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(54) **PIECED STRUCTURE OF BUILDING BLOCK TOY**

(57) The present application provides an assembly structure of a building block, and particularly relates to an assembly structure allowed to be engaged with secondary main bodies of additional building blocks from various directions and generating the encasing and decorating effects. The assembly structure includes a main body of a building block. An exterior of the main body is provided with connection surfaces. The connection surfaces face toward various directions of the circumference

of the main body, respectively. Each of the connection surfaces includes at least one stud to be engaged with an engaging recess of a secondary main body of an additional building block. Therefore, the main body can be engaged with the secondary main bodies of the additional building blocks from various directions to enhance the overall aesthetic appearance and make assembling building blocks more convenient.

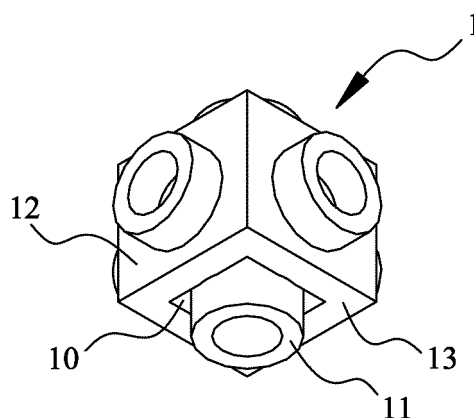


FIG. 2

Description

BACKGROUND OF THE INVENTION

1. Field of the Invention

[0001] The present invention relates generally to an assembly structure for a building block, such as Lego bricks and Mega Bloks bricks, and more particularly to provide an assembly structure of a building block allowed to be engaged with a secondary main body of an additional building block from various directions of circumferences and generating the encasing and decorating effects, and especially to provide an assembly structure of a building block having connection surfaces of a main body to be connected with a secondary main body of an additional building block and studs to be engaged with an engaging recess of the secondary main body of the additional building block.

2. The Prior Arts

[0002] Building blocks are toys that can train hand eye coordination, enhance the development of intelligence and develop children's imagination and creativity. Therefore, the building blocks are popular and widely favored by the consumers.

[0003] Currently, the most successful construction toy in the world is generally considered to be the Lego bricks, which are manufactured by The Lego Group, a company having a history of 50 years and based in Denmark. The Lego Group not only has the most customers and the largest market share in the world but also has the largest forum, creators and players. Therefore, Lego become a synonym for the building blocks.

[0004] Because many patents of Lego expire, a lot of toy companies manufacturing the building blocks, such as Mega Bloks based in Canada, adopt the interlocking structure of studs and engaging recesses of Lego bricks. Thus, the building blocks manufactured by the competing companies have designs, structures, and interlocking structure very similar to the Lego bricks.

[0005] There are unlimited and various ways to play the building blocks. The building blocks have various shapes, such as a square, a rectangle, a triangle, a cylinder, etc. and have variety of colors. Thus, the children can connect the building blocks having various shapes, sizes and colors, thereby developing children's imagination and creativity and providing entertainment.

[0006] The interlocking structure of the conventional building blocks is stacking them in the vertical direction. Thus, a main body and a secondary main body of the building block include one or more than one studs disposed at tops thereof and the studs are arranged evenly spaced. Moreover, the main body and the secondary main body include at least one engaging recess disposed at a bottom thereof. The engaging recesses can be engaged with the studs with interference fit. The main body

of the building block can be engaged with the engaging recesses of the secondary main body of the additional building block by the studs or can be engaged with the studs of the secondary main body of the additional building block by the engaging recesses. Therefore, the connection surfaces are formed on a top and a bottom of the main body to be connected with the secondary main body of the additional building block, respectively.

[0007] Furthermore, in order to enhance the appearance of the connected building blocks, the Lego Group and Mega Bloks also market a building block having a decoration surface, and the decoration surface is shaped in a smooth, curved or special contour to reduce or omit the studs of the building block. The decoration surface is formed at a side of the building block opposite to the engaging recess and this type of building block takes advantage of the engaging recesses to be assembled to the most exterior of the connected building blocks. Thus, the decoration surface is exposed to the most exterior and encases the studs inside to enhance the appearance.

[0008] Based on the design of the engaging recess, each main body of the building block includes both of the studs to be engaged with the engaging recess of the secondary main body of the additional building block and the engaging recess to be engaged with the studs of the secondary main body of the additional building block. For a long time, manufacturers of Lego bricks, Mega Bloks bricks or the other building blocks all follow this principle to change and design the main bodies and the secondary main bodies of the building blocks. Even though the studs are replaced by the decoration surfaces as mentioned above, the engaging recess is still the common design of the main bodies and the secondary main bodies of the building blocks.

[0009] Obviously, the main body and the secondary main body having the engaging recesses save the cost of the manufacturing material more than the main body and the secondary main body having the studs. However, it greatly limits the feasibility during assembling the building blocks. Because the existence of the engaging recess, it is unable to directly engage the engaging recess of the main body with the engaging recess of the secondary main body of the building block having the decoration surface. Therefore, after the building blocks are assembled, the engaging recess would likely be exposed at the back of the assembled building blocks. Thus, the aesthetic appearance of the building blocks deteriorates and it is inconvenient to assemble the building blocks. It needs to solve this problem of the conventional building blocks.

