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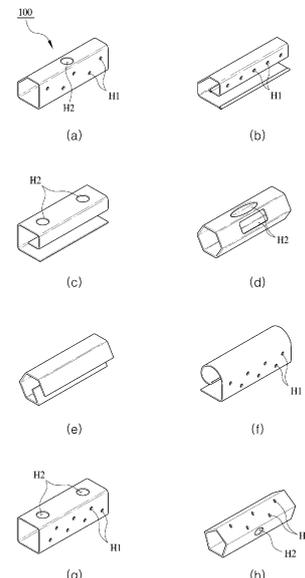
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(54) **AMUSEMENT RIDE BLOCKS CAPABLE OF CONSTRUCTING VARIOUS AMUSEMENT RIDES BY BEING COMBINED AND ARRANGED IN VARIOUS SHAPES**

(57) The present invention relates to amusement ride blocks that can be played with indoors and outdoors. The amusement ride blocks 100 are each formed to be penetrated in a length direction, provided with an entrance/exit, and assembled with one another or arranged in various shapes to make three-dimensional structures to make various amusement rides. The amusement ride blocks 100 are arranged vertically in combination with one another or arranged horizontally on a floor surface to provide various games. The amusement ride blocks 100 are combined and arranged in various shapes so that the amusement ride may be constructed by reflecting creative ideas of amusement ride installers and children who are main subjects of the game.

FIG 1



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**Description****[Technical Field]**

**[0001]** The present invention relates to amusement ride blocks that can be played with indoors and outdoors, and more particularly, to amusement ride blocks that may be combined and arranged in various shapes to construct amusement rides by reflecting creative ideas of amusement ride installers and children who are main subjects of games.

**[Background Art]**

**[0002]** Recently, various play blocks have been developed and used to improve creativity, organization, and concentration in toddlers and children.

**[0003]** The play blocks are designed to allow toddlers and children to experience three-dimensional construction by making various shapes such as buildings or vehicles by using and combining various three-dimensional blocks.

**[0004]** The play blocks for achieving these functions are small in size so that toddlers and children may construct various shapes by manipulating the play blocks by hand indoors. However, the play blocks are not enough to construct amusement rides that toddlers and children may enjoy by using their whole body.

**[0005]** There is a need to develop an amusement ride that may allow the toddlers and children to play the amusement ride without getting tired easily and provide growth and development for the toddlers and children.

**[Disclosure]****[Technical Problem]**

**[0006]** The present invention has been made in an effort to solve the above-mentioned problem caused by small play blocks.

**[0007]** An object of the present invention is to provide eight types of amusement ride blocks that may be combined and arranged in various shapes to creatively construct amusement rides, thereby allowing children to enjoy unique games, enhancing creativity and concentration of the children, and contributing to growth and development of the children.

**[Technical Solution]**

**[0008]** In order to achieve the above-mentioned object, the present invention provides amusement ride blocks capable of constructing various amusement rides by being combined and arranged in various shapes, the amusement ride blocks being each formed to be penetrated in a length direction, provided with an entrance/exit, and assembled with one another or arranged in various shapes to make three-dimensional structures to make

various amusement rides, in which the amusement ride blocks are arranged vertically in combination with one another or arranged horizontally on a floor surface to provide various games.

**[0009]** The present invention provides amusement ride blocks capable of constructing various amusement rides by being combined and arranged in various shapes, in which the amusement ride blocks are each formed to be penetrated in a length direction, provided with an entrance/exit, and provided with surfaces having small holes that a user may grip or step on, and large holes through which the user may pass, and in which the amusement ride blocks are combined with one another vertically and horizontally and used or spaced apart from one another at predetermined intervals and used as bar members connected to one another in order to provide: a game of hide and seek that the user plays while hiding inside the amusement ride block through the entrance/exit and the large hole; a climbing wall game that the user plays while climbing the amusement ride block while gripping or stepping on the hole; a physical exercise game that the user plays while passing over the amusement ride block by gripping the bar member by hand; a space in which the user rests and talks by combining the amusement ride blocks like a bleacher or a seating table; and a tag or maze game that the user plays while passing through the inside of the amusement ride block and passing between the amusement ride blocks.

**[Advantageous Effects]**

**[0010]** As described above, according to the present invention, the amusement ride blocks may be combined and used to construct three-dimensional configurations having various shapes, such that it is possible to provide play spaces with unique features, provide complex play functions, and provide combined play spaces that the children may enjoy by using their whole body, thereby providing growth and development of the children.

**[Description of Drawings]****[0011]**

FIG. 1 is a view for explaining structures of amusement ride blocks according to an embodiment of the present invention.

FIG. 2 is a view for explaining a structure of a first block among the amusement ride blocks according to the embodiment of the present invention.

FIGS. 3A and 3B are views for explaining a structure of a second block among the amusement ride blocks according to the embodiment of the present invention.

FIG. 4 is a view for explaining a structure of a third block among the amusement ride blocks according to the embodiment of the present invention.

FIG. 5 is a view for explaining a structure of a fourth

block among the amusement ride blocks according to the embodiment of the present invention.

FIG. 6 is a view for explaining a structure of a fifth block among the amusement ride blocks according to the embodiment of the present invention.

FIG. 7 is a view for explaining a structure of a sixth block among the amusement ride blocks according to the embodiment of the present invention.

FIG. 8 is a view for explaining a structure of a seventh block among the amusement ride blocks according to the embodiment of the present invention.

FIG. 9 is a view for explaining a structure of an eighth block among the amusement ride blocks according to the embodiment of the present invention.

FIGS. 10 to 13 are views for explaining three-dimensional amusement rides manufactured by the amusement ride blocks according to the embodiment of the present invention.

<Explanation of Reference Numerals and Symbols>

**[0012]**

100: Block  
 110: First block  
 120: Second block  
 130: Second block  
 140: Fourth block  
 150: Fifth block  
 160: Sixth block  
 170: Seventh block  
 180: Eighth block  
 200: Safety guardrail  
 300: Support member  
 400: Finishing plate  
 500: Slide  
 600: Pull-up bar  
 D: Entrance/exit  
 P: Packing

**[Best Mode]**

**[0013]** Hereinafter, embodiments of the present invention will be described with reference to the accompanying drawings.

