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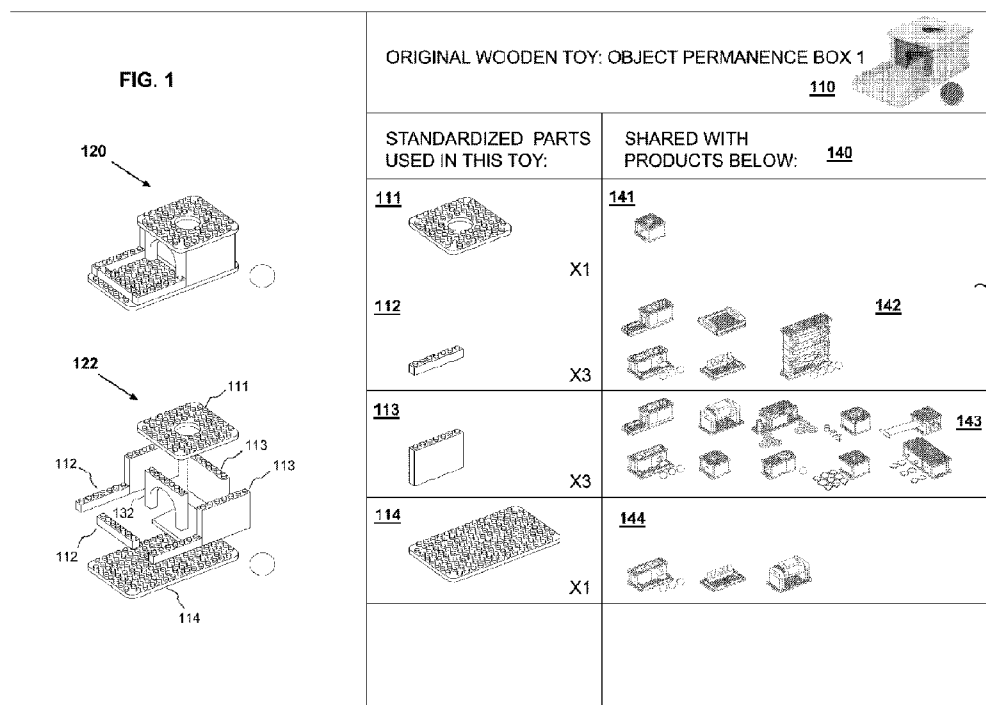
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(57) Abstract: Toys that comply with at least American Society for Testing and Materials educational and safety standards are standardized so that the standardized parts fit existing Duplo™ and Lego™ pieces and can be used interchangeably with other toys.

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MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,
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INTERACTIVE TOYS HAVING STANDARDIZED PIECES AND COMPLYING WITH EDUCATIONAL METHODS, SAFETY REQUIREMENTS AND CHILDREN'S TOY BLOCKS

FIELD

[0001] Embodiments of the present disclosure generally relate to toys, and more specifically to children's interactive, educational toys that comply with educational methods, such as the Montessori method, and various safety test requirements as provided by various agencies such as United States Consumer Product Safety Commission ("CPSC"), American Society for Testing and Materials ("ASTM"), etc. The toys of the present disclosure include pieces that have standardized sizes and fit with Lego™ and Duplo™ style blocks.

BACKGROUND

[0002] School toys, and Montessori toys in particular, are designed to help children develop respect for others and the environment, self-esteem and self-confidence, self-discipline, coordination, independence, social skills, emotional growth, and cognitive preparation. To this end, school toys, including Montessori toys, are designed to be interactive, educational, and comply with the characteristics listed above. These toys are designed in a manner that allows the children to actively use their imagination and learn while playing with the toys.

[0003] For children aged 0-3, the toys not only need to comply with the characteristics listed above but also need to be safe for children to use. U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544, which are incorporated by reference herein, disclosed toys that have all the features described above and were uniquely designed after multiple experimentations (including weight, size, and shape of both the finished toys as well as the individual components) in order to comply with both the Montessori educational method and also comply with the safety requirements as provided by various agencies such as CPSC, ASTM, etc. These toys are made of wood. And, each toy fills the place of one material in the traditional Montessori curriculum. As a result, many individual toys are required for the entire curriculum, and they primarily have a very focused and specific educational purpose.

[0004] Accordingly, it is advantageous to have educational toys that provide an interactive, educational environment, complying with the safety requirements as provided by various agencies,

and also include common, standardized pieces that can be shared in other toys, including with Lego™ and Duplo™ style blocks.

SUMMARY

[0005] Provided herein are embodiments of interactive, educational toys that comply with educational methods, including the Montessori method, and also comply with the safety requirements as provided by various agencies such as CPSC, ASTM, other foreign agencies, etc. The toys of the present disclosure further include interchangeable components and combine designs that are typically used alone together with other designs to form materials that support development of multiple skills simultaneously.

[0006] As used herein, components, parts and pieces may be used interchangeably.

[0007] In some embodiments, the present disclosure may include toys disclosed in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544, which are incorporated by reference herein. These toys may be converted to fit the existing Duplo™ and Lego™ piece sizes. For example, various parts of the toys may be converted to include Lego-style studs and inner tubes or knobs/connector pieces. Conversion to fit other toys are also contemplated.

[0008] In some embodiments, the toy components may be standardized so that a user may create one toy with pieces from other toys. For example, walls of the Object Permanence Box 1 toy may be shared with walls of the Coin Box toy, and vice versa. In other words, these wall pieces are standardized. Another advantage for this standardization of components may be, for example, when the user already owns Object Permanence Box 1 toy, she only needs to purchase remaining pieces to complete Coin Box toy. The user may not need to purchase all components of each toy of the entire educational curriculum to make all products.

[0009] In some embodiments, component sizes within one toy may be standardized to reduce manufacturing cost (e.g., fewer unique pieces per toy). For example, using two wall sizes in one toy verses using one wall size in that one toy will be cheaper due to manufacturing economies of scale.

[00010] In some embodiments, the user may create more than what is included in an educational curriculum, e.g., the Montessori curriculum. For example, she may make unique toys with Montessori elements.

[00011] In some embodiments, the toys may be stored and shipped flat, although assembled into 3D toys.

[00012] In some embodiments, the present disclosure may include a toy complied with at least American Society for Testing and Materials educational and safety standards, comprising: a plurality of parts; at least one part of the plurality of parts resized into a first size; at least one surface of the at least one resized part comprises a plurality of studs; and wherein the at least one resized part with the plurality of studs is sized to receive and fit into one or more existing Lego™ or Duplo™ pieces.

[00013] In some embodiments, the present disclosure may include a process of standardizing a toy complied with at least American Society for Testing and Materials educational and safety standards, the toy comprising a plurality of parts, the process comprising: resizing at least one part of the plurality of parts into a first size; adding a plurality of studs to at least one surface of the at least one resized part; and wherein the at least one resized part with the plurality of studs is sized to receive and fit into one or more existing Lego™ or Duplo™ pieces.