[0010] In addition, if other building blocks are provided between the engaging recess of the main body and the engaging recess of the secondary main body of the building block having the decoration surface to connect them together, it would make the connected building blocks thicker and bulkier. Moreover, the building block has its own thickness. When assembling the automobiles, the

airplanes, the ships, the robots, and so on that have specific proportions, the extra building blocks provided between the originally needed building blocks would change the proportions. The overall aesthetic appearance of the assembled building blocks deteriorates. And, it is also inconvenient to assemble the building blocks in this way.

[0011] Based on the aforementioned descriptions, the applicant proposes the present invention that overcomes the disadvantages of the conventional building blocks.

SUMMARY OF THE INVENTION

[0012] A primary objective of the present invention is to provide an assembly structure of a building block, and particular to an assembly structure of a building block allowed to be engaged with a secondary main body of an additional building block from various directions of circumferences and generating the encasing and decorating effects. Because the main body of the conventional building block includes an engaging recess, it is unable to directly engage the engaging recess of the main body with the engaging recess of the main body of the building block having the decoration surface. Therefore, after the building blocks are assembled, the engaging recess would be exposed at the back of the assembled building blocks. Thus, the aesthetic appearance of the building blocks deteriorates and it is inconvenient to assemble the building blocks. The objective of the present invention is to provide an assembly structure of a building block to overcome the shortcomings of the conventional designs.

[0013] In order to achieve the objective, an assembly structure of a building block according to the present invention includes a main body. An exterior of the main body includes a plurality of connection surfaces facing toward the various directions of the circumferences of the main body, respectively.

[0014] Each of the connection surfaces includes at least one stud extended outward to be connected with the secondary main body of the additional building block. The secondary main body of the additional building block includes an engaging recess to be engaged with the stud of the main body.

[0015] Based on the structure mentioned above, the studs face toward the various directions of the circumferences of the main body, respectively, and therefore the studs of the main body can be engaged with the secondary main bodies of the additional building blocks from various directions of the main body of the building block.

[0016] The embodiments of the present invention is further explained in the following descriptions:

[0017] According to the primary structural feature mentioned above, the secondary main body is provided with a decoration surface disposed at a side corresponding to be away from the main body.

[0018] According to the primary structural feature mentioned above, the secondary main body is provided with at least one stud disposed at a side corresponding to be

away from the main body.

[0019] According to the primary structural feature mentioned above, the main body includes a polyhedron. The polyhedron can be a hexahedron.

[0020] According to the primary structural feature mentioned above, the main body includes a recess defined therein, and the recess is defined in at least one connection surface. The studs of the main body are formed by extending from an inner wall of the bottom of the recess.

[0021] Compared with the conventional building block, the present invention includes the following advantages:

1. The main body of the building block according to the present invention omits the engaging recess and includes the studs disposed on all side walls of the main body. Moreover, the studs disposed on the connection surfaces are extended toward various directions of the circumferences of the main body, which makes the studs easy to be engaged with the engaging recesses of the secondary main bodies of the additional building blocks from various directions of the circumferences. Thus, the main body of the building block according to the present invention enhances the feasibility and convenience when assembling the building blocks.

2. Because the studs are disposed on all of the side walls of the main body, all of the connection surfaces of the main body can be directly engaged with the engaging recess of the secondary main body of the additional building block having the decoration surface. Therefore, all of the side walls and studs of the main body can be encased in the decoration surfaces without increasing the thickness or changing the proportions. Furthermore, the overall aesthetic appearance of the assembled building blocks according to the present invention is improved.

3. The main bodies according to the present invention can use studs distributed on all side walls thereof to be connected with the secondary main bodies of the conventional additional building blocks. There are huge numbers of additional building blocks that have the studs, the decoration surfaces or various designs currently available. Therefore, the assembly structure of the building block according to the preferred embodiment makes the assembling ways of the building blocks more diverse, and greatly improves the variability of the appearances and designs of the conventional building blocks.

[0022] Based on the descriptions mentioned above, the applicant provides the present invention that overcomes the disadvantages of the conventional building blocks.

BRIEF DESCRIPTION OF THE DRAWINGS

[0023] The present invention will be apparent to those skilled in the art by reading the following detailed descrip-

tion of a preferred embodiment thereof, with reference to the attached drawings, in which:

Fig. 1 is a perspective view showing an assembly structure of a building block according to a first embodiment of the present invention;

Fig. 2 is a perspective view showing the assembly structure of the building block of Fig. 1 from a bottom viewing angle;

Fig. 3 is a front view showing the assembly structure of the building block of Fig. 1;

Fig. 4 is a perspective view showing an assembly structure of a building block according to a second embodiment of the present invention;

Fig. 5 is a perspective view showing the assembly structure of the building block of Fig. 4 from a bottom viewing angle;

Fig. 6 is a perspective view showing an assembly structure of a building block according to a third embodiment of the present invention;

Fig. 7 is a perspective view showing the assembly structure of the building block of Fig. 6 in use;

Fig. 8 is a partially exploded view showing the assembly structure of the building block of Fig. 7 in use; and

Fig. 9 is an exploded view showing the assembly structure of the building block of Fig. 8 in use.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0024] The accompanying drawings, which are included to provide a further understanding of the invention, illustrate the preferred embodiments and together with the description serve to explain the technical means to achieve the objectives of the present invention.