**[0014]** In the description of the present invention herein, the specific descriptions of publicly known related functions or configurations will be omitted when it is determined that the specific descriptions may unnecessarily obscure the subject matter of the present invention. In addition, the terms used in the description are defined considering the functions of the present invention and may vary depending on the intention or usual practice of a manufacturer for manufacturing products. Therefore, the definitions should be made based on the entire contents of the present specification.

(Embodiments)

**[0015]** As illustrated in FIG. 1 attached hereto, the present invention provides various amusement rides blocks 100 that may each be formed to be penetrated in a length direction, provided with an entrance/exit, and combined with one another or arranged in various shapes to make three-dimensional structures to make various amusement rides.

**[0016]** In particular, the amusement ride blocks 100, which are each formed to be penetrated in the length direction, provided with an entrance/exit D, and provided with surfaces having small holes H1 that a user may grip or step on, and large holes H2 through which the user may pass, are combined with one another vertically and horizontally and used or spaced apart from one another at predetermined intervals and used as bar members connected to one another in order to provide various play methods by providing: a game of hide and seek that the user plays while hiding inside the block through the entrance/exit D and the large hole H2; a climbing wall game that the user plays while climbing the block while gripping or stepping on the hole H1; a physical exercise game that the user plays while passing over the block by gripping the bar member by hand; a space in which the user may rest and talk by combining the amusement ride blocks like a bleacher or a seating table; and a tag or maze game that the user plays while passing through the inside of the amusement ride block and passing between the blocks.

**[0017]** The blocks 100 according to the embodiment of the present invention include a first block 110, a second block 120, a third block 130, a fourth block 140, a fifth block 150, a sixth block 160, a seventh block 170, and an eighth block 180.

<First Block>

**[0018]** As illustrated in FIG. 2 attached hereto, the first block 110 is provided in the form of a quadrangular column penetrated like a tunnel, one edge portion of the first block 110 has an inclined surface C, a small hole H1 that the user may grip by hand or step with foot is provided in each of the surfaces thereof, and a large hole H2 through which the user may pass is provided in each of the surfaces thereof.

**[0019]** The small hole H1 and the large hole H2 may each have a circular to polygonal shape. The hole may have a size that allows the user to grip the hole while inserting his/her hand into the hole or step on the hole. Further, the hole may have a size that allows the user to pass through the hole.

**[0020]** It is noted that the second to eighth blocks to be described below include the holes H1 and H2.

**[0021]** Further, the block is an amusement ride block formed to be penetrated like a tunnel and mainly used for a tunnel game. In order to prevent injuries to the child's head caused by a collision, soft packings P may be pro-

vided around edges of start and end portions. It is noted that the second to eighth blocks to be described below include the packings.

**[0022]** Further, various pictures may be printed inside and outside the block. The block may be made of non-hazardous synthetic resin to prevent injuries caused by a collision.

<Second Block>

**[0023]** As illustrated in FIG. 3 attached hereto, the second block 120 is provided in the form of a quadrangular column penetrated like a tunnel, one edge portion of the second block 120 has an inclined surface C, an entrance/exit D is provided at one side of the second block 120, and the holes H1 and H2 having different sizes and various shapes are provided in each of the surfaces thereof.

**[0024]** The entrance/exit D is formed by opening one main part, and a guide piece 121 is bent inward so that the user may smoothly enter or exit the opening portion.

<Third Block>

**[0025]** As illustrated in FIG. 4 attached hereto, the third block 130 is provided in the form of a quadrangular column penetrated like a tunnel, an entrance/exit D is provided at one side of the third block 130, and the holes H1 and H2 having different sizes and various shapes are provided in each of the surfaces thereof.

<Fourth Block>

**[0026]** As illustrated in FIG. 5 attached hereto, the fourth block 140 is provided in the form of a hexagonal column penetrated like a tunnel, and the holes H1 and H2 having different sizes and various shapes are provided in each of the surfaces thereof.

<Fifth Block>

**[0027]** As illustrated in FIG. 6 attached hereto, the fifth block 150 is provided in the form of a hexagonal column penetrated like a tunnel, an entrance/exit D is provided at one side of the fifth block 150, and the holes H1 and H2 having different sizes and various shapes are provided in each of the surfaces thereof.

**[0028]** The entrance/exit D may be formed by opening one part, a guide piece 151 for guiding an inlet may be bent inward, and a start piece 152 may be formed in parallel with the guide piece.

<Sixth Block>

**[0029]** As illustrated in FIG. 7 attached hereto, the sixth block 160 is penetrated like a tunnel and rounded to be curved inward toward an upper end bent in an "L" shape, and the entrance/exit D is provided from the bent portion

and communicates with the rounded portion.

<Seventh Block>

**[0030]** As illustrated in FIG. 8 attached hereto, the seventh block 170 is provided in the form of a quadrangular column penetrated like a tunnel, and the holes H1 and H2 having different sizes and various shapes are provided in each of the surfaces thereof.

<Eighth Block>

**[0031]** As illustrated in FIG. 9 attached hereto, the eighth block 180 is provided in the form of a pentagonal column penetrated like a tunnel, and the holes H1 and H2 having different sizes and various shapes are provided in each of the surfaces thereof.

**[0032]** FIGS. 10 to 13 attached hereto illustrate examples of combinations that the user may enjoy by using the blocks according to the embodiment of the present invention. In addition, the blocks may be combined and arranged in various shapes to implement the amusement rides having complex play functions and various shapes.

**[0033]** FIGS. 10 to 12 attached hereto illustrate amusement rides provided by coupling the blocks according to the embodiment of the present invention and other items.

**[0034]** As illustrated in FIG. 10, the blocks 100 are stacked and assembled vertically, and as necessary, finishing plates 400 are used by being fitted and assembled with the start and end parts of the blocks 100 based on the length direction.