[00014] This summary and the following detailed description are merely exemplary, illustrative, and explanatory, and are not intended to limit, but to provide further explanation of the invention as claimed. Additional features and advantages of the invention will be set forth in the descriptions that follow, and in part will be apparent from the description, or may be learned by practice of the invention. The objectives and other advantages of the invention will be realized and attained by the structure particularly pointed out in the written description, claims and the appended drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[00015] The present invention may be better understood by referring to the following figures. The components in the figures are not necessarily to scale. Emphasis instead being placed upon illustrating the principles of the disclosure. In the figures, reference numerals designate corresponding parts throughout the different views.

[00016] FIG. 1 illustrates the toy Object Permanence Box 1 having components that may be standardized so that the standardized parts may fit existing Duplo™ and Lego™ pieces, and may be used interchangeably with other toys of the present disclosure and with other toys, according to some embodiments of the present disclosure.

[00017] FIG. 2 illustrates the toy Push Balls having components that may be standardized so that the standardized parts may fit existing Duplo™ and Lego™ pieces, and may be used interchangeably with other toys of the present disclosure and with other toys, according to some embodiments of the present disclosure.

[00018] FIG. 3 illustrates the toy Peg Box having components that may be standardized so that the standardized parts may fit existing Duplo™ and Lego™ pieces, and may be used interchangeably with other toys of the present disclosure and with other toys, according to some embodiments of the present disclosure.

[00019] FIG. 4 illustrates the toy Spinning Drum having components that may be standardized so that the standardized parts may fit existing Duplo™ and Lego™ pieces, and may be used interchangeably with other toys of the present disclosure and with other toys, according to some embodiments of the present disclosure.

[00020] FIG. 5 illustrates the toy Tracker having components that may be standardized so that the standardized parts may fit existing Duplo™ and Lego™ pieces, and may be used interchangeably with other toys of the present disclosure and with other toys, according to some embodiments of the present disclosure.

[00021] FIG. 6 illustrates the toy Cylinder Drop having components that may be standardized so that the standardized parts may fit existing Duplo™ and Lego™ pieces, and may be used interchangeably with other toys of the present disclosure and with other toys, according to some embodiments of the present disclosure.

[00022] FIG. 7 illustrates the toy Ring Slide having components that may be standardized so that the standardized parts may fit existing Duplo™ and Lego™ pieces, and may be used interchangeably with other toys of the present disclosure and with other toys, according to some embodiments of the present disclosure.

[00023] FIG. 8 illustrates the toy Object Permanence Box 2 having components that may be standardized so that the standardized parts may fit existing Duplo™ and Lego™ pieces, and may be used interchangeably with other toys of the present disclosure and with other toys, according to some embodiments of the present disclosure.

[00024] FIG. 9 illustrates the toy Coin Box having components that may be standardized so that the standardized parts may fit existing Duplo™ and Lego™ pieces, and may be used interchangeably with other toys of the present disclosure and with other toys, according to some embodiments of the present disclosure.

[00025] FIG. 10 illustrates the toy Motor Planning Box having components that may be standardized so that the standardized parts may fit existing Duplo™ and Lego™ pieces, and may

be used interchangeably with other toys of the present disclosure and with other toys, according to some embodiments of the present disclosure.

[00026] FIG. 11 illustrates the toy Fabric Winder having components that may be standardized so that the standardized parts may fit existing Duplo™ and Lego™ pieces, and may be used interchangeably with other toys of the present disclosure and with other toys, according to some embodiments of the present disclosure.

[00027] FIG. 12 illustrates the toy Mailbox having components that may be standardized so that the standardized parts may fit existing Duplo™ and Lego™ pieces, and may be used interchangeably with other toys of the present disclosure and with other toys, according to some embodiments of the present disclosure.

[00028] FIG. 13 illustrates the toy Box with Bins having components that may be standardized so that the standardized parts may fit existing Duplo™ and Lego™ pieces, and may be used interchangeably with other toys of the present disclosure and with other toys, according to some embodiments of the present disclosure.

[00029] FIG. 14 illustrates the toy Tray having components that may be standardized so that the standardized parts may fit existing Duplo™ and Lego™ pieces, and may be used interchangeably with other toys of the present disclosure and with other toys, according to some embodiments of the present disclosure.

[00030] FIG. 15 illustrates the toy Gluing Set having components that may be standardized so that the standardized parts may fit existing Duplo™ and Lego™ pieces, and may be used interchangeably with other toys of the present disclosure and with other toys, according to some embodiments of the present disclosure.

[00031] FIG. 16 illustrates the toy Peg Board having components that may be standardized so that the standardized parts may fit existing Duplo™ and Lego™ pieces, and may be used interchangeably with other toys of the present disclosure and with other toys, according to some embodiments of the present disclosure.

[00032] FIG. 17 illustrates the toy Rocking Stacker having components that may be standardized so that the standardized parts may fit existing Duplo™ and Lego™ pieces, and may be used interchangeably with other toys of the present disclosure and with other toys, according to some embodiments of the present disclosure.

[00033] FIG. 17A illustrates a toy's increasing complexity as a child grows, according to some embodiments of the present disclosure.

[00034] FIG. 18 illustrates the toy Stable Stacker having components that may be standardized so that the standardized parts may fit existing Duplo™ and Lego™ pieces, and may be used interchangeably with other toys of the present disclosure and with other toys, according to some embodiments of the present disclosure.

[00035] FIG. 19 illustrates the toy Shapes on Pegs having components that may be standardized so that the standardized parts may fit existing Duplo™ and Lego™ pieces, and may be used interchangeably with other toys of the present disclosure and with other toys, according to some embodiments of the present disclosure.

[00036] FIG. 20 illustrates the toy Bolt Board having components that may be standardized so that the standardized parts may fit existing Duplo™ and Lego™ pieces, and may be used interchangeably with other toys of the present disclosure and with other toys, according to some embodiments of the present disclosure.

[00037] FIG. 21 illustrates the toy Curved Dowel having components that may be standardized so that the standardized parts may fit existing Duplo™ and Lego™ pieces, and may be used interchangeably with other toys of the present disclosure and with other toys, according to some embodiments of the present disclosure.

DETAILED DESCRIPTION

[00038] The following disclosure describes various embodiments of the present invention and method of use in at least one of its preferred, best mode embodiments, which is further defined in detail in the following description. Those having ordinary skill in the art may be able to make alterations and modifications to what is described herein without departing from its spirit and scope. While this invention is susceptible to different embodiments in different forms, there is shown in the drawings and will herein be described in detail a preferred embodiment of the invention with the understanding that the present disclosure is to be considered as an exemplification of the principles of the invention and is not intended to limit the broad aspect of the invention to the embodiment illustrated. All features, elements, components, functions, and steps described with respect to any embodiment provided herein are intended to be freely combinable and substitutable with those from any other embodiment unless otherwise stated.

Therefore, it should be understood that what is illustrated is set forth only for the purposes of example and should not be taken as a limitation on the scope of the present invention.

[00039] In the following description and in the figures, like elements are identified with like reference numerals. The use of “e.g.,” “etc.,” and “or” indicates non-exclusive alternatives without limitation, unless otherwise noted. The use of “including” or “includes” means “including, but not limited to,” or “includes, but not limited to,” unless otherwise noted.