[0025] Figs. 1 to 3 show a first preferred embodiment of the present invention. Fig. 1 is a perspective view showing an assembly structure of a building block according to the first preferred embodiment of the present invention. Fig. 2 is a perspective view showing the assembly structure of the building block of Fig. 1 from a bottom viewing angle. Fig. 3 is a front view showing the assembly structure of the building block of Fig. 1.

[0026] Referring to Figs. 1 to 3, the assembly structure of the building block according to the first preferred embodiment of the present invention includes a main body 1. An exterior of the main body 1 is provided with a plurality of connection surfaces 12 to be connected with secondary main bodies 2 of additional building blocks (as shown in Figs. 8 and 9). The connection surfaces 12 face toward various directions of the circumferences of the main body 1, respectively. The various directions of the circumferences of the main body 1 include six directions, the top, bottom, left, right, front and rear directions of the main body 1.

[0027] The connection surfaces 12 are disposed on all of outer walls, including the top, bottom, left, right, front

and rear outer walls of the main body 1. Each of the connection surfaces 12 includes at least one stud 11 extended outward to be connected with the secondary main body 2 of the additional building block. The secondary main body 2 of the additional building block includes an engaging recess 20 corresponding to the stud 11 of the main body 1, so that the engaging recess 20 of the secondary main body 2 can be engaged with the stud 11 of the main body 1. The studs 11 face toward various directions of the circumferences of the main body 1, respectively, and therefore the studs 11 of the main body 1 can be engaged with the secondary main bodies 2 of the additional building blocks from the top, bottom, left, right, front and rear directions of the main body 1.

[0028] Figs. 4 to 6 show further preferred embodiments of the present invention. Fig. 4 is a perspective view showing an assembly structure of a building block according to the second embodiment that is a variation of the assembly structure of Fig. 1. Fig. 5 is a perspective view showing the assembly structure of the building block of Fig. 4 from a bottom viewing angle. Fig. 6 is a perspective view showing an assembly structure of a building block according to a third embodiment that is another variation of the assembly structure of the building block of Fig. 1. Each of the connection surfaces 12a, 12b of the main body 1a, 1b include more than one stud 11a, 11b that are arranged evenly spaced. The studs 11a, 11b can be arranged in a single row or arranged as a matrix.

[0029] Figs. 7 to 9 show another preferred embodiment of the present invention. Fig. 7 is a perspective view showing the assembly structure of the building block of Fig. 6 in use. Fig. 8 is a partially exploded view showing the assembly structure of the building block of Fig. 7. Fig. 9 is an exploded view showing the assembly structure of the building block of Fig. 8. The present invention further includes:

[0030] According to the preferred embodiments, a position of the secondary main body 2 of the additional building block corresponding to the connection surface 12, 12a, 12b of the main body 1, 1a, 1b includes the engaging recess 20 provided to be engaged with the stud 11, 11a, 11b of the main body 1, 1a, 1b.

[0031] According to the preferred embodiments, the secondary main body 2 of the additional building block includes a decoration surface 22 disposed at a side corresponding to be away from the connection surface 12, 12a, 12b of the main body 1, 1a, 1b. Thus, the decoration surface 22 accompanying with the secondary main body 2 of the additional building block encases the connection surface 12, 12a, 12b of the main body 1, 1a, 1b. And, the decoration surface 22 can have a smooth, curve or special shape.

[0032] According to the preferred embodiments, the secondary main body 2 of the additional building block includes a stud 21 disposed at a side corresponding to be away from the connection surface 12, 12a, 12b of the main body 1, 1a, 1b. The stud 21 of the secondary main body 2 of the additional building block can be engaged

with the engaging recess 20a of the secondary main body 2a of another additional building block.

[0033] In fact, the secondary main body 2, 2a of the additional building block can be conventional Lego or Mega Bloks bricks.

[0034] According to the preferred embodiments, the main body 1, 1a, 1b of the building block can be a polyhedron. The polyhedron includes a brick of a pentahedron, a hexahedron, a heptahedron, etc. In other words, the polyhedron is a brick having a square, rectangular, triangle or trapezoid surface. According to the preferred embodiments of the present invention, the main body 1, 1a, 1b is a parallelepiped.

[0035] According to the preferred embodiments, the main body 1, 1a, 1b includes a recess 10, 10a, 10b defined therein, and the recess 10, 10a, 10b is disposed in at least one connection surface 13, 13a, 13b. The studs 11, 11a, 11b of the connection surface 13, 13a, 13b is formed by extending from an inner wall of the bottom of the recess 10, 10a, 10b.