**[0035]** Further, the blocks may be fastened by fastening units (not illustrated). Support members 300 may be provided at lower ends of the blocks spaced apart from the floor and securely support the spaced blocks.

**[0036]** In addition, safety guardrails 200 may be provided at upper ends of the stacked blocks to prevent children from falling.

**[0037]** As illustrated in FIG. 11, the blocks 100 are stacked, and the finishing plates 400 may be used by being provided in the entrance/exits at two opposite sides of the block based on the length direction. The support member 300 may be provided between the start piece of the entrance/exit and the guide piece to prevent the block from sagging.

**[0038]** Further, the safety guardrails 200 may be provided at the upper ends of the stacked blocks to prevent children from falling. A slide 500 may be provided on the main part of the safety guardrails to manufacture a slide amusement ride that the children ride and play.

**[0039]** In addition, as illustrated in FIG. 12 attached hereto, the blocks may be spaced apart from one another vertically, and a circular bar, a pull-up bar, or the like may be combined between the upper ends of the blocks, thereby providing an amusement ride that provides a rolling ladder motion or a pull-up bar motion.

**[0040]** As described above, the amusement ride may provide a game of hide and seek, a pull-up bar game,

and a game that the user plays while gripping the pull-up bar and moving.

**[0041]** In addition, as illustrated in FIG. 13 attached hereto, the blocks are assembled to have various shapes and patterns to providing a game and allow the amusement ride installers and children, who are the users, to make various shapes and patterns while reflecting creativity.

**[0042]** The specific embodiments of the present invention have been described. However, it can be naturally understood by those skilled in the art, to which the present invention pertains, that the spirit and scope of the present invention are not particularly limited to the specific embodiments, and various modifications and alterations may be made without departing from the subject matter of the present invention.

**[0043]** Therefore, the embodiments of the present invention are provided so that the present invention is completely disclosed, and a person with ordinary skill in the art can fully understand the scope of the present invention. Accordingly, the present invention is to be understood as exemplary and non-limiting in all respects, and the invention is only defined by the scope of the claims.

#### Claims

1. Amusement ride blocks capable of constructing various amusement rides by being combined and arranged in various shapes, the amusement ride blocks 100 being each formed to be penetrated in a length direction, provided with an entrance/exit, and assembled with one another or arranged in various shapes to make three-dimensional structures to make various amusement rides, wherein the amusement ride blocks are arranged vertically in combination with one another or arranged horizontally on a floor surface to provide various games.
2. The amusement ride blocks of claim 1, wherein the amusement ride blocks 100 comprises a first block 110, a second block 120, a third block 130, a fourth block 140, a fifth block 150, a sixth block 160, a seventh block 170, and an eighth block 180 that are combined and arranged to constitute various shapes and structures and provide various games.
3. The amusement ride blocks of claim 2, wherein the first block 110 is provided in the form of a quadrangular column penetrated like a tunnel, one edge portion thereof has an inclined surface C, and holes H1 and H2 having different sizes and various shapes are provided in each of the surfaces thereof.
4. The amusement ride blocks of claim 2, wherein the second block 120 is provided in the form of a quadrangular column penetrated like a tunnel, one edge portion thereof has an inclined surface C, an entrance/exit D is provided at one side thereof, and holes H1 and H2 having different sizes and various shapes are provided in each of the surfaces thereof.
5. The amusement ride blocks of claim 2, wherein the third block 130 is provided in the form of a quadrangular column penetrated like a tunnel, an entrance/exit D is provided at one side thereof, and holes H1 and H2 having different sizes and various shapes are provided in each of the surfaces thereof.
6. The amusement ride blocks of claim 2, wherein the fourth block 140 is provided in the form of a hexagonal column penetrated like a tunnel, and holes H1 and H2 having different sizes and various shapes are provided in each of the surfaces thereof.
7. The amusement ride blocks of claim 2, wherein the fifth block 150 is provided in the form of a hexagonal column penetrated like a tunnel, an entrance/exit D is provided at one side thereof, and holes H1 and H2 having different sizes and various shapes are provided in each of the surfaces thereof.
8. The amusement ride blocks of claim 2, wherein the sixth block 160 is penetrated like a tunnel and rounded to be curved inward toward an upper end bent in an "L" shape, and an entrance/exit D is provided from the bent portion and communicates with the rounded portion.
9. The amusement ride blocks of claim 2, wherein the seventh block 170 is provided in the form of a quadrangular column penetrated like a tunnel, and holes H1 and H2 having different sizes and various shapes are provided in each of the surfaces thereof.
10. The amusement ride blocks of claim 2, wherein the eighth block 180 is provided in the form of a pentagonal column penetrated like a tunnel, and holes H1 and H2 having different sizes and various shapes are provided in each of the surfaces thereof.
11. Amusement ride blocks capable of constructing various amusement rides by being combined and arranged in various shapes, wherein the amusement ride blocks 100 are each formed to be penetrated in a length direction, provided with an entrance/exit D, and provided with surfaces having holes H1 and H2 having different sizes and various shapes so that a user grips the holes H1 and H2 with hand or steps with foot while inserting the foot into the holes H1 and H2, and wherein the amusement ride blocks 100 are combined with one another vertically and horizontally and used or spaced apart from one another at predetermined intervals and used as bar members connected to one another in order to provide:

a game of hide and seek that the user plays while hiding inside the amusement ride block through the entrance/exit D and the large hole H2;  
a climbing wall game that the user plays while climbing the amusement ride block while gripping or stepping on the hole H1; 5  
a physical exercise game that the user plays while passing over the amusement ride block by gripping the bar member by hand;  
a space in which the user rests and talks by combining the amusement ride blocks like a bleacher or a seating table; and 10  
a tag or maze game that the user plays while passing through the inside of the amusement ride block and passing between the amusement ride blocks. 15