[00040] As used herein, the term “and/or” placed between a first entity and a second entity means one of (1) the first entity, (2) the second entity, and (3) the first entity and the second entity. Multiple entities listed with “and/or” should be construed in the same manner, i.e., “one or more” of the entities so conjoined. Other entities may optionally be present other than the entities specifically identified by the “and/or” clause, whether related or unrelated to those entities specifically identified. Thus, as a non-limiting example, a reference to “A and/or B,” when used in conjunction with open-ended language such as “comprising” can refer, in one embodiment, to A only (optionally including entities other than B); in another embodiment, to B only (optionally including entities other than A); in yet another embodiment, to both A and B (optionally including other entities). These entities may refer to elements, actions, structures, steps, operations, values, and the like.

[00041] As described below, various dimensions have been specified in exemplary embodiments. This disclosure is not limited to such dimensions and any dimensions that may still ensure educational and safety compliance as described herein may be used for the various components of the various toys described herein. Further, various components are not limited to the shapes, sizes, colors, and/or materials as described herein. Any shapes, sizes, colors, and/or materials that may still ensure educational and safety compliance as described herein may be used for the various components of the various toys described herein. The weights of the toys described herein may be according to the user’s needs while complying with the safety and educational testing requirements described herein. Finally, various surfaces, sides, and features of various components of the toys described herein are per how a person skilled in the art would construe those characteristics unless otherwise specified.

[00042] The designs disclosed herein require in-depth knowledge of 0-3-year-old safety testing requirements (in multiple countries) and expert understanding of both educational curriculums, including the Montessori curriculum, and concepts of 0-3-year-old toy design to create. For

example, weight, size, and shape of both the finished toys as well as the individual components are uniquely and advantageously designed. Furthermore, the designs may maximize the number of shared/common pieces in an extraordinarily creative process.

[00043] In some embodiments, the toys of the present disclosure may be made to fit the specific age range of 0-3-year-olds and designed to accommodate their hand sizes, with low weights to accommodate their muscular abilities, etc. These concepts are a very important part of educational curriculums. In some embodiments, design dimensions may be slightly modified to have the least number of custom pieces as possible.

[00044] In some embodiments, the present disclosure may include a set of toys with interchangeable components, which may achieve at least the goals of:

- Significantly increase the combinatoric learning possibilities for the child (to create materials that develop multiple skills by recombining the pieces in different ways, thus allowing a much more customized program: level of challenge can be exactly what the child needs at any time, and materials can be configured in ways that combine designs, that are typically used alone, together with other designs to form materials that support development of multiple skills simultaneously)
- Reduce cost (in any way possible)
- Reduce shipping size, and
- Increase useful life through more flexible applications and multiple purposes (e.g., can use the pieces for other completely different uses later).

[00045] The toys of the present disclosure may:

- allow for pieces to be shared among materials, facilitating much lower cost
- allow for infinite extensions/customizations of the toys to enhance learning opportunities that cannot be achieved with toys of fixed designs (e.g., user can combine teaching characteristics of two toys into one, e.g., combining the shape sorting skill of the Mail Box (or Mailbox) toy with the Object Permanence cognitive lessons of the Object Permanence Box 2 toy)
- allow for users to create their own custom extensions, using existing Duplo/Lego blocks
- allow for much longer useful life as users can use components for other Duplo/Lego constructions long after they are done with their infant or toddler program
- provide much lower cost safety testing and manufacturing requirements due to different materials and designs
- allow users to, from an educational perspective, put together completely customized toys, challenges, and learning opportunities
- provide moveable components/pieces that bring developmental value and creativity
- allow actual future play value in the parts themselves – with lots of possibility

- decrease cost (e.g., ship flat, standardizing wall, fence, etc. will make it more affordable)
- prolong useful life
- allow infinite educational configurations.

[00046] In some embodiments, glue (e.g., glue from Monti Kids, Inc., L8 gluing set) may help glue the pieces together so they may not fall apart during play, or for toys using small parts. In some embodiments, the glue may be dissolved, e.g., in warm water, and the pieces (e.g., Lego™ pieces, standardized pieces) can be re-used for other toys.

[00047] In some embodiments, sizes may be consistent across toys.

[00048] In some embodiments, a standardized part may be slightly modified or enhanced from the original toy. For example, for the Box with Bins toy, the drawers may stay open once opened, and open on a pivot which enhances development of wrist movement, color may be introduced via facades to lower manufacturing cost. In some embodiments, standardized parts retain high fidelity from original toys. For example, little ramps that make sure balls roll in the right direction and speed may be present in both the original version and the present disclosure.

[00049] FIGS. 1 to 21 illustrate various toys having components that may be standardized so that the standardized parts may fit existing Duplo™ and Lego™ pieces, and may be used interchangeably with other toys of the present disclosure and with other toys disclosed in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544, both mentioned and not mentioned in this disclosure.

[00050] In some embodiments, the present disclosure may convert toys' building elements (e.g., walls, lids, etc.) to fit existing Duplo™ sizes, standardize the sizes of each component to create one toy with pieces from other toys (e.g., FIG. 1 shows Object Permanence Box 1 walls are shared with Coin Box walls), or standardize component sizes within one toy to reduce manufacturing cost (fewer unique pieces per toy). Using one wall size in one toy verses using two wall sizes in that one toy may be cheaper due to manufacturing economies of scale (e.g., FIG. 2).

[00051] For each FIGS. 1 to 21, according to some embodiments, a wooden toy of the present disclosure may have one or more parts being standardized. The original toy is shown at the top and the standardized parts are shown in the second column labeled STANDARDIZED PARTS USED IN TOY.

[00052] Referring now to FIG. 1, for example, the illustrated wooden toy 110 (OBJECT PERMANENCE BOX 1), in some embodiments, may have standardized parts as shown in the

second column 130 (labeled STANDARDIZED PARTS USED IN TOY). The OBJECT PERMANENCE BOX 1 toy 110 is described in more detail in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. For toy 110, the standardized parts may include parts 111, 112, 113, and 114 (see further descriptions below). The standardized parts are parts originally from the OBJECT PERMANENCE BOX 1 toy in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, these parts may be resized to standard sizes, Lego-style studs and inner tubes or knobs/connector pieces may be added to one or more surface of the parts to fit into or receive Lego™ or Duplo™ pieces.

[00053] For each FIGS. 1 to 21, according to some embodiments, a perspective view of the toy assembled with the standardized parts and a perspective exploded view of the toy with standardized parts are shown in the first column.

[00054] For example, in FIG. 1, an exemplary perspective view of the toy 110 assembled with the standardized parts 111-114 is shown in 120. An exemplary perspective exploded view of the toy 110 with standardized components 111-114 is shown in 122.

[00055] For each FIGS. 1 to 21, according to some embodiments, a third column, labeled SHARED WITH PRODUCTS BELOW, shows one or more toys that each of the standardized parts may be shared with.

[00056] For example, in FIG. 1, in some embodiments, standardized part 111 may be shared with the toys shown in 141, standardized part 112 may be shared with the toys shown in 142, standardized part 113 may be shared with the toys shown in 143, and standardized part 114 may be shared with the toys shown in 144.