[0036] In fact, the structure of the recess 10, 10a, 10b of the connection surface 13, 13a, 13b of the main body 1, 1a, 1b is equivalent to that of the engaging recess 20, 20a of the secondary main body 2, 2a of the additional building block. However, the stud 11, 11a, 11b of the connection surface 13, 13a, 13b of the main body 1, 1a, 1b is extended from the inner wall of the recess 10, 10a, 10b, so that the recess 10, 10a, 10b of the main body 1, 1a, 1b according to the present invention excludes the original function of the engaging recess. In the mean time, the studs 11, 11a, 11b extend toward various directions of the circumferences of the main body 1, 1a, 1b, respectively, and are capable of being engaged with the engaging recesses 20 of the secondary main bodies 2 of the additional building blocks from various directions of the circumferences of the main body 1, 1a, 1b. Therefore, the assembly structure of the building block according to the present invention possesses inventive step.

[0037] The secondary main body 2 of the additional building block, such as the conventional Lego or Mega Bloks bricks, is usually provided with the engaging recess 20 at a side opposite to the decoration surface 22. The engaging recess 20 increases the strength of the secondary main body 2 and prevents size deviation caused by shrinking deformation after injection molding. Thus, it ensures the fulfillment of quality requirement and it also reduces the cost of the materials. Of course, the secondary main body of the conventional building block may also be provided with the studs at a side opposite to the decoration surface, but it is a special product whose amount and designs are far fewer than the secondary main body 2 of the additional building block having the engaging recess 20 at a side opposite to the decoration surface 22.

[0038] Therefore, the main body 1, 1a, 1b includes studs 11, 11a, 11b disposed on all connection surfaces 12, 13, 12a, 13a, 12b, 13b, which are the top, bottom, left, right, front and rear outer walls of the main body 1,

1a, 1b, and extended toward various directions of the circumferences of the main body 1, 1a, 1b. Therefore, the main body 1, 1a, 1b according to the present invention can directly engaged with the aforementioned secondary main body 2 having the engaging recess 20 disposed on the side opposite to the decoration surface 22 and the aforementioned secondary main body 2 having the engaging recess 20 disposed on the side opposite to the stud 21. Therefore, it is very convenient to assemble the main body 1, 1a, 1b of the building block according to the present invention with the secondary main body 2 of the conventional additional building block.

[0039] Through the structure mentioned above, it can carry out the present invention. The following description takes the main body 1b to assemble a robot as an example to further explain the present invention. Figs. 7 and 8 clearly show using the main body 1b according to the present invention to assemble an upper portion of a robot.

[0040] The main body 1b can be used to assemble a backpack assembly of the robot. A torso and a head of the robot are assembled by the secondary main bodies 2b of the additional building blocks, and the conventional engaging recesses (not shown in the drawings) are exposed at a back of the robot. Because the secondary main bodies 2b assembled to form the upper portion of the robot are conventional Lego or Mega Bloks bricks and the chest and the face of the robot are presented by the decoration surfaces 22b, the user can freely connect the secondary main bodies 2b of the additional building blocks and arrange them to expose the engaging recesses 22b at the back of the robot.

[0041] Then, taking the main body 1b as a center, the engaging recesses 20, 20b, 20c, 20d, 20e, 20f of the secondary main bodies 2, 2b, 2c, 2d, 2e 2f surround and engage with the studs 11b of the all connection surfaces 12b, 13b of the main body 1b according to the present invention. Because the studs 11b disposed at the side walls of the main body 1b are engaged with the secondary main bodies 2, 2c, 2d, 2e, 2f of the additional building blocks, the decoration surfaces 22, 22c, 22d, 22e, 22f encase the circumferences of the studs 11b of the connection surfaces 12b, 13b of the main body 1b and show the appearance of the backpack of the robot. Because the studs 11b of the main body 1b are further engaged with the secondary main body 2b of the additional building blocks, the backpack is connected to the back of the robot. Thus, the assembly of the upper portion of the robot is finished.

[0042] As mentioned above, the main body 1 of the building block according to the present invention omits the engaging recess of the conventional Lego and Mega Bloks bricks and is provided with the studs 11, 11a, 11b disposed on all side walls of the main body 1, 1a, 1b. Moreover, the studs 11, 11a, 11b disposed on the connection surfaces 12, 13, 12a, 13a, 12b, 13b are extended toward various directions of the circumferences of the main body 1, 1a, 1b, which makes the studs 11, 11a, 11b

easy to engaged with the engaging recesses 20, 20b, 20c, 20d, 20e or 20f of the secondary main body 2, 2b, 2c, 2d, 2e or 2f from various directions of the circumferences. Furthermore, the secondary main body 2, 2b, 2c, 2d, 2e, 2f of the additional building block can use the studs 21 or the engaging recesses thereof to connect with the other additional building blocks. Therefore, the main bodies 1, 1a, 1b of the building blocks and the secondary main bodies 2, 2a, 2b, 2c, 2d, 2e and 2f of the additional building blocks can be connected to form the buildings, the automobiles, the airplanes, the ships, the robots or other objects. Thus, the main body 1 of the building block according to the present invention enhances the diversity and convenience when assembling the building blocks.

