of sufficient strength compatible with a cementitious material. Such a material may include, but not be limited to, a thermoplastic or elastomeric material, such as rubber. In one embodiment, formliner 100 is manufactured from a resilient elastomeric material so that the same formliner can be re-used. In another embodiment, formliner 100 is manufactured from an inexpensive, preferably recyclable, thermoplastic material for a single-use, permitting formliner 100 to be recycled or disposed.

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[0041] Figures 6A and 6B illustrate the master mold 600, according to one exemplary embodiment of the disclosure, for producing formliners 100. Master mold 600 may be used independently or in conjunction with other master molds to produce a larger formliner.

[0042] The manufacturing process to produce formliners 100 generally involves production from master mold 600. The material for formliner 100 is injected or poured into master mold 600 and is formed using well-known injection molding or rubber casting techniques. Master mold 600 may be aluminum, steel or other high density material. Each master mold 600 includes pocket molds 640 that produce pockets 140 and a lattice of ridge molds 630 that produces ridges 130 in the formliner. As will be appreciated by those skilled in the art, producing varying angle or depth pockets 140 in a formliner may be achieved by using pocket molds 640 with corresponding varying angles or heights and ridge molds 630 with varying angles or depths.

[0043] In a preferred embodiment, master mold 600 is a rigid foam, such as a rigid high-density urethane closed cell foam or a rigid polyisocyanurate foam. A master mold 600 formed from such rigid foams produces a textured formliner 100 having textured ridges 130 that results in a more realistic mortar joint that is sandy and grout-like in feel and appearance. The results can be achieved with ridges 130 that provide a mortar joint having either a coved (rounded) or raked (flat) profile. Generally, liquid molding compounds used in manufacturing elastomeric liners are difficult to remove from porous master molds, as the compound may seep into the pores and bond with the master mold. As a result, demolding can destroy the master mold and damage the formliner beyond reasonable repair. The rigid polyisocyanurate and urethane closed cell foams are unexpectedly able to resist destruction during the demolding process, while repeatedly providing a formliner capable of achieving the desired realistic result.

[0044] While the disclosure has been described with reference to a preferred embodiment, it will be understood by those skilled in the art that various changes may

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be made and equivalents may be substituted for elements thereof without departing from the scope of the disclosure. In addition, many modifications may be made to adapt a particular situation or material to the teachings of the disclosure without departing from the essential scope thereof. Therefore, it is intended that the disclosure not be limited to the particular embodiment disclosed as the best mode contemplated for carrying out this disclosure, but that the disclosure will include all embodiments falling within the scope of the appended claims.

CLAIMS

1. A formliner, comprising:
 - a plurality of courses, each course having a plurality of pockets, each pocket sized and configured to receive a decorative brick; and
 - a ridge lattice arranged and disposed to form the plurality of pockets,
 - wherein the ridge lattice has a first ridge having a dimension that differs from a same dimension of a second ridge substantially parallel to the first ridge prior to receiving a decorative brick such that visible mortar joints in a brick veneer wall formed by the formliner are not uniform with respect to one another; and
 - wherein the dimension that differs is a ridge width.
2. The formliner of claim 1, wherein the dimension that differs is a ridge height.
3. The formliner of claim 1, wherein the first ridge and the second ridge are textured.
4. The formliner of claim 1, wherein the ridge lattice forms non-uniform mortar joints in a brick veneer wall formed by the formliner.
5. The formliner of claim 1, wherein the decorative brick is selected from the group consisting of utility, Norman, modular, closure thin bricks, and combinations thereof.
6. The formliner of claim 1, wherein the ridge lattice is arranged to separate the plurality of pockets in a pattern selected from the group consisting of running bond, soldier course, Flemish bond, stack bond, 1/3 running bond, herringbone, basket weave, offset weave, and combinations thereof.
7. The formliner of claim 1, wherein the formliner is arranged and disposed to be positioned adjacent a second formliner.
8. The formliner of claim 1, wherein the formliner comprises a thermoplastic or elastomeric material.
9. The formliner of claim 1, wherein a first portion of the first ridge has a ridge dimension that differs from a same ridge dimension of a second portion of the first ridge.
10. The formliner of claim 1, wherein the first ridge has a ridge dimension that differs from a same ridge dimension of a third ridge that is substantially perpendicular to the first ridge.

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11. A formliner, comprising:

a plurality of courses, each course having a plurality of pockets, each pocket sized and configured to receive a decorative brick; and

a ridge lattice arranged and disposed to form the plurality of pockets,

wherein, prior to receiving a decorative brick, the ridge lattice has a first ridge having a dimension that differs from a same dimension of a second ridge substantially parallel to the first ridge such that visible mortar joints in a brick veneer wall formed by the formliner are not uniform with respect to one another; and

wherein the dimension that differs is a ridge width.