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FIG 1

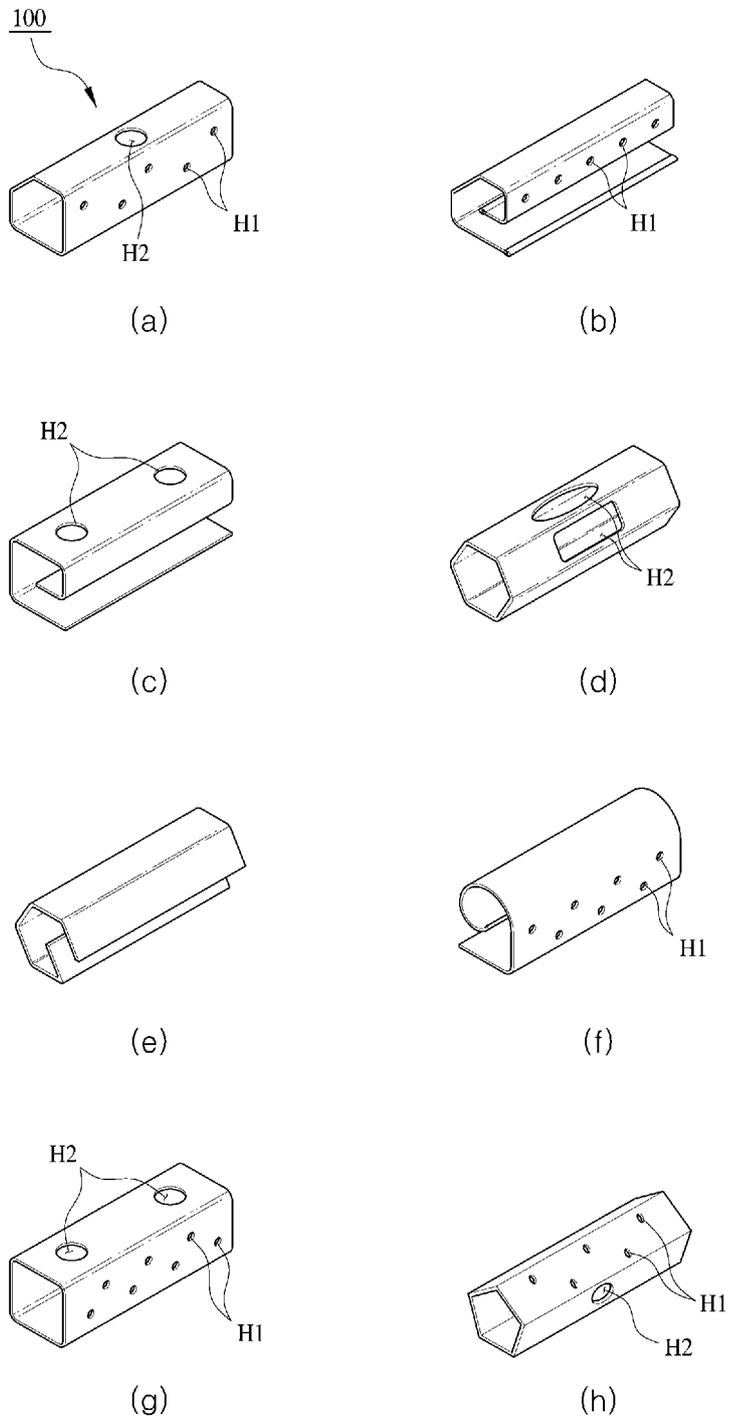


FIG 2

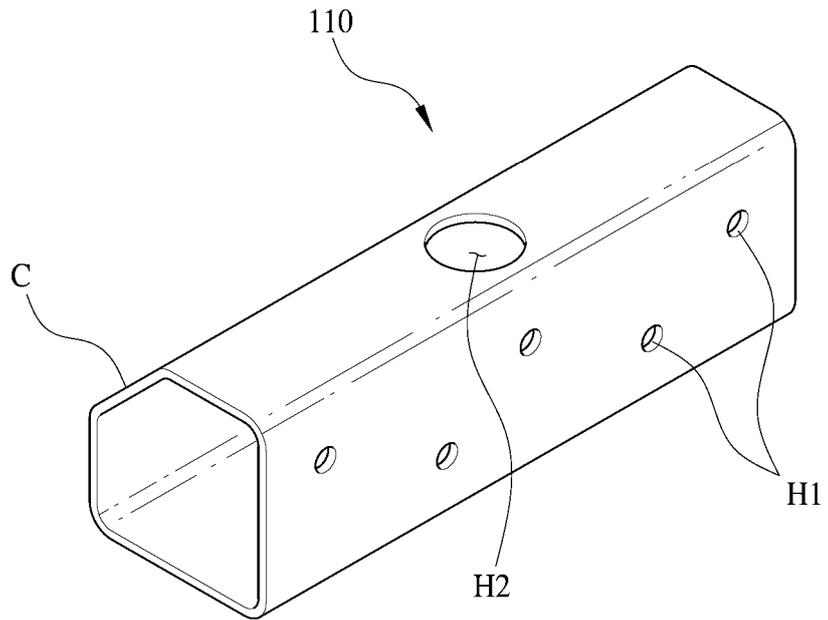


FIG 3a

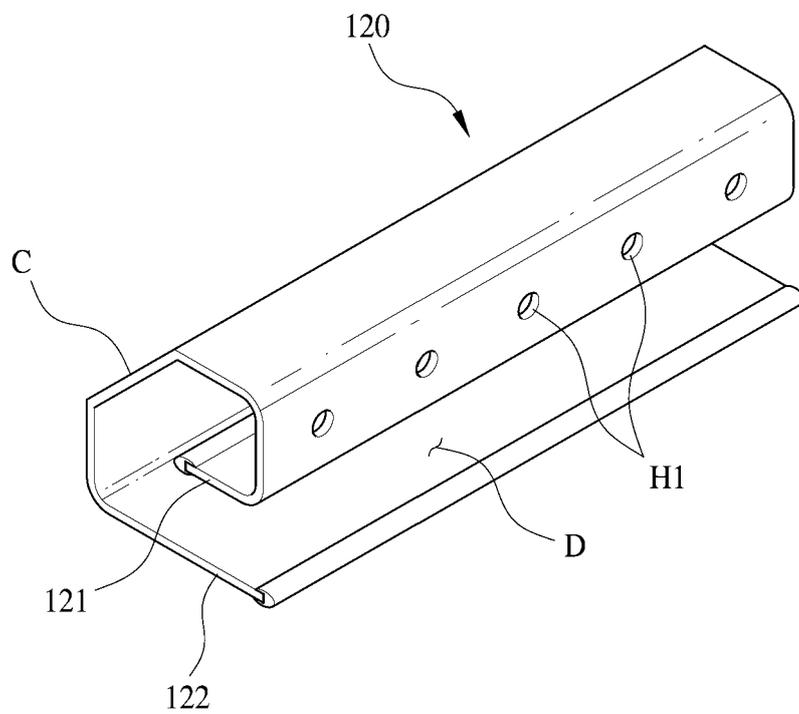


FIG 3b

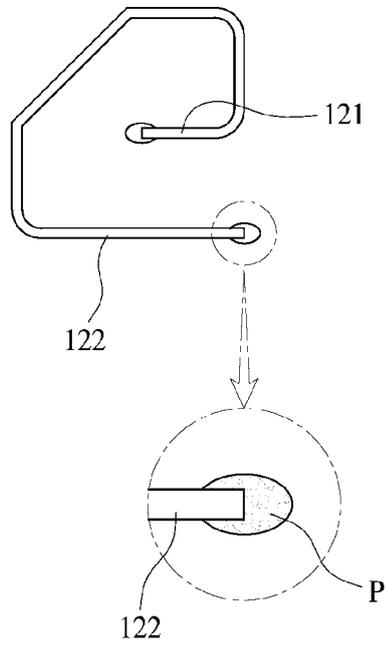


FIG 4

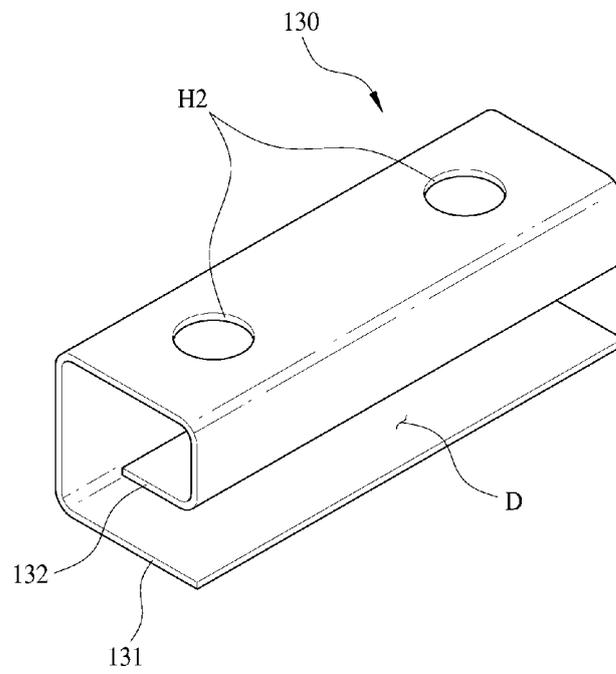


FIG 5

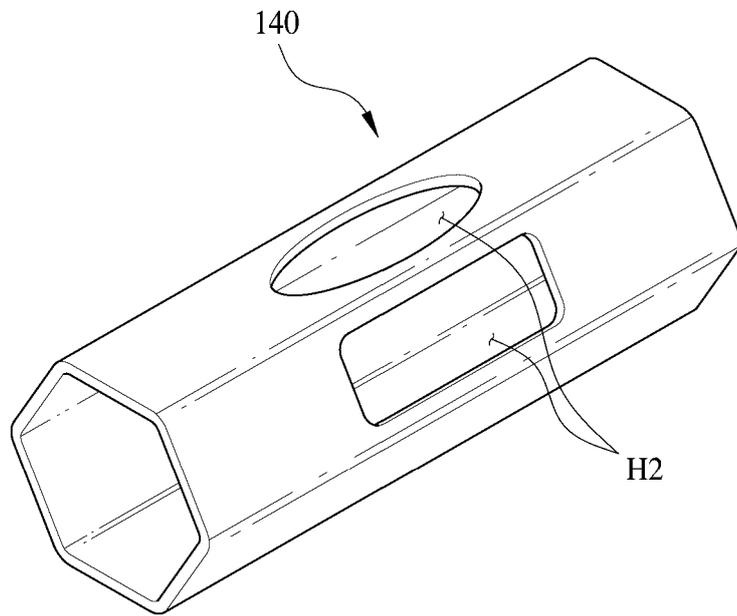


FIG 6

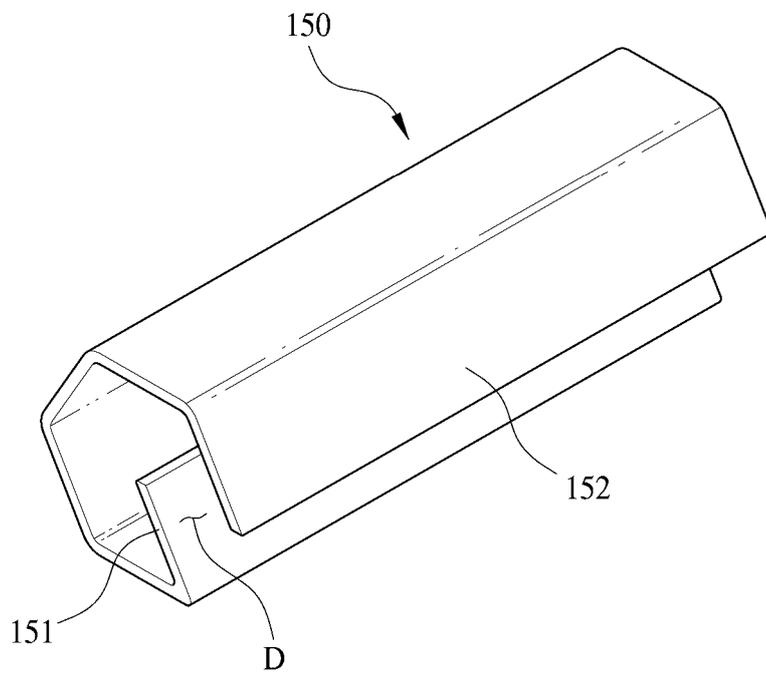


FIG 7

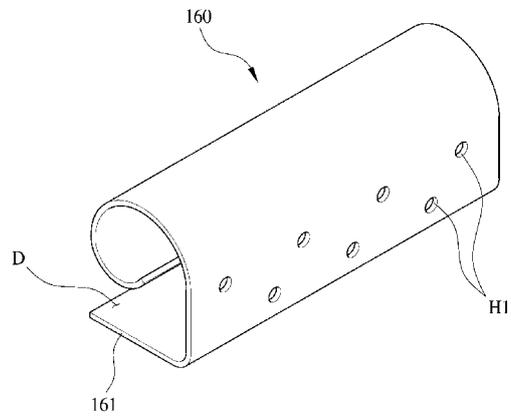


FIG 8

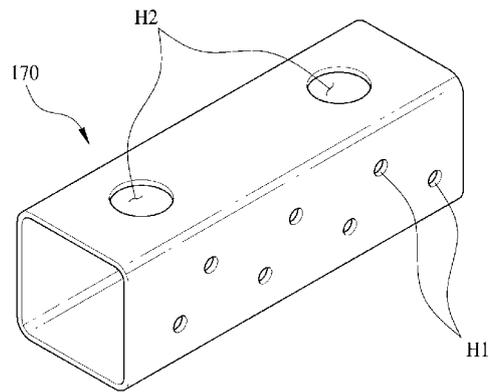


FIG 9

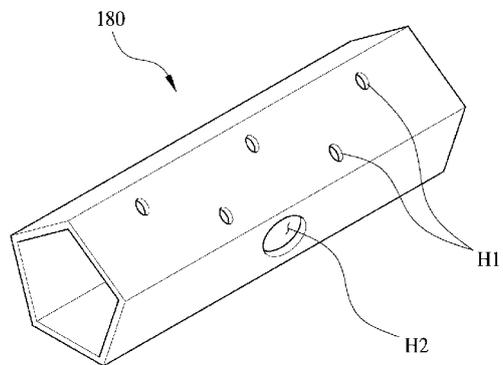


FIG 10

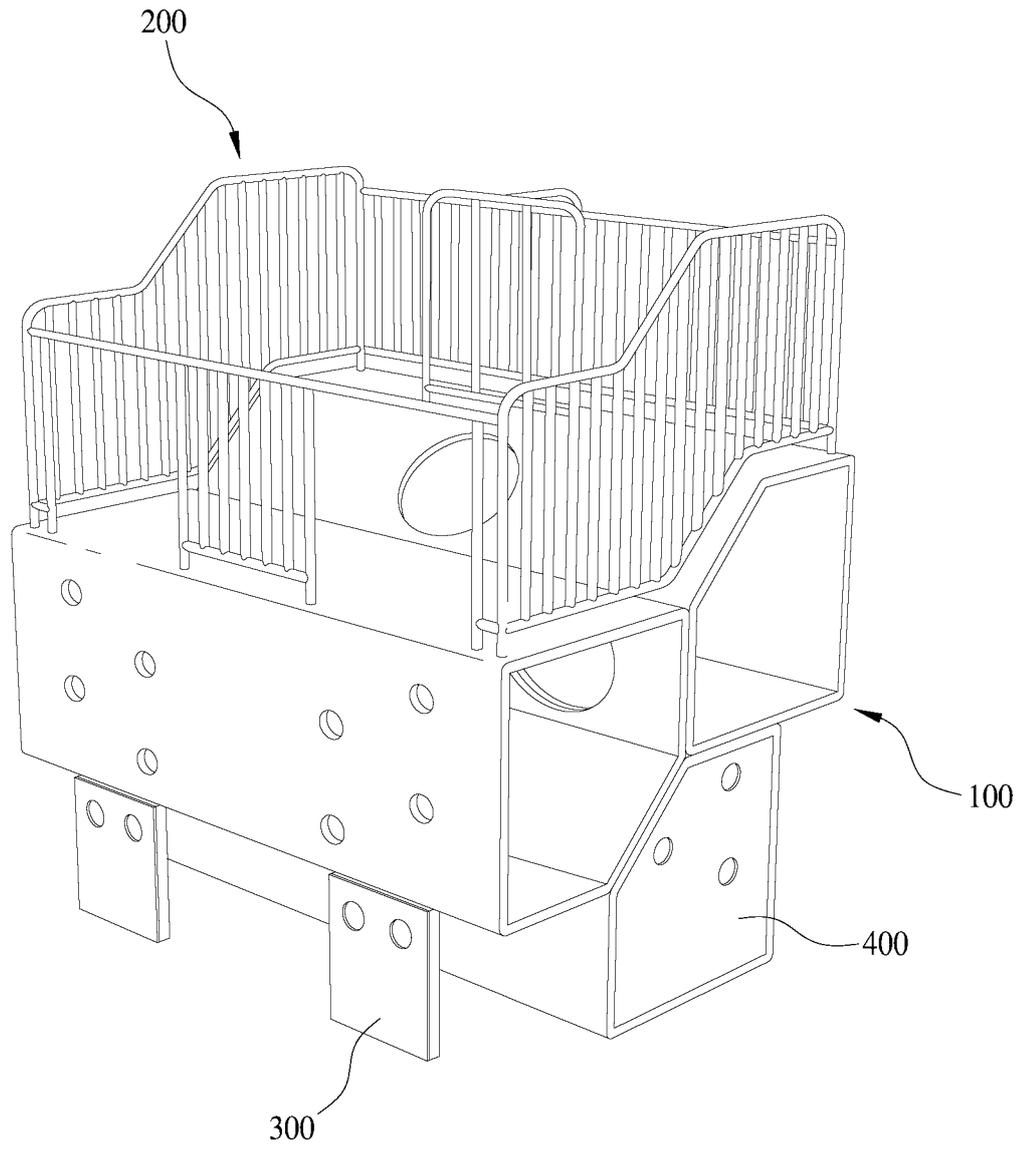