[0043] It is noticeable that the studs 11, 11a, 11b are disposed on all of the side walls of the main body 1, 1a, 1b. Thus, all of the connection surfaces 12, 13, 12a, 13a, 12b, 13b of the main body 1, 1a, 1b can take advantage of the studs 11, 11a, 11b thereof to be directly engaged with the engaging recesses 20, 20b, 20c, 20d, 20e, 20f of the secondary main body 2, 2b, 2c, 2d, 2e, 2f of the conventional additional building block having the decoration surface 22, 22b, 22c, 22d, 22e, 22f. Therefore, all of the side walls and studs 11, 11a, 11b of the main body 1, 1a, 1b can be wrapped in the decoration surfaces 22, 22b, 22c, 22d, 22e, 22f, and then the secondary main bodies 2, 2b, 2c, 2d, 2e, 2f can further connect with the secondary main bodies of the other additional building blocks. The overall aesthetic appearance of the assembled building blocks according to the present invention can be enhanced without increasing the thickness or changing the proportions.

[0044] Accordingly, the main bodies 1, 1a, 1b according to the present invention can use studs 11, 11a, 11b distributed on all side walls to connected with the secondary main bodies 2, 2a, 2b, 2c, 2d, 2e, 2f of the conventional additional building blocks. There are huge number of additional building blocks currently available, such as additional building blocks 2, 2a, 2b, 2c, 2d, 2e, 2f having studs 21 and the decoration surfaces 22, 22a, 22b, 22c, 22d, 22e, 22f or various designs. Therefore, the assembly structure of the building block according to the preferred embodiment makes the assembling ways of the building blocks more diverse, and greatly improves the variability of the appearances and designs of the conventional building blocks.

[0045] In summary, because the main body of the conventional building block includes the engaging recess, it is unable to directly engage the engaging recess of the main body with the engaging recess of the main body of the building block having the decoration surface. Therefore, after the building blocks are assembled, the engaging recess would be exposed at the back of the assembled building blocks. Thus, the aesthetic appearance of the building blocks deteriorates and it is inconvenient to assemble the building blocks. The assembly structure of the building block according to the present invention does

overcome the shortcomings of the conventional building blocks mentioned above, and can engaged with the main bodies of the additional building blocks in every direction to provide the effect of encasing and decoration.

[0046] Although the present invention and its using methods have been described with reference to the preferred embodiments thereof, it is apparent to those skilled in the art that a variety of modifications and changes may be made without departing from the scope of the present invention which is intended to be defined by the appended claims.

Claims

1. An assembly structure of a building block, comprising:
 - a main body, an exterior of the main body including a plurality of connection surfaces, the connection surfaces facing toward various directions of the circumferences of the main body, respectively,
 - wherein each of the connection surfaces includes at least one stud to be engaged with a secondary main body of an additional building block, and the secondary main body is provided with an engaging recess corresponding to the stud.
2. The assembly structure of the building block according to claim 1, wherein the secondary main body includes a decoration surface encasing the secondary main body at a side corresponding to be away from the main body.
3. The assembly structure of the building block according to claim 1, wherein the secondary main body includes at least one stud at a side corresponding to be away from the main body.
4. The assembly structure of the building block according to any one of claims 1 to 3, wherein the main body includes a polyhedron.
5. The assembly structure of the building block according to claim 4, wherein the polyhedron includes a hexahedron.
6. The assembly structure of the building block according to any one of claims 1 to 3, wherein the main body includes a recess, the recess is defined in at least one connection surface, and the studs of the main body is formed by extending from a bottom wall of the recess.
7. The assembly structure of the building block according to claim 4, wherein the main body includes a re-

cess, the recess is defined in at least one connection surface, and the studs of the main body is formed by extending from a bottom wall of the recess.

8. The assembly structure of the building block according to claim 5, wherein the main body includes a recess, the recess is defined in at least one connection surface, and the studs of the main body is formed by extending from a bottom wall of the recess.

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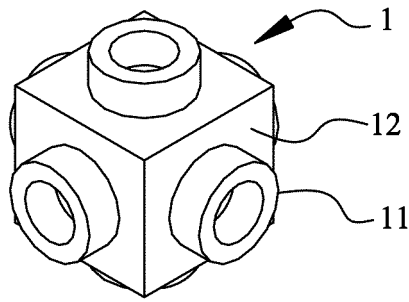