12. The formliner of claim 11, wherein the dimension that differs is a ridge height.

13. The formliner of claim 11, wherein the first ridge and the second ridge are textured.

14. The formliner of claim 11, wherein the first ridge has a ridge dimension that differs from a same ridge dimension of a third ridge that is substantially perpendicular to the first ridge.

15. The formliner of claim 11, wherein the ridge lattice forms non-uniform mortar joints in a brick veneer wall formed by the formliner.

16. A formliner, comprising:

a plurality of courses, each course having a plurality of pockets, each pocket sized and configured to receive a decorative brick; and

a ridge lattice arranged and disposed to form the plurality of pockets,

wherein, prior to receiving a decorative brick, the ridge lattice has a first ridge having a dimension that differs from a same dimension of a second ridge substantially perpendicular to the first ridge such that visible mortar joints in a brick veneer wall formed by the formliner are not uniform with respect to one another; and

wherein the dimension that differs is a ridge width.

17. The formliner of claim 16, wherein the dimension that differs is a ridge height.

18. A formliner, comprising:

a plurality of courses, each course having a plurality of pockets, each pocket sized and configured to receive a decorative brick; and

a ridge lattice arranged and disposed to form the plurality of pockets,

wherein the ridge lattice has a first ridge having a dimension that differs from a same dimension of a second ridge substantially parallel to the first ridge prior to

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receiving a decorative brick such that visible mortar joints in a brick veneer wall formed by the formliner are not uniform with respect to one another; and
wherein the first ridge and the second ridge are textured.

19. A formliner, comprising:

a plurality of courses, each course having a plurality of pockets, each pocket sized and configured to receive a decorative brick; and

a ridge lattice arranged and disposed to form the plurality of pockets,

wherein, prior to receiving a decorative brick, the ridge lattice has a first ridge having a dimension that differs from a same dimension of a second ridge substantially parallel to the first ridge such that visible mortar joints in a brick veneer wall formed by the formliner are not uniform with respect to one another; and

wherein the first ridge and the second ridge are textured.