[00057] The standardized parts used in this toy may include, for example:

- (1) **9x9 Square Lid with Hole** 111 – may be shared with, for example, Motor Planning Box (in 141)
- (3) **7-Connector Fence** 112 - may be shared with, for example, Cylinder Drop, Tray, Push Balls, Peg Box and Tracker (in 142)
- (3) **7-Connector Wall** 113 - may be shared with, for example, Cylinder Drop, Spinning Drum, Ring Slide, Mailbox, Fabric Winder, Push Balls, Motor Planning Box, Object Permanence Box 2, Coin Box and Box with Bins (in 143)
- (1) **9x16 Rectangle Base** 114 - may be shared with, for example, Push Balls, Peg Box and Spinning Drum (in 144).

[00058] The toys mentioned above in 141, 142, 143 and 144 are described in more detail throughout the present disclosure. It should be noted that the toys mentioned above in 141, 142, 143 and 144 are examples and are not meant to be limited.

[00059] In some embodiments, Lego-style studs and inner tubes or knobs/connector pieces may also be added to one or more part of the original toy which is not standardized. For example, part 132 may not be standardized but may have studs added.

[00060] Referring now to FIG. 2, the illustrated wooden toy is Push Balls 210. The wooden toy Push Balls 210 is described in more detail in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, the standardized parts used in this toy (or parts being standardized) may include, for example:

- (2) **7-Connector Fence 112** - may be shared with, for example, Cylinder Drop, Tray, Object Permanence Box 1, Peg Box and Tracker (in 241)
- (3) **7-Connector Wall 113** - may be shared with, for example, Cylinder Drop, Spinning Drum, Ring Slide, Mailbox, Fabric Winder, Object Permanence Box 1, Motor Planning Box, Object Permanence Box 2, Coin Box and Box with Bins (in 242)
- (1) **9x16 Rectangle Base 114** - may be shared with, for example, Object Permanence Box 1, Peg Box and Spinning Drum (in 243).

[00061] The toys mentioned above are described in more detail throughout the present disclosure. It should be noted that the toys mentioned above are examples and are not meant to be limited.

[00062] An exemplary perspective view of the toy 210 assembled with the standardized parts 220. An exemplary perspective exploded view of the toy 210 with standardized parts is shown in 222. The standardized parts are parts originally from the toy in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, these parts may be resized to standard sizes, and Lego-style studs and inner tubes or knobs/connector pieces may be added to one or more surface of the parts to fit into or receive Lego™ or Duplo™ pieces. In some embodiments, Lego-style studs and inner tubes or knobs/connector pieces may also be added to one or more part of the original toy which is not standardized. For example, part 232 may not be standardized but may have studs added.

[00063] Referring now to FIG. 3, the illustrated wooden toy is Peg Box 310. The wooden toy Peg Box 310 is described in more detail in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, the standardized parts used in this toy (or parts being standardized) may include, for example:

- (4) **7-Connector Fence 112** - may be shared with, for example, Cylinder Drop, Tray, Push Balls, Object Permanence Box 1 and Tracker (in 341)
- (1) **9x16 Rectangle Base 114** - may be shared with, for example, Push Balls, Object Permanence Box 1 and Spinning Drum (in 342).

[00064] The toys mentioned above are described in more detail throughout the present disclosure. It should be noted that the toys mentioned above are examples and are not meant to be limited.

[00065] An exemplary perspective view of the toy 310 assembled with the standardized parts 320. An exemplary perspective exploded view of the toy 310 with standardized parts is shown in 322. The standardized parts are parts originally from the toy in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, these parts may be resized to standard sizes, and Lego-style studs and inner tubes or knobs/connector pieces may be added to one or more surface of the parts to fit into or receive Lego™ or Duplo™ pieces.

[00066] Referring now to FIG. 4, the wooden toy is Spinning Drum 410. The wooden toy Spinning Drum 410 is described in more detail in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, the standardized parts used in this toy (or parts being standardized) may include, for example:

- (2) **Circle Base 412** - may be shared with, for example, Bolt Board, Shapes on Pegs, Stable Stacker, Curved Dowel and Rocking Stacker (in 441)
- (4) **7-Connector Wall 413** - may be shared with, for example, Cylinder Drop, Push Balls, Ring Slide, Mailbox, Fabric Winder, Object Permanence Box 1, Motor Planning Box, Object Permanence Box 2, Coin Box and Box with Bins (in 442)
- (1) **9x16 Rectangle Base 114** - may be shared with, for example, Push Balls, Object Permanence Box 1 and Peg Box (in 443).

[00067] The toys mentioned above are described in more detail throughout the present disclosure. It should be noted that the toys mentioned above are examples and are not meant to be limited.

[00068] An exemplary perspective view of the toy 410 assembled with the standardized parts 420. An exemplary perspective exploded view of the toy 410 with standardized parts is shown in 422. The standardized parts are parts originally from the toy in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, these parts may be resized to standard sizes, and Lego-style studs and inner tubes or knobs/connector pieces may be added to one or more surface of the parts to fit into or receive Lego™ or Duplo™ pieces.

[00069] In some embodiments, Lego-style studs and inner tubes or knobs/connector pieces may also be added to one or more part of the original toy which is not standardized. For example, part 432 may not be standardized but may have studs added.

[00070] Referring now to FIG. 5, the illustrated wooden toy is Tracker 510. The wooden toy Tracker 510 is described in more detail in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, the standardized parts used in this toy (or parts being standardized) may include, for example:

- (10) **2x4 Classic Duplo Block** 512 - may be shared with, for example, classic Duplo blocks
- (4) **7-Connector Fence** 112 - may be shared with, for example, Peg Box, Tray, Push Balls, Object Permanence Box 1 and Cylinder Drop (in 542)
- (1) **6x21 Narrow Rectangle Base** 514 - may be shared with, for example, Cylinder Drop and Ring Slide (in 543).

[00071] The toys mentioned above are described in more detail throughout the present disclosure. It should be noted that the toys mentioned above are examples and are not meant to be limited.

[00072] An exemplary perspective view of the toy 510 assembled with the standardized parts 520. An exemplary perspective exploded view of the toy 510 with standardized parts is shown in 522. The standardized parts are parts originally from the toy in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, these parts may be resized to standard sizes, and Lego-style studs and inner tubes or knobs/connector pieces may be added to one or more surface of the parts to fit into or receive Lego™ or Duplo™ pieces.

[00073] In some embodiments, Lego-style studs and inner tubes or knobs/connector pieces may also be added to one or more part of the original toy which is not standardized.

[00074] Referring now to FIG. 6, the illustrated wooden toy is Cylinder Drop 610. The wooden toy Cylinder Drop 610 is described in more detail in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, the standardized parts used in this toy (or parts being standardized) may include, for example:

- (3) **4-Connector Wall** 612 - may be shared with, for example, Object Permanence Box 2 (in 641)
- (2) **7-Connector Wall** 413 - may be shared with, for example, Spinning Drum, Push Balls, Ring Slide, Mailbox, Fabric Winder, Object Permanence Box 1, Motor Planning Box, Object Permanence Box 2, Coin Box and Box with Bins (in 642)
- (4) **4-Connector Fence** 613- may be shared with, for example, Ring Slide (in 643)

- (4) **7-Connector Fence 112** - may be shared with, for example, Peg Box, Tray, Push Balls, Object Permanence Box 1 and Tracker (in 644)
- (1) **6x21 Narrow Rectangle Base 614** - may be shared with, for example, Ring Slide and Tracker (in 645).