FIG 11

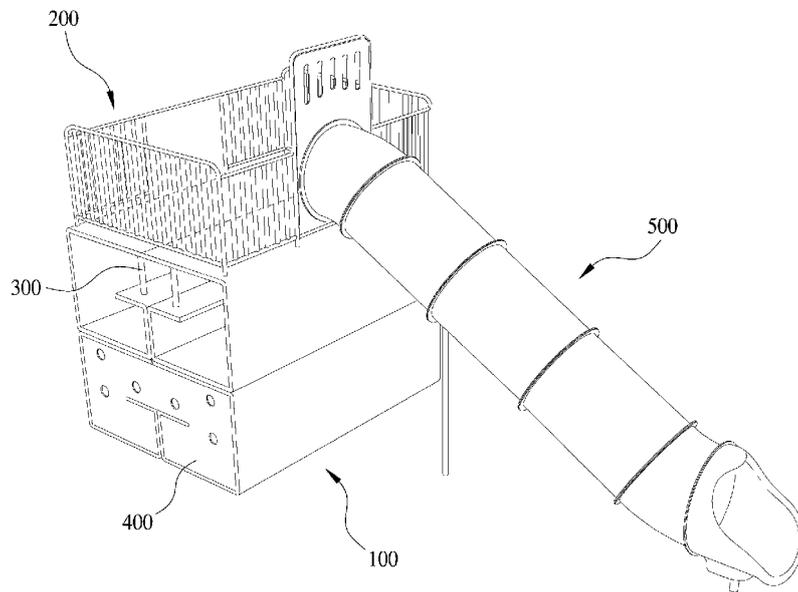


FIG 12

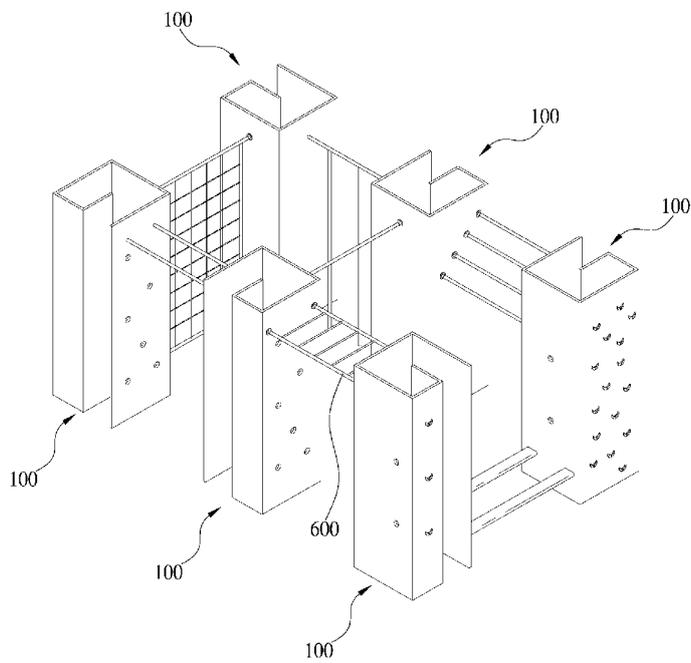


FIG 13a

100

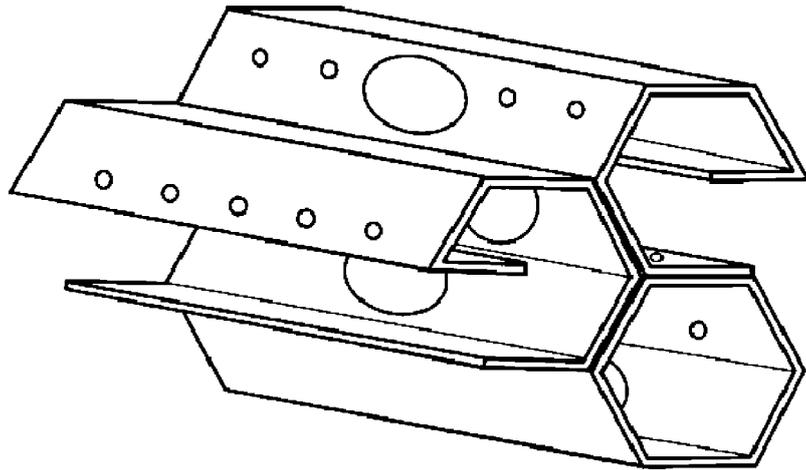


FIG 13b

100

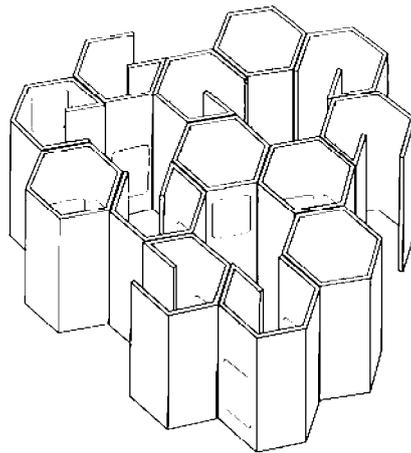


FIG 13c

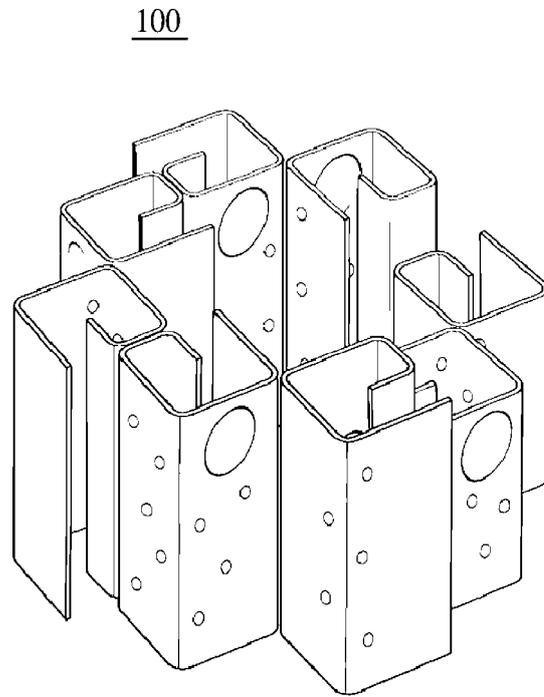


FIG 13d

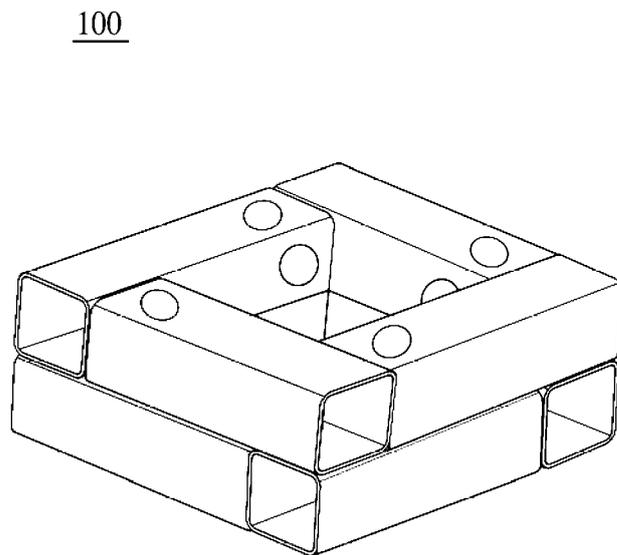


FIG 13e

100

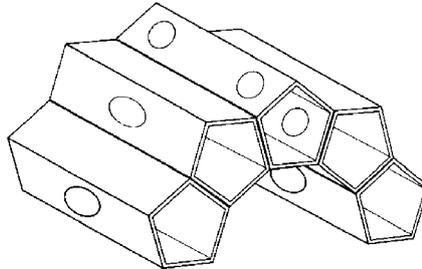


FIG 13f

100

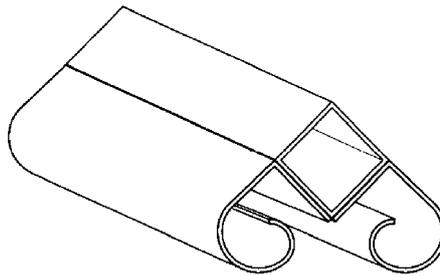


FIG 13g

100

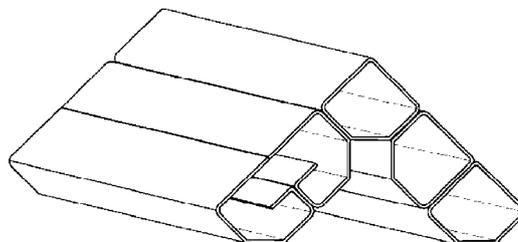
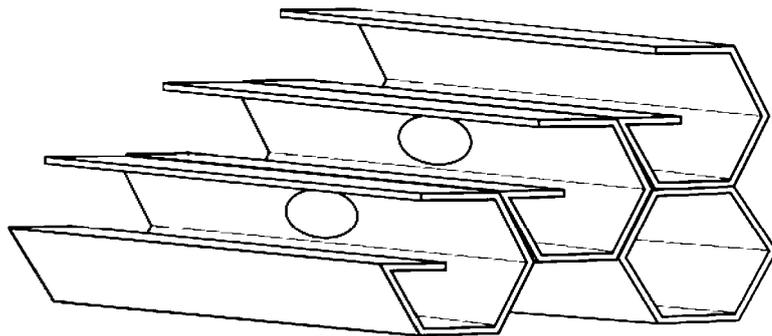


FIG 13h

100



INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR2021/006569

**A. CLASSIFICATION OF SUBJECT MATTER**  
**A63B 9/00**(2006.01)i; **A63B 17/04**(2006.01)i; **A63H 33/06**(2006.01)i; **A63H 33/10**(2006.01)i; **A63H 33/12**(2006.01)i;  
**A63J 11/00**(2006.01)i; **A63F 9/00**(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)  
**A63B 9/00**(2006.01); **A01K 1/03**(2006.01); **A01K 15/02**(2006.01); **A63G 21/00**(2006.01); **A63H 33/04**(2006.01);  
**A63H 33/10**(2006.01)  
 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
 Korean utility models and applications for utility models: IPC as above  
 Japanese utility models and applications for utility models: IPC as above  
 Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
 eKOMPASS (KIPO internal) & keywords: 블록 (block), 배열 (array), 놀이 (play), 라운드 (round), 다각형 (polygon)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	KR 10-1887310 B1 (HUR, Jun) 09 August 2018 (2018-08-09) See paragraphs [0021]-[0057] and figures 4-7.	1-5,9
Y		6-8,10,11
Y	KR 10-2020-0139334 A (LEE, Nam Joo) 14 December 2020 (2020-12-14) See paragraphs [0011]-[0022].	6-8,10
Y	KR 10-1654560 B1 (OH, Seung Young) 06 September 2016 (2016-09-06) See paragraphs [0036]-[0040].	11
A	US 2018-0161690 A1 (ZEN, Janete) 14 June 2018 (2018-06-14) See paragraphs [0029]-[0030].	1-11
A	KR 10-2018-0055267 A (NAM, Yeiji) 25 May 2018 (2018-05-25) See claims 1-10.	1-11

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  
 "D" document cited by the applicant in the international application  
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 "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  
 "O" document referring to an oral disclosure, use, exhibition or other means  
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