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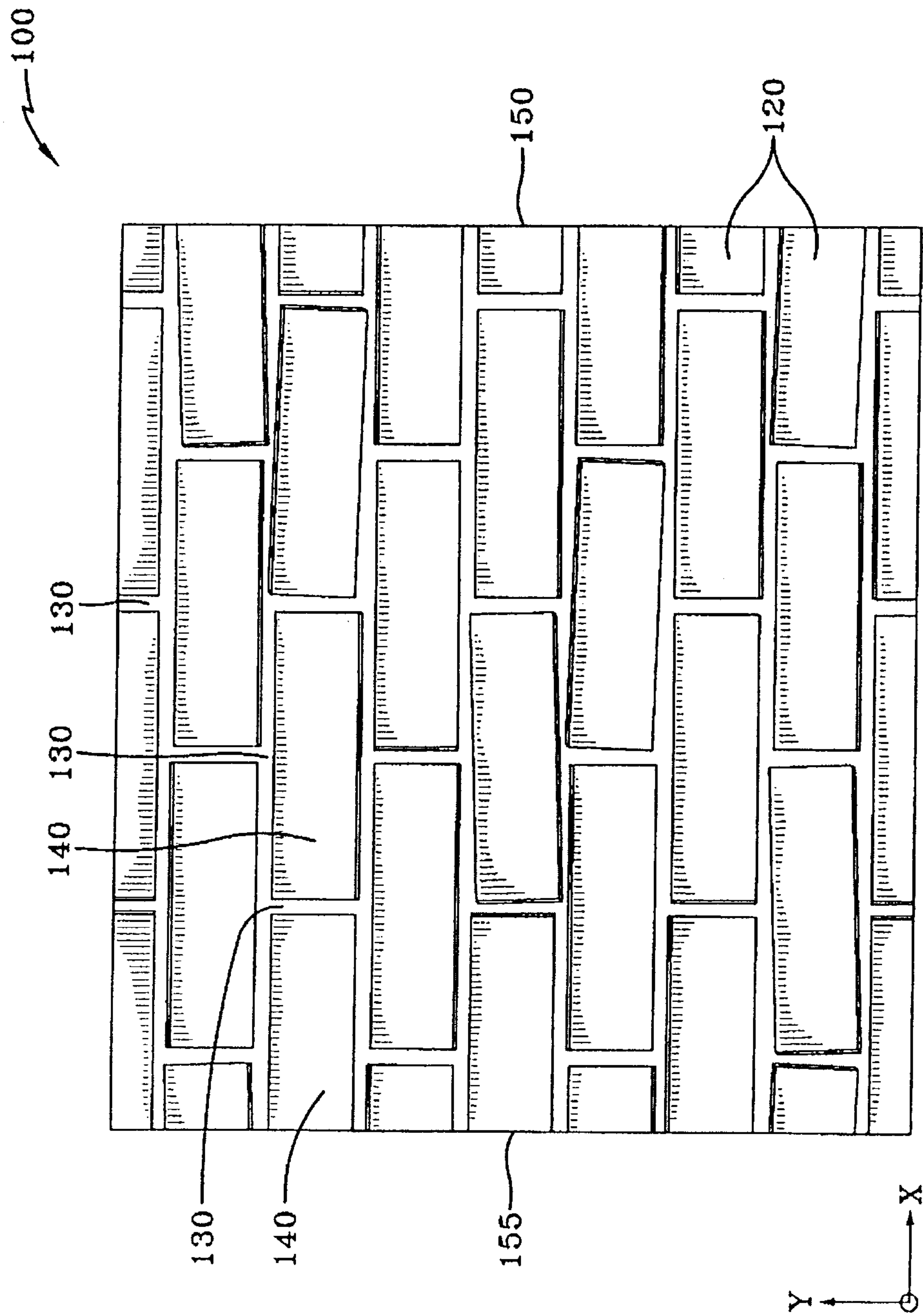
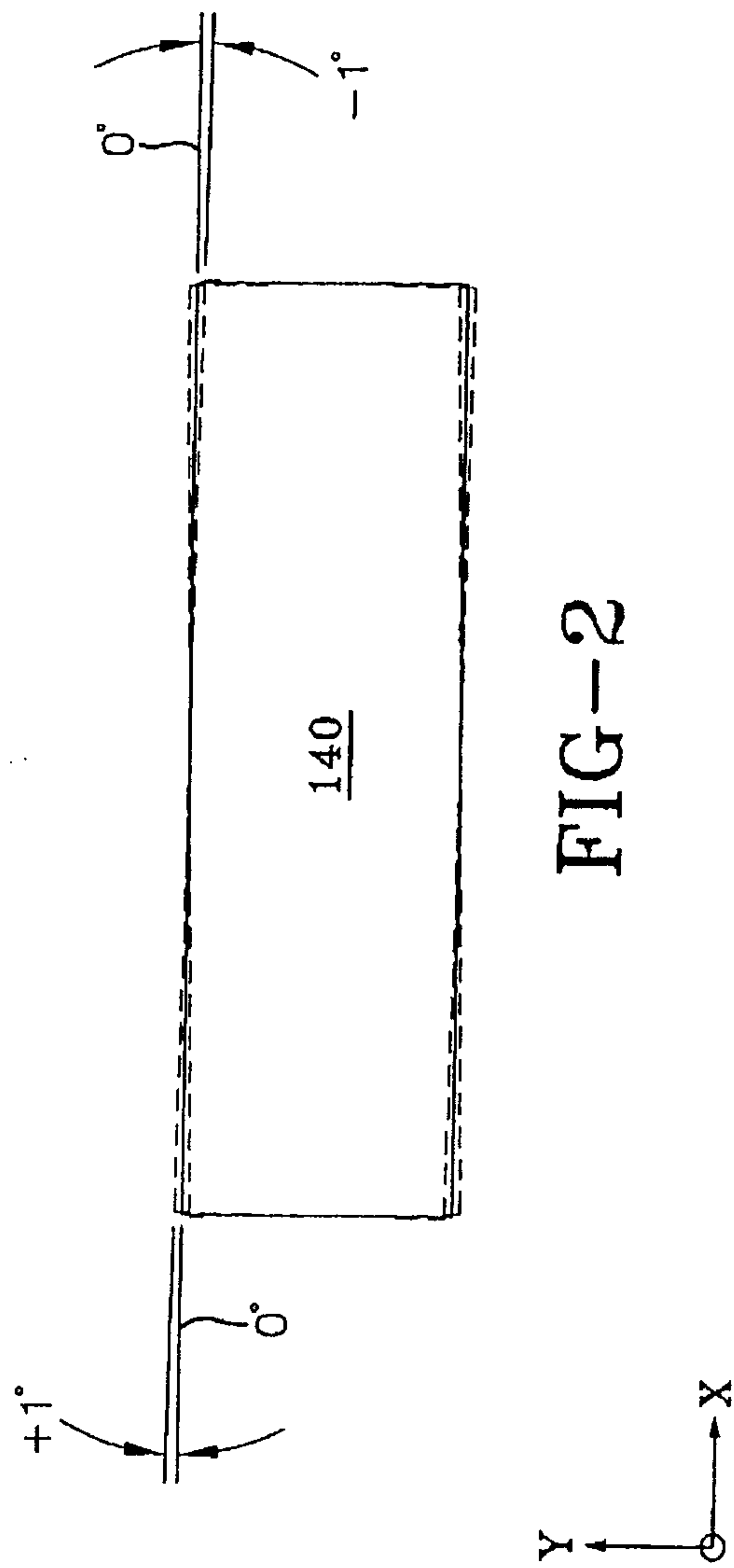