[00075] The toys mentioned above are described in more detail throughout the present disclosure. It should be noted that the toys mentioned above are examples and are not meant to be limited.

[00076] An exemplary perspective view of the toy 610 assembled with the standardized parts 620. An exemplary perspective exploded view of the toy 610 with standardized parts is shown in 622. The standardized parts are parts originally from the toy in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, these parts may be resized to standard sizes, and Lego-style studs and inner tubes or knobs/connector pieces may be added to one or more surface of the parts to fit into or receive Lego™ or Duplo™ pieces.

[00077] In some embodiments, Lego-style studs and inner tubes or knobs/connector pieces may also be added to one or more part of the original toy which is not standardized.

[00078] Referring now to FIG. 7, the illustrated wooden toy is Ring Slide 710. The wooden toy Ring Slide 710 is described in more detail in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, the standardized parts used in this toy (or parts being standardized) may include, for example:

- (2) **6x13 Rectangle Base 712** - may be shared with, for example, Object Permanence Box 2 (in 741)
- (4) **Small Cylinder 713** - may be shared with, for example, Rocking Stacker (in 742)
- (4) **7-Connector Wall 413** - may be shared with, for example, Spinning Drum, Push Balls, Cylinder Drop, Mailbox, Fabric Winder, Object Permanence Box 1, Motor Planning Box, Object Permanence Box 2, Coin Box and Box with Bins (in 743)
- (4) **4-Connector Fence 613** - may be shared with, for example, Cylinder Drop (in 744)
- (1) **6x21 Narrow Rectangle Base 714** - may be shared with, for example, Cylinder Drop and Tracker (in 745).

[00079] The toys mentioned above are described in more detail throughout the present disclosure. It should be noted that the toys mentioned above are examples and are not meant to be limited.

[00080] An exemplary perspective view of the toy 710 assembled with the standardized parts 720. An exemplary perspective exploded view of the toy 710 with standardized parts is shown in 722. The standardized parts are parts originally from the toy in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, these parts may be resized to

standard sizes, and Lego-style studs and inner tubes or knobs/connector pieces may be added to one or more surface of the parts to fit into or receive Lego™ or Duplo™ pieces.

[00081] In some embodiments, Lego-style studs and inner tubes or knobs/connector pieces may also be added to one or more part of the original toy which is not standardized.

[00082] Referring now to FIG. 8, the illustrated wooden toy is Object Permanence Box 2 810. The wooden toy Object Permanence Box 2 810 is described in more detail in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, the standardized parts used in this toy (or parts being standardized) may include, for example:

- (3) **4-Connector Wall** 612 - may be shared with, for example, Cylinder Drop (in 841)
- (2) **7-Connector Wall** 413 - may be shared with, for example, Spinning Drum, Push Balls, Cylinder Drop, Mailbox, Fabric Winder, Object Permanence Box 1, Motor Planning Box, Ring Slide, Coin Box, Box with Bins (in 842)
- (1) **6x13 Rectangle Base** 712 - may be shared with, for example, Ring Slide (in 843).

[00083] The toys mentioned above are described in more detail throughout the present disclosure. It should be noted that the toys mentioned above are examples and are not meant to be limited.

[00084] An exemplary perspective view of the toy 810 assembled with the standardized parts 820. An exemplary perspective exploded view of the toy 810 with standardized parts is shown in 822. The standardized parts are parts originally from the toy in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, these parts may be resized to standard sizes, and Lego-style studs and inner tubes or knobs/connector pieces may be added to one or more surface of the parts to fit into or receive Lego™ or Duplo™ pieces.

[00085] In some embodiments, Lego-style studs and inner tubes or knobs/connector pieces may also be added to one or more part of the original toy which is not standardized.

[00086] Referring now to FIG. 9, the illustrated wooden toy is Coin Box 910. The wooden toy Coin Box 910 is described in more detail in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, the standardized parts used in this toy (or parts being standardized) may include, for example:

- (4) **7-Connector Wall** 413 - may be shared with, for example, Spinning Drum, Push Balls, Cylinder Drop, Mailbox, Fabric Winder, Object Permanence Box 1, Motor Planning Box, Ring Slide, Object Permanence Box 2, Box with Bins (in 941)
- (1) **9x9 Square Base** 912 - may be shared with, for example, Motor Planning Box, Mailbox, Fabric Winder (in 942).

[00087] The toys mentioned above are described in more detail throughout the present disclosure. It should be noted that the toys mentioned above are examples and are not meant to be limited.

[00088] An exemplary perspective view of the toy 910 assembled with the standardized parts 920. An exemplary perspective exploded view of the toy 910 with standardized parts is shown in 922. The standardized parts are parts originally from the toy in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, these parts may be resized to standard sizes, and Lego-style studs and inner tubes or knobs/connector pieces may be added to one or more surface of the parts to fit into or receive Lego™ or Duplo™ pieces.

[00089] In some embodiments, Lego-style studs and inner tubes or knobs/connector pieces may also be added to one or more part of the original toy which is not standardized.

[00090] Referring now to FIG. 10, the illustrated wooden toy is Motor Planning Box 1010. The wooden toy Motor Planning Box 1010 is described in more detail in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, the standardized parts used in this toy (or parts being standardized) may include, for example:

- (1) **9x9 Square Lid with Hole** 111 - may be shared with, for example, Object Permanence Box 1 (in 1041)
- (3) **7-Connector Wall** 113 -may be shared with, for example, Spinning Drum, Push Balls, Cylinder Drop, Mailbox, Fabric Winder, Object Permanence Box 1, Coin Box, Ring Slide, Object Permanence Box 2, Box with Bins (in 1042)
- (1) **9x9 Square Base** 912 - may be shared with, for example, Coin Box, Mailbox, Fabric Winder (in 1043).

[00091] The toys mentioned above are described in more detail throughout the present disclosure. It should be noted that the toys mentioned above are examples and are not meant to be limited.

[00092] An exemplary perspective view of the toy 1010 assembled with the standardized parts 1020. An exemplary perspective exploded view of the toy 1010 with standardized parts is shown in 1022. The standardized parts are parts originally from the toy in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, these parts may be resized to standard sizes, and Lego-style studs and inner tubes or knobs/connector pieces may be added to one or more surface of the parts to fit into or receive Lego™ or Duplo™ pieces.

[00093] In some embodiments, Lego-style studs and inner tubes or knobs/connector pieces may also be added to one or more part of the original toy which is not standardized.