FIG. 1

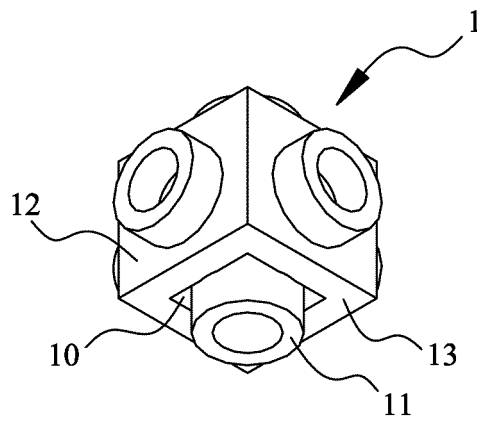


FIG. 2

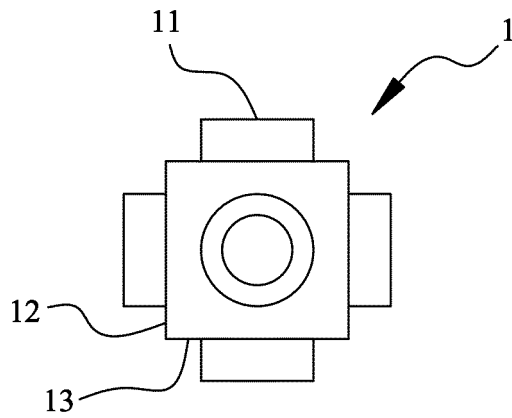


FIG. 3

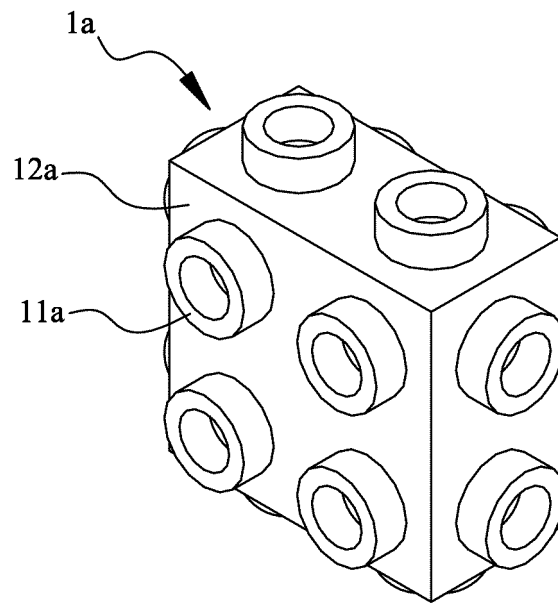


FIG. 4

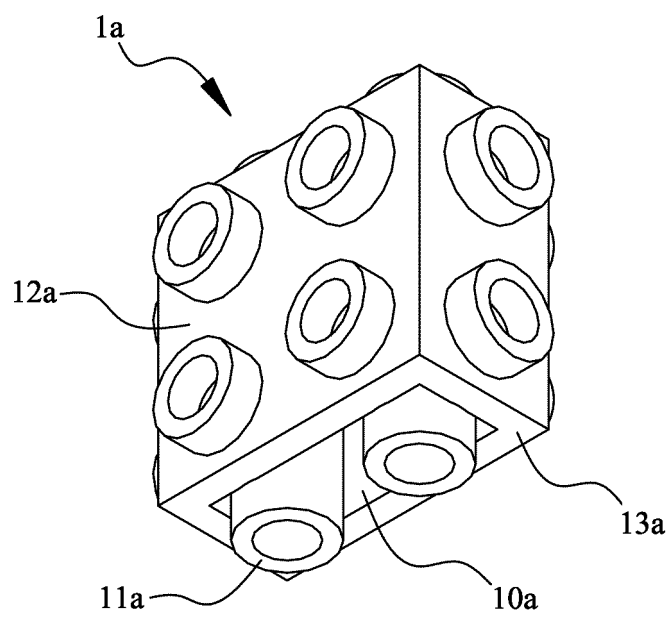


FIG. 5

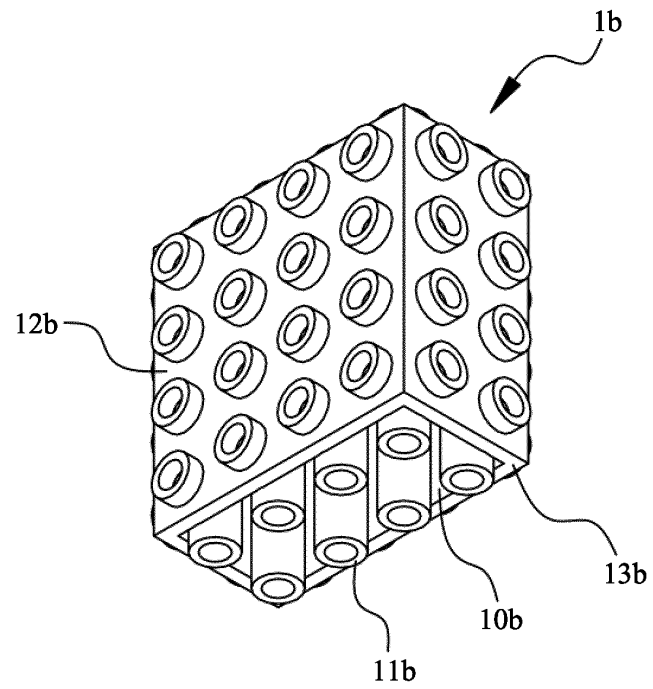


FIG. 6

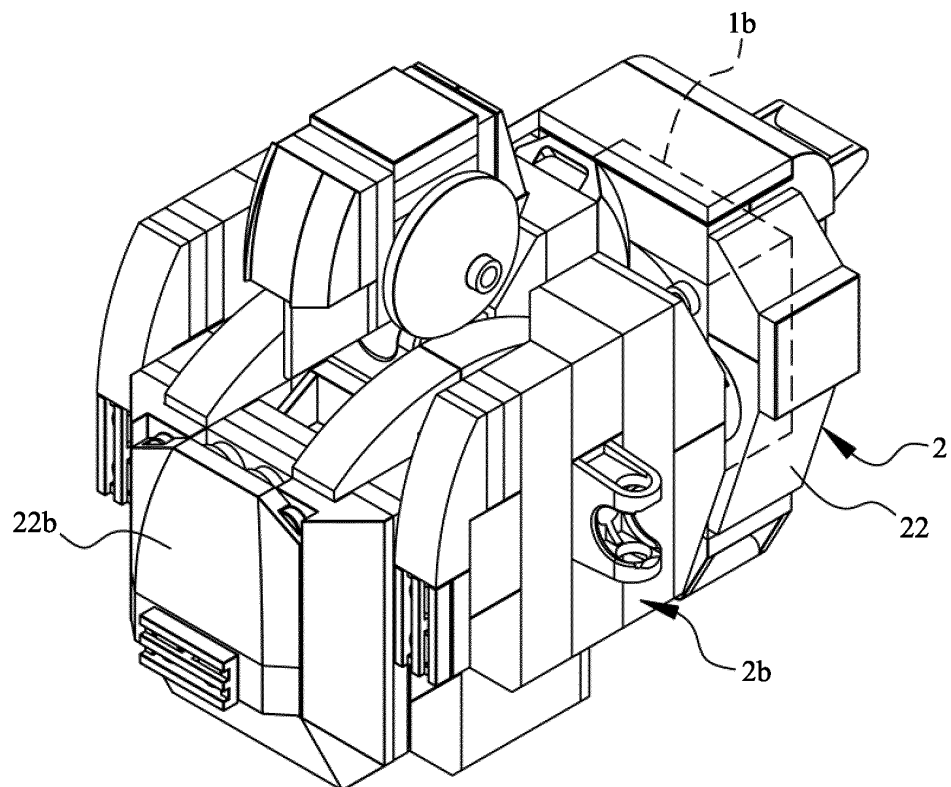


FIG. 7

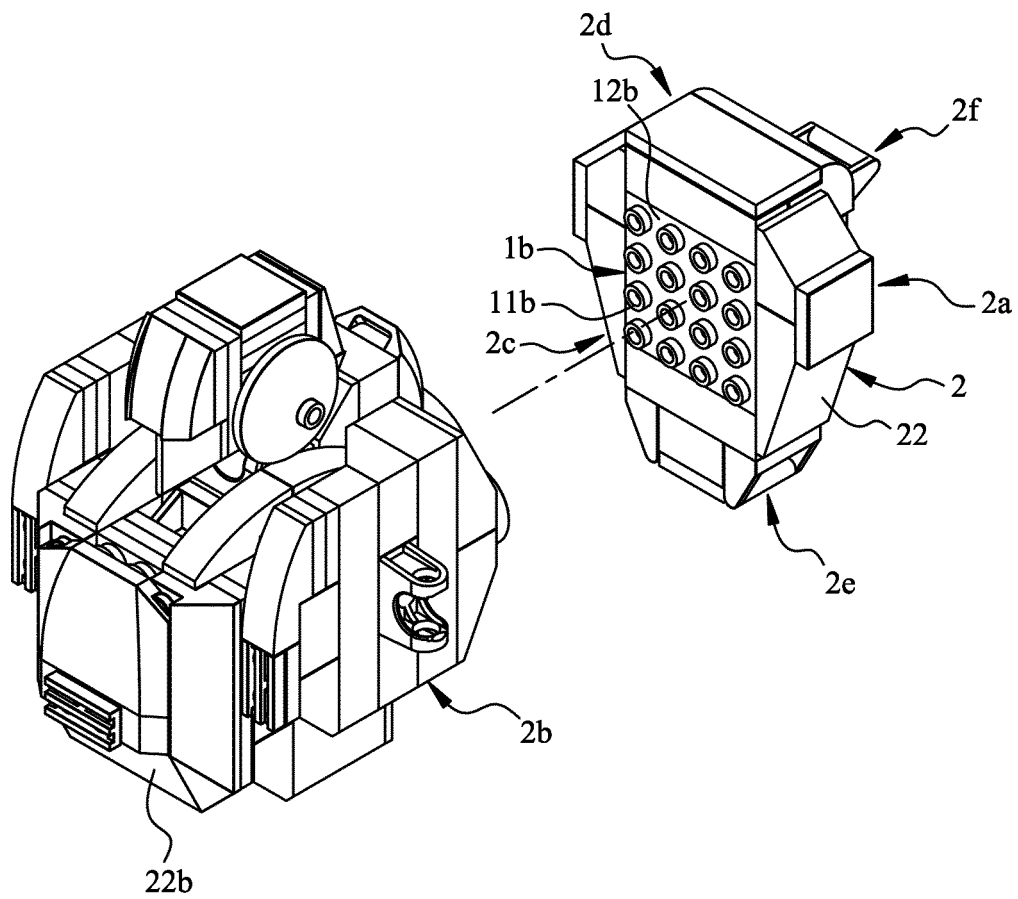


FIG. 8

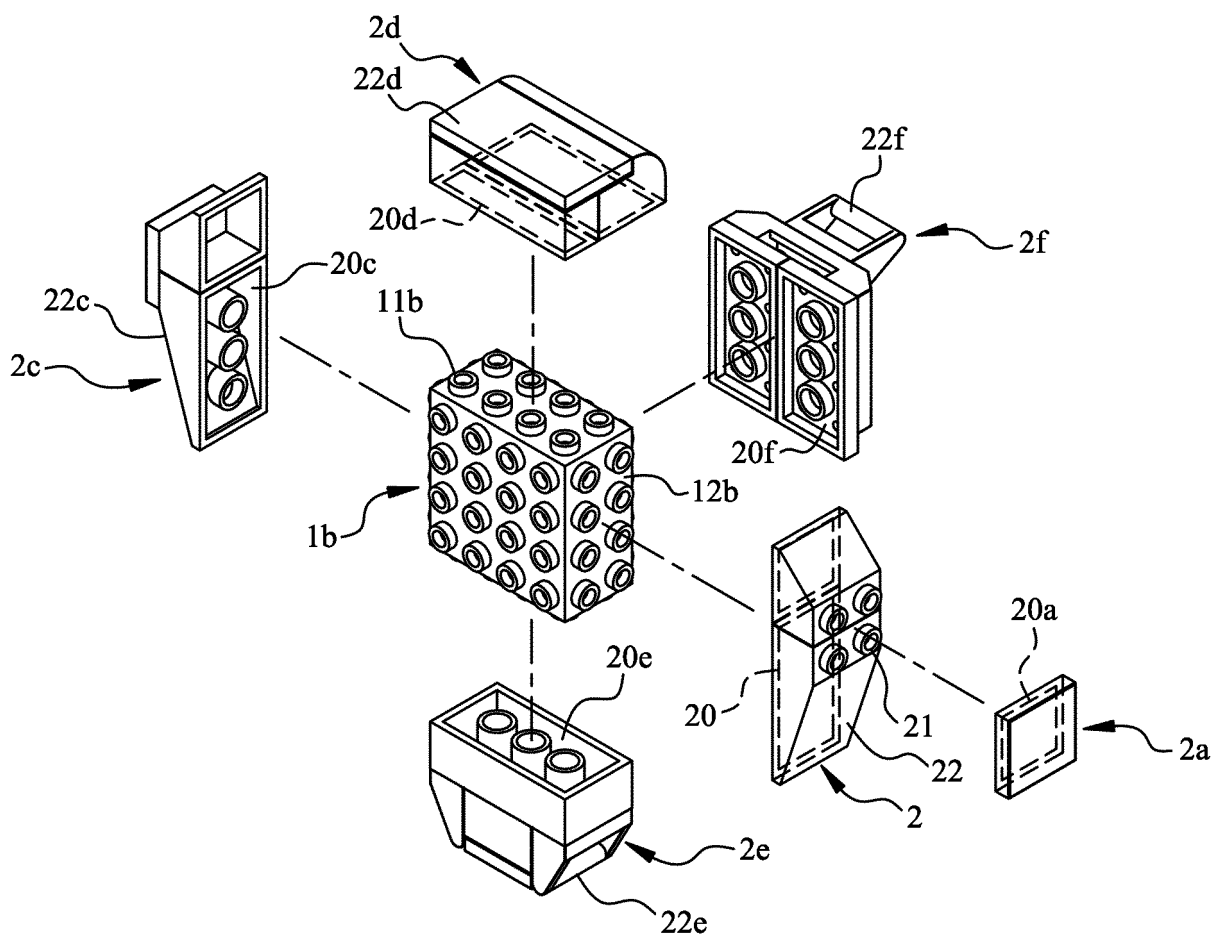


FIG. 9

INTERNATIONAL SEARCH REPORT

International application No.

PCT/CN2014/082220

A. CLASSIFICATION OF SUBJECT MATTER

A63H 33/08 (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)

A63H

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

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

EPODOC, WPI, CNPAT, CNKI: hole, interpose, middle, male, protrusion, protrud+, extrud+, convex??, boss??, stud?, bolt?, female, concav+, dent+, sink+, recess??, groove?, socket?, main, subject, central, body, secondary, extend+, periphery, outskirt, external, outside, exterior

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Y	WO 2008072025 A1 (PURRAAD, R. et al.), 19 June 2008 (19.06.2008), description, page 5, line 28 to page 17, line 15, and figures 1-29	6-8
Y	CN 201940058 U (GENIUS TOY TAIWAN CO., LTD.), 24 August 2011 (24.08.2011), description, paragraphs [0030]-[0036], and figure 1	6-8
X	JP S54169597 U (COMBI CORP.), 30 November 1979 (30.11.1979), description, page 3, line 7 to page 5, line 9, and figures 1-6	1-5
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☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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INTERNATIONAL SEARCH REPORT

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