FIG-1

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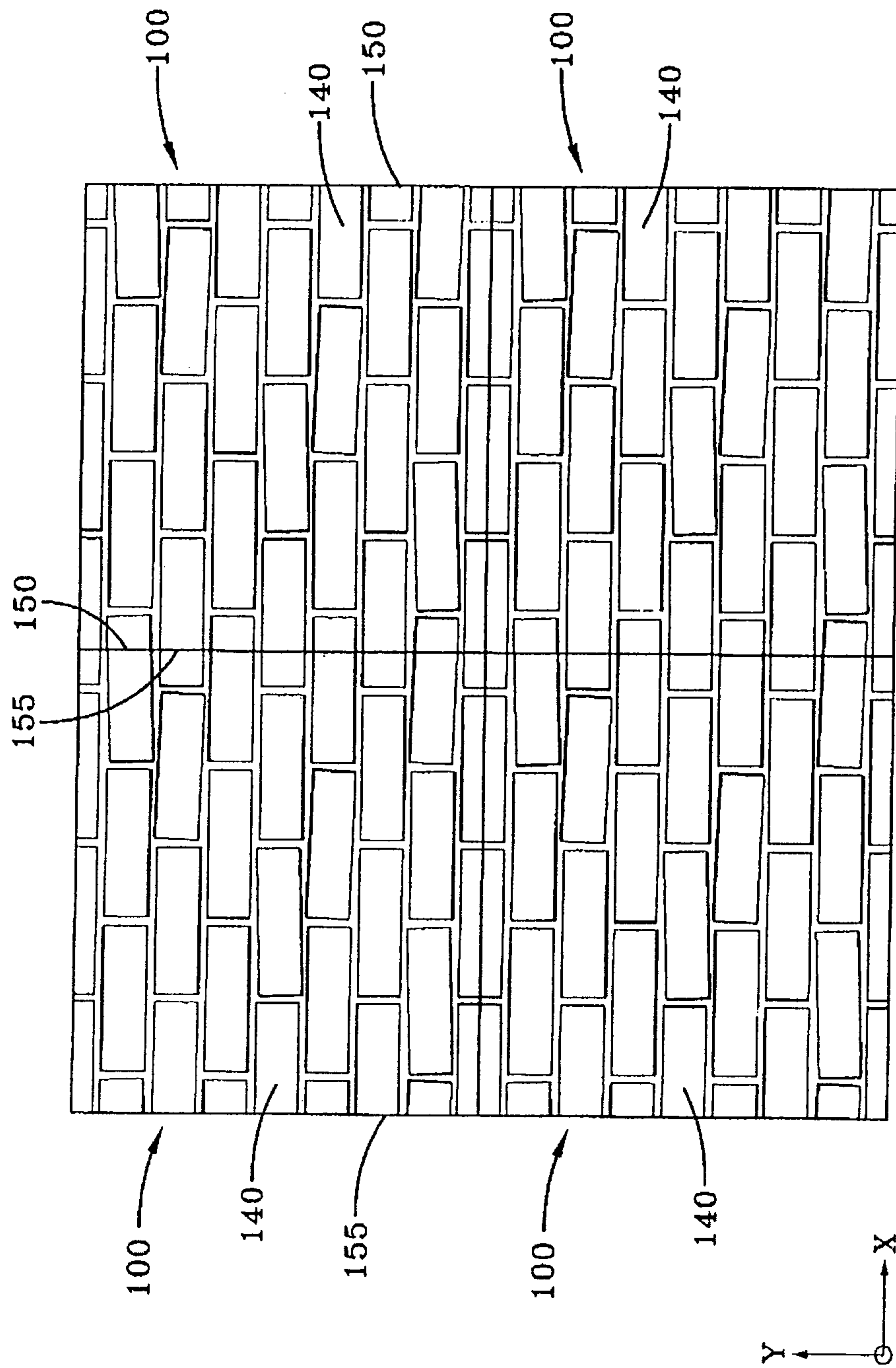
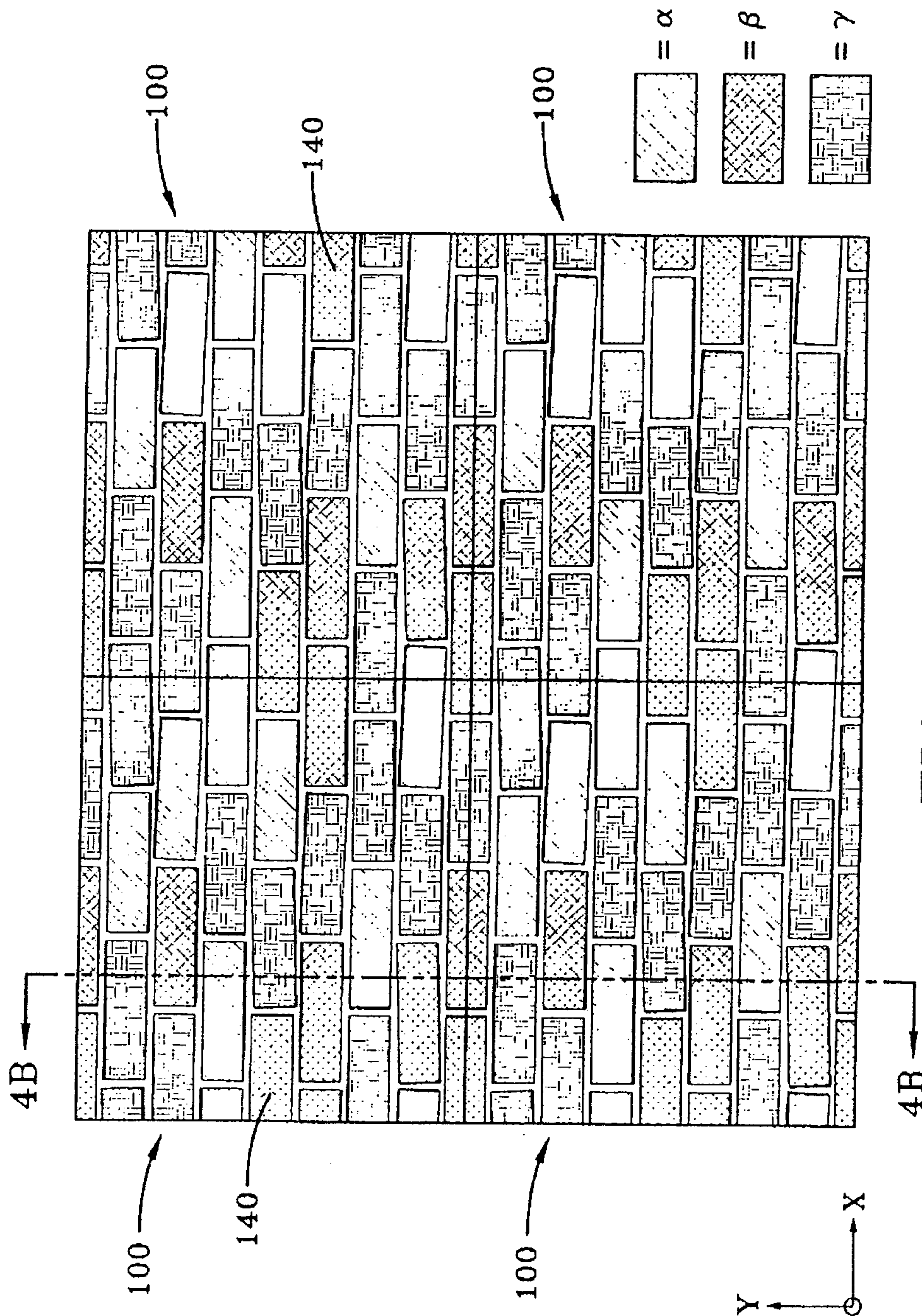