[00094] Referring now to FIG. 11, the illustrated wooden toy is Fabric Winder 1110. The wooden toy Fabric Winder 1110 is described in more detail in U.S. Application No. 16/543,493 and PCT

Application No. PCT/US2018/018544. In some embodiments, the standardized parts used in this toy (or parts being standardized) may include, for example:

- (1) **7-Connector Wall 113** - may be shared with, for example, Spinning Drum, Push Balls, Cylinder Drop, Motor Planning Box, Mailbox, Object Permanence Box 1, Coin Box, Ring Slide, Object Permanence Box 2, Box with Bins
- (2) **9x9 Square Base 912** - may be shared with, for example, Coin Box, Motor Planning Box, Mailbox (in 1142).

[00095] The toys mentioned above are described in more detail throughout the present disclosure. It should be noted that the toys mentioned above are examples and are not meant to be limited.

[00096] An exemplary perspective view of the toy 1110 assembled with the standardized parts 1120. An exemplary perspective exploded view of the toy 1110 with standardized parts is shown in 1122. The standardized parts are parts originally from the toy in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, these parts may be resized to standard sizes, and Lego-style studs and inner tubes or knobs/connector pieces may be added to one or more surface of the parts to fit into or receive Lego™ or Duplo™ pieces.

[00097] In some embodiments, Lego-style studs and inner tubes or knobs/connector pieces may also be added to one or more part of the original toy which is not standardized.

[00098] Referring now to FIG. 12, the illustrated wooden toy is Mailbox 1210. The wooden toy Mailbox 1210 is described in more detail in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, the standardized parts used in this toy (or parts being standardized) may include, for example:

- (3) **7-Connector Wall 113** - may be shared with, for example, Spinning Drum, Push Balls, Cylinder Drop, Motor Planning Box, Fabric Winder, Object Permanence Box 1, Coin Box, Ring Slide, Object Permanence Box 2, Box with Bins (in 1241)
- (1) **9x9 Square Base 912** - may be shared with, for example, Coin Box, Motor Planning Box, Fabric Winder (in 1242).

[00099] The toys mentioned above are described in more detail throughout the present disclosure. It should be noted that the toys mentioned above are examples and are not meant to be limited.

[000100] An exemplary perspective view of the toy 1210 assembled with the standardized parts 1220. An exemplary perspective exploded view of the toy 1210 with standardized parts is shown in 1222. The standardized parts are parts originally from the toy in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, these parts

may be resized to standard sizes, and Lego-style studs and inner tubes or knobs/connector pieces may be added to one or more surface of the parts to fit into or receive Lego™ or Duplo™ pieces.

[000101] In some embodiments, Lego-style studs and inner tubes or knobs/connector pieces may also be added to one or more part of the original toy which is not standardized.

[000102] Referring now to FIG. 13, the illustrated wooden toy is Box with Bins 1310. The wooden toy Box with Bins 1310 is described in more detail in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, the standardized parts used in this toy (or parts being standardized) may include, for example:

- (4) **7-Connector Wall** 113 - may be shared with, for example, Spinning Drum, Push Balls, Cylinder Drop, Motor Planning Box, Mailbox, Object Permanence Box 1, Coin Box, Ring Slide, Object Permanence Box 2 and Fabric Winder (in 1341).

[000103] The toys mentioned above are described in more detail throughout the present disclosure. It should be noted that the toys mentioned above are examples and are not meant to be limited.

[000104] An exemplary perspective view of the toy 1310 assembled with the standardized parts 1320. An exemplary perspective exploded view of the toy 1310 with standardized parts is shown in 1322. The standardized parts are parts originally from the toy in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, these parts may be resized to standard sizes, and Lego-style studs and inner tubes or knobs/connector pieces may be added to one or more surface of the parts to fit into or receive Lego™ or Duplo™ pieces.

[000105] In some embodiments, Lego-style studs and inner tubes or knobs/connector pieces may also be added to one or more part of the original toy which is not standardized.

[000106] Referring now to FIG. 14, the illustrated wooden toy is Tray 1410. The wooden toy Tray 1410 is described in more detail in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, the standardized parts used in this toy (or parts being standardized) may include, for example:

- (4) **7-Connector Fence** 112 - may be shared with, for example, Peg Box, Cylinder Drop, Push Balls, Object Permanence Box 1, Tracker (in 1441)
- (1) **14x14 Square Base** 1412 - may be shared with, for example, Gluing Set, Peg Board (in 1442).

[000107] The toys mentioned above are described in more detail throughout the present disclosure. It should be noted that the toys mentioned above are examples and are not meant to be limited.

[000108] An exemplary perspective view of the toy 1410 assembled with the standardized parts 1420. An exemplary perspective exploded view of the toy 1410 with standardized parts is shown in 1422. The standardized parts are parts originally from the toy in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, these parts may be resized to standard sizes, and Lego-style studs and inner tubes or knobs/connector pieces may be added to one or more surface of the parts to fit into or receive Lego™ or Duplo™ pieces.

[000109] In some embodiments, Lego-style studs and inner tubes or knobs/connector pieces may also be added to one or more part of the original toy which is not standardized.

[000110] Referring now to FIG. 15, the illustrated wooden toy is Gluing Set 1510. The wooden toy Gluing Set 1510 is described in more detail in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, the standardized parts used in this toy (or parts being standardized) may include, for example:

- (1) **14x14 Square Base** 1412 - may be shared with, for example, Tray and Peg Board (in 1541).

[000111] The toys mentioned above are described in more detail throughout the present disclosure. It should be noted that the toys mentioned above are examples and are not meant to be limited.

[000112] An exemplary perspective view of the toy 1510 assembled with the standardized parts 1520. An exemplary perspective exploded view of the toy 1510 with standardized parts is shown in 1522. The standardized parts are parts originally from the toy in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, these parts may be resized to standard sizes, and Lego-style studs and inner tubes or knobs/connector pieces may be added to one or more surface of the parts to fit into or receive Lego™ or Duplo™ pieces.

[000113] In some embodiments, Lego-style studs and inner tubes or knobs/connector pieces may also be added to one or more part of the original toy which is not standardized.

[000114] Referring now to FIG. 16, the illustrated wooden toy is Peg Board 1610. The wooden toy Peg Board 1610 is described in more detail in U.S. Application No. 16/543,493 and PCT

Application No. PCT/US2018/018544. In some embodiments, the standardized parts used in this toy (or parts being standardized) may include, for example:

- (1) **14x14 Square Base** 1412 - may be shared with, for example, Gluing Set and Tray (in 1641).

[000115] The toys mentioned above are described in more detail throughout the present disclosure. It should be noted that the toys mentioned above are examples and are not meant to be limited.

[000116] An exemplary perspective view of the toy 1610 assembled with the standardized parts 1620. An exemplary perspective exploded view of the toy 1610 with standardized parts is shown in 1622. The standardized parts are parts originally from the toy in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, these parts may be resized to standard sizes, and Lego-style studs and inner tubes or knobs/connector pieces may be added to one or more surface of the parts to fit into or receive Lego™ or Duplo™ pieces.

[000117] In some embodiments, Lego-style studs and inner tubes or knobs/connector pieces may also be added to one or more part of the original toy which is not standardized.

[000118] Referring now to FIG. 17, the illustrated wooden toy is Rocking Stacker 1710. The wooden toy Rocking Stacker 1710 is described in more detail in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, the standardized parts used in this toy (or parts being standardized) may include, for example:

- (1) **Circle Base** 412 - may be shared with, for example, Spinning Drum, Stable Stacker, Bolt Board, Curved Dowel, Shapes on Pegs (in 1741)
- (1) **Small Cylinder** 713 - may be shared with, for example, Ring Slide (in 1742).

[000119] The toys mentioned above are described in more detail throughout the present disclosure. It should be noted that the toys mentioned above are examples and are not meant to be limited.

[000120] An exemplary perspective view of the toy 1710 assembled with the standardized parts 1720. An exemplary perspective exploded view of the toy 1710 with standardized parts is shown in 1722. The standardized parts are parts originally from the toy in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, these parts may be resized to standard sizes, and Lego-style studs and inner tubes or knobs/connector pieces may be added to one or more surface of the parts to fit into or receive Lego™ or Duplo™ pieces.

[000121] In some embodiments, Lego-style studs and inner tubes or knobs/connector pieces may also be added to one or more part of the original toy which is not standardized.

[000122] In some embodiments, a toy's complexity may increase as the child grows. For example, the toy Rocking Stacker's complexity may increase by using the same base (**Circle Base** 412) with different tops, as shown in the example in FIG. 17A. Using the same base, the toy may progress from a Rocking Stacker, for example, to a Stable Stacker (FIG. 18), or a Curved Dowel (FIG. 21), or a Shapes on Pegs (FIG. 19), or a Bolt Board (FIG. 20), and so on.

[000123] Referring now to FIG. 18, the illustrated wooden toy is Stable Stacker 1810. The wooden toy Stable Stacker 1810 is described in more detail in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, the standardized parts used in this toy (or parts being standardized) may include, for example:

- (1) **Circle Base** 412 - may be shared with, for example, Spinning Drum, Rocking Stacker, Bolt Board, Curved Dowel, Shapes on Pegs (in 1841)
- (1) **Stacker Rod** 1812 - may be shared with, for example, Shapes on Pegs (in 1842).

[000124] The toys mentioned above are described in more detail throughout the present disclosure. It should be noted that the toys mentioned above are examples and are not meant to be limited.

[000125] An exemplary perspective view of the toy 1810 assembled with the standardized parts 1820. An exemplary perspective exploded view of the toy 1810 with standardized parts is shown in 1822. The standardized parts are parts originally from the toy in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, these parts may be resized to standard sizes, and Lego-style studs and inner tubes or knobs/connector pieces may be added to one or more surface of the parts to fit into or receive Lego™ or Duplo™ pieces.

[000126] In some embodiments, Lego-style studs and inner tubes or knobs/connector pieces may also be added to one or more part of the original toy which is not standardized.

[000127] Referring now to FIG. 19, the illustrated wooden toy is Shapes on Pegs 1910. The wooden toy Shapes on Pegs 1910 is described in more detail in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, the standardized parts used in this toy (or parts being standardized) may include, for example:

- (1) **Circle Base** 412 - may be shared with, for example, Spinning Drum, Rocking Stacker, Bolt Board, Curved Dowel, Stable Stacker (in 1941)
- (1) **Stacker Rod** 1812 - may be shared with, for example, Stable Stacker (in 1842).

[000128] The toys mentioned above are described in more detail throughout the present disclosure. It should be noted that the toys mentioned above are examples and are not meant to be limited.

[000129] An exemplary perspective view of the toy 1910 assembled with the standardized parts 1920. An exemplary perspective exploded view of the toy 1910 with standardized parts is shown in 1922. The standardized parts are parts originally from the toy in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, these parts may be resized to standard sizes, and Lego-style studs and inner tubes or knobs/connector pieces may be added to one or more surface of the parts to fit into or receive Lego™ or Duplo™ pieces.

[000130] In some embodiments, Lego-style studs and inner tubes or knobs/connector pieces may also be added to one or more part of the original toy which is not standardized.

[000131] Referring now to FIG. 20, the illustrated wooden toy is Bolt Board 2010. The wooden toy Bolt Board 2010 is described in more detail in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, the standardized parts used in this toy (or parts being standardized) may include, for example:

- (1) **Circle Base 412** - may be shared with, for example, Spinning Drum, Rocking Stacker, Shapes on Pegs, Curved Dowel, Stable Stacker (in 2041).

[000132] The toys mentioned above are described in more detail throughout the present disclosure. It should be noted that the toys mentioned above are examples and are not meant to be limited.

[000133] An exemplary perspective view of the toy 2010 assembled with the standardized parts 2020. An exemplary perspective exploded view of the toy 2010 with standardized parts is shown in 2022. The standardized parts are parts originally from the toy in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, these parts may be resized to standard sizes, and Lego-style studs and inner tubes or knobs/connector pieces may be added to one or more surface of the parts to fit into or receive Lego™ or Duplo™ pieces.

[000134] In some embodiments, Lego-style studs and inner tubes or knobs/connector pieces may also be added to one or more part of the original toy which is not standardized.

[000135] Referring now to FIG. 21, the illustrated wooden toy is Curved Dowel 2110. The wooden toy Curved Dowel 2110 is described in more detail in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, the standardized parts used in this toy (or parts being standardized) may include, for example:

- (1) **Circle Base 412** - may be shared with, for example, Spinning Drum, Rocking Stacker, Shapes on Pegs, Bolt Board, Stable Stacker (in 2141).

[000136] The toys mentioned above are described in more detail throughout the present disclosure. It should be noted that the toys mentioned above are examples and are not meant to be limited.

[000137] An exemplary perspective view of the toy 2110 assembled with the standardized parts 2120. An exemplary perspective exploded view of the toy 2110 with standardized parts is shown in 2122. The standardized parts are parts originally from the toy in U.S. Application No. 16/543,493 and PCT Application No. PCT/US2018/018544. In some embodiments, these parts may be resized to standard sizes, and Lego-style studs and inner tubes or knobs/connector pieces may be added to one or more surface of the parts to fit into or receive Lego™ or Duplo™ pieces.

[000138] In some embodiments, Lego-style studs and inner tubes or knobs/connector pieces may also be added to one or more part of the original toy which is not standardized.

[000139] As described above, various numbers and dimensions have been specified in exemplary embodiments. This disclosure is not limited to such numbers and dimensions, and any numbers and dimensions that may still ensure educational and safety compliance as described herein may be used for the various components of the various toys described herein. For example, a 7-Connector Wall part may not be limited to 7 connectors and may have less or more connectors when still ensure educational and safety compliance as described herein. Further, various components are not limited to the shapes, sizes, colors, and/or materials as described herein. Any shapes, sizes, colors, and/or materials that may still ensure educational and safety compliance as described herein may be used for the various components of the various toys described herein. The weights of the toys described herein may be according to the user's needs while complying with the safety and educational testing requirements described herein. Further, any attachment mechanism, such as glue, tight fit, zippers, buttons, snaps, nails, hooks, Lego-style raised circular connectors, etc., may be used to secure the components of each toy together or with other toys. Finally, various surfaces, sides, and features of various components of the toys described herein are per how a person skilled in the art would construe those characteristics unless otherwise specified.