FIG-3

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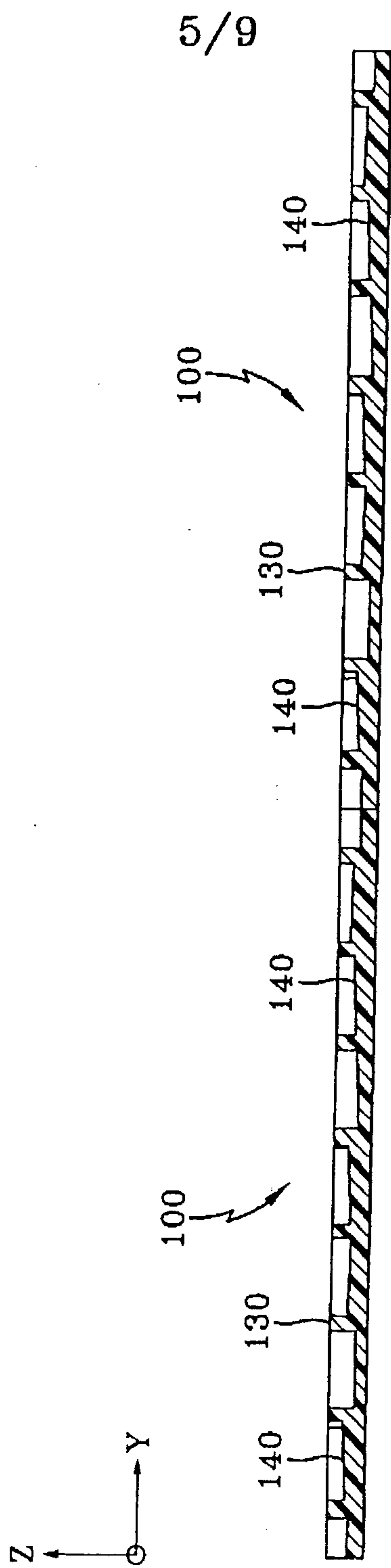
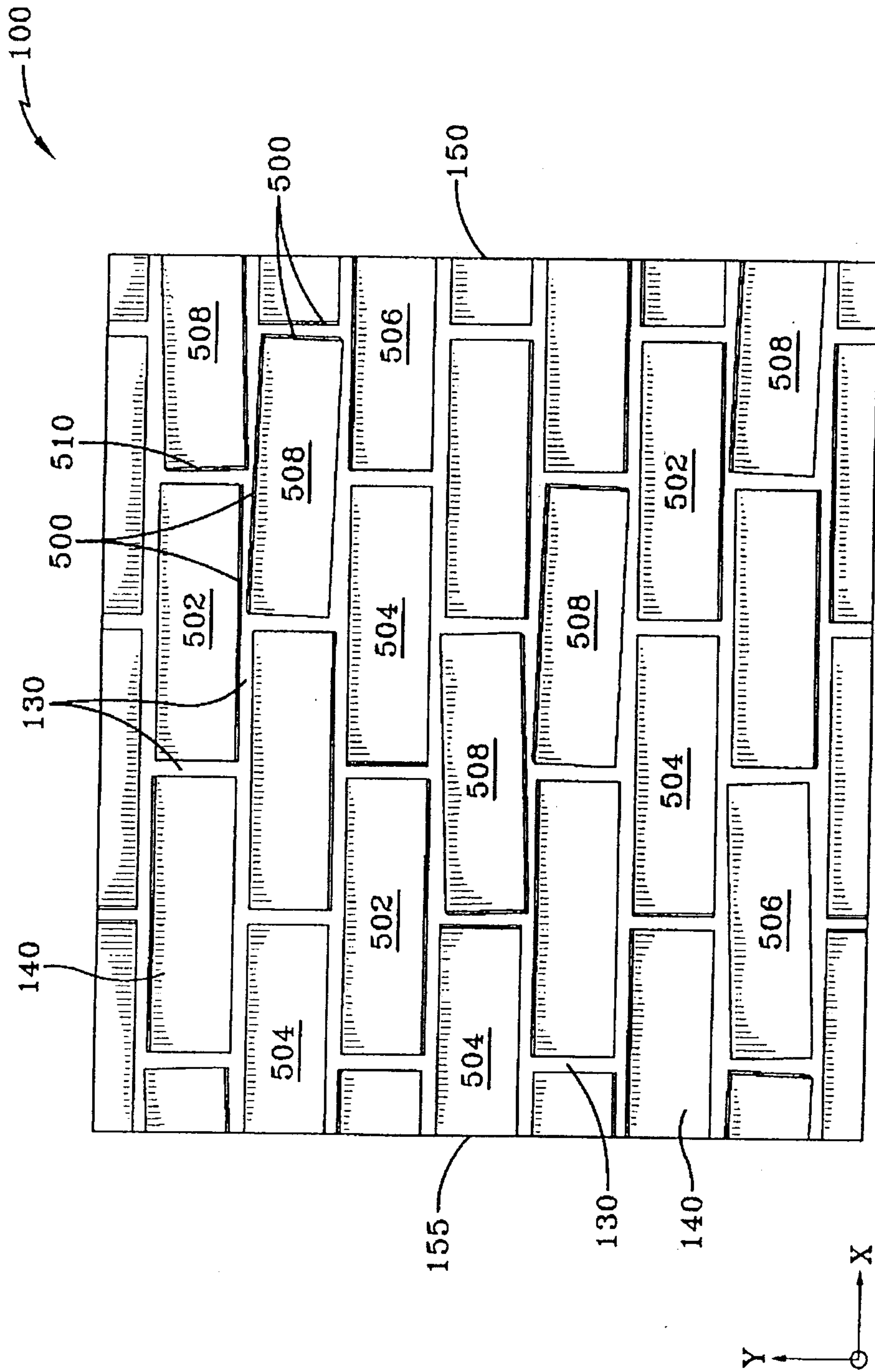


FIG-4B

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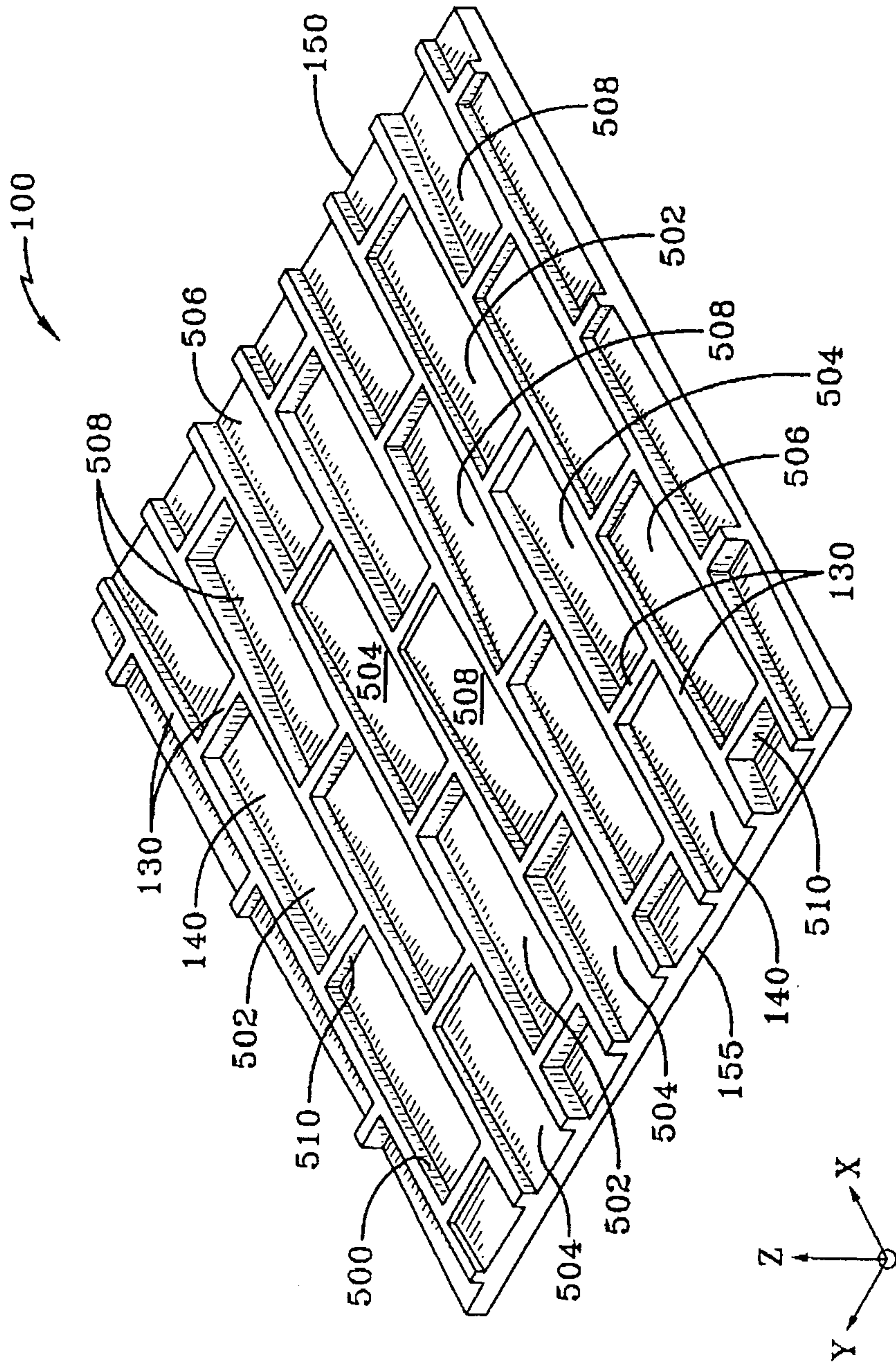
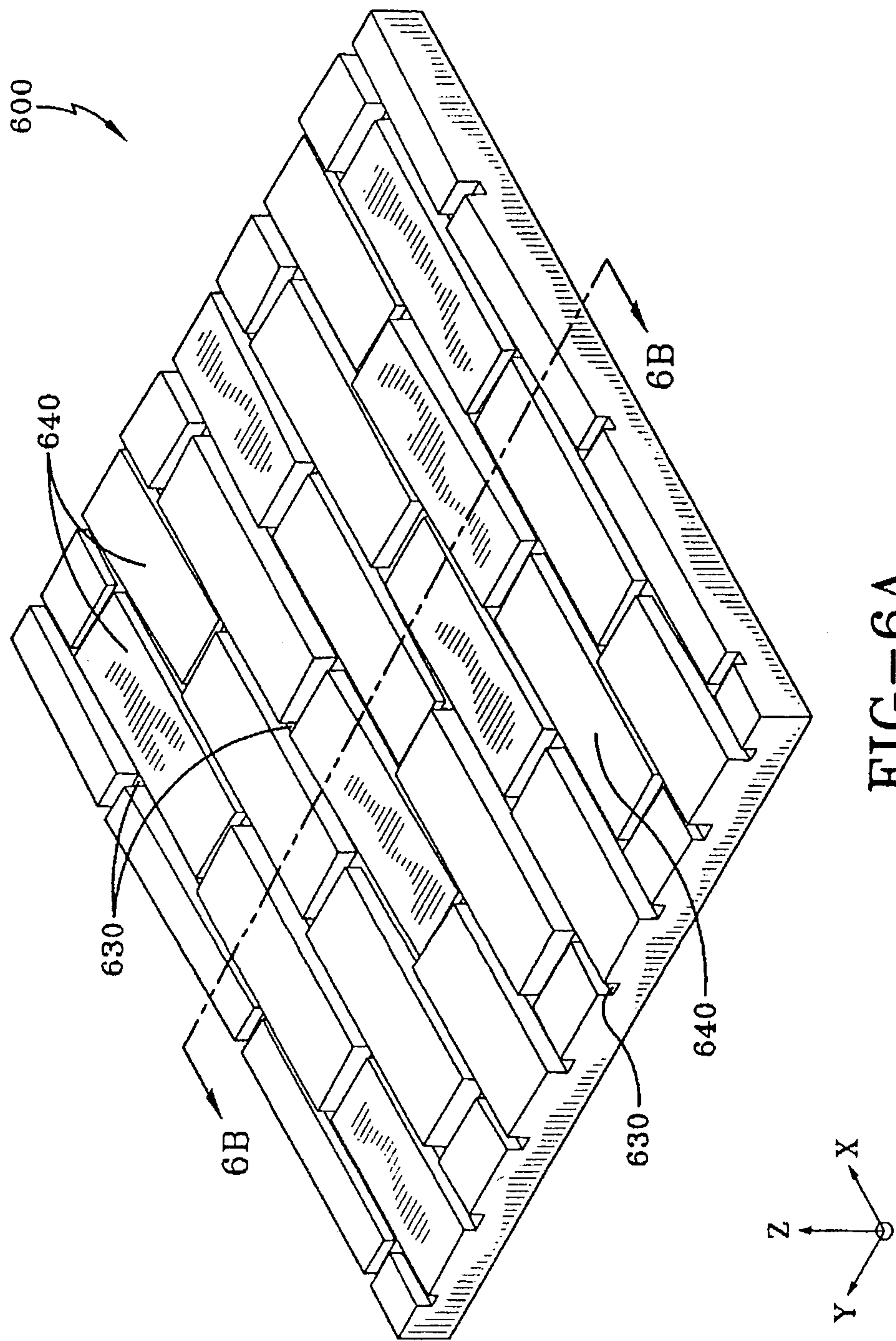


FIG-5B

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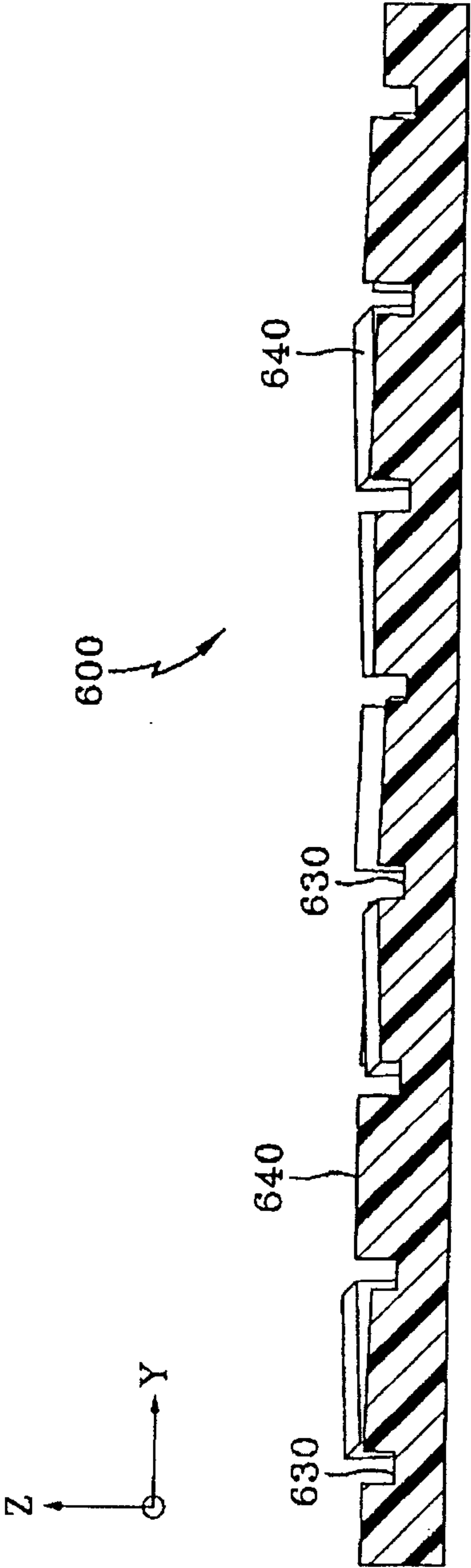


FIG-6B