CLAIMS

1. A toy complied with at least American Society for Testing and Materials educational and safety standards, comprising:
 - a plurality of parts;
 - at least one part of the plurality of parts resized into a first size;
 - at least one surface of the at least one resized part comprises a plurality of studs; and
 - wherein the at least one resized part with the plurality of studs is sized to receive and fit into one or more existing Lego™ or Duplo™ pieces.
2. The toy of claim 1 further complies to educational and safety standards for 0 to 3-year-old children.
3. The toy of claim 1, wherein the plurality of parts is configured with sizes for 0 to 3-year-old children.
4. The toy of claim 1, wherein the plurality of parts is configured with weights for 0 to 3-year-old children.
5. The toy of claim 1, wherein the at least one resized part with the plurality of studs is configured for use with other toys complied with at least American Society for Testing and Materials educational and safety standards.
6. The toy of claim 1, wherein the at least one resized part with the plurality of studs is configured for use with other toys complied with the Montessori methods.
7. The toy of claim 1, wherein the toy is at least one of an Object Permanence Box 1, an Object Permanence Box 2, a Push Balls, a Peg Box, a Spinning Drum, a Tracker, a Cylinder Drop, a Ring Slide, a Coin Box, a Motor Planning Box, a Fabric Winder, a Mailbox, a Box with Bins, a Tray, a Gluing Set, a Peg Board, a Rocking Stacker, a Stable Stacker, a Shapes on Pegs, a Bolt Board, and a Curved Dowel.

8. A process of standardizing a toy complied with at least American Society for Testing and Materials educational and safety standards, the toy comprising a plurality of parts, the process comprising:

resizing at least one part of the plurality of parts into a first size;
adding a plurality of studs to at least one surface of the at least one resized part; and
wherein the at least one resized part with the plurality of studs is sized to receive and fit into one or more existing Lego™ or Duplo™ pieces.

9. The process of claim 8, wherein, after the standardizing, the toy further complies to educational and safety standards for 0 to 3-year-old children.

10. The process of claim 8, wherein the plurality of parts is configured with sizes for 0 to 3-year-old children.

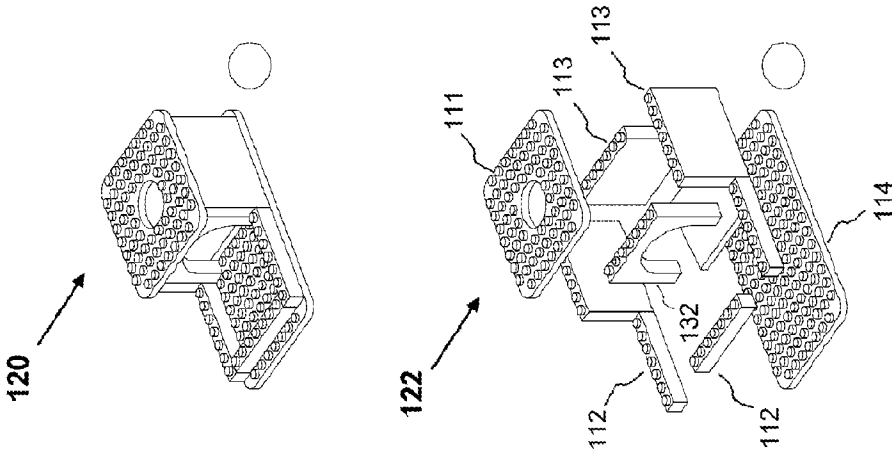
11. The process of claim 8, wherein the plurality of parts is configured with weights for 0 to 3-year-old children.

12. The process of claim 8, wherein the at least one resized part with the plurality of studs is configured for use with other toys complied with at least American Society for Testing and Materials educational and safety standards.

13. The process of claim 8, wherein the at least one resized part with the plurality of studs is configured for use with other toys complied with the Montessori methods.

14. The process of claim 8, wherein the toy is at least one of an Object Permanence Box 1, an Object Permanence Box 2, a Push Balls, a Peg Box, a Spinning Drum, a Tracker, a Cylinder Drop, a Ring Slide, a Coin Box, a Motor Planning Box, a Fabric Winder, a Mailbox, a Box with Bins, a Tray, a Gluing Set, a Peg Board, a Rocking Stacker, a Stable Stacker, a Shapes on Pegs, a Bolt Board, and a Curved Dowel.

FIG. 1



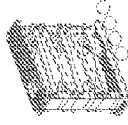
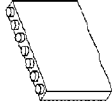
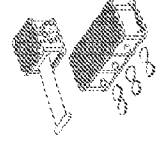
ORIGINAL WOODEN TOY: OBJECT PERMANENCE BOX 1 <u>110</u>		PCT/US20/51129 16 September 2020 (16.09.2020)	
STANDARDIZED PARTS USED IN THIS TOY:		SHARED WITH PRODUCTS BELOW: <u>140</u>	
<u>111</u>  X1	<u>141</u> 		
<u>112</u>  X3	<u>142</u> 		
<u>113</u>  X3	<u>143</u> 		
<u>114</u>  X1	<u>144</u> 		

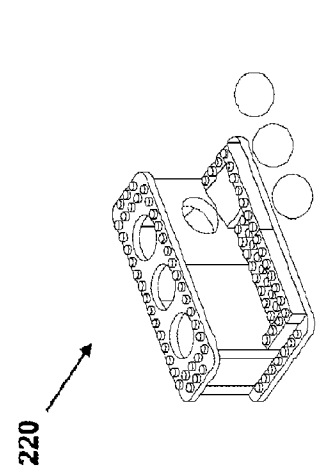
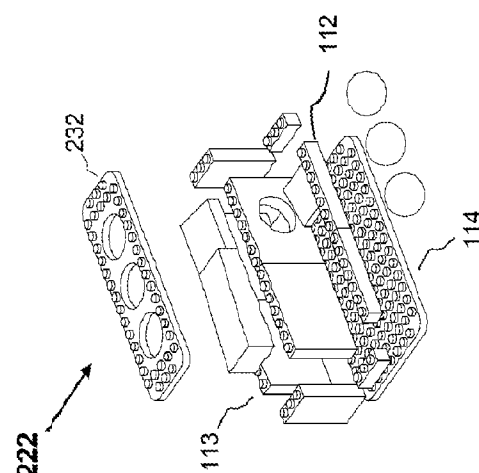
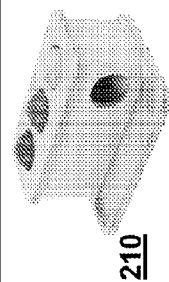
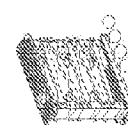
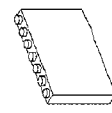
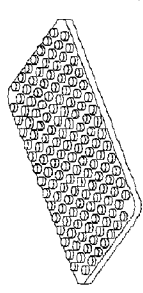
FIG. 2 220  222 		ORIGINAL WOODEN TOY: PUSH BALLS		 210	PCT/US20/51129 16 September 2020 (16.09.2020)	
STANDARDIZED PARTS USED IN THIS TOY: 230		SHARED WITH PRODUCTS BELOW: 240				
112  X2		241 		242 		
113  X3		243 				
114  X1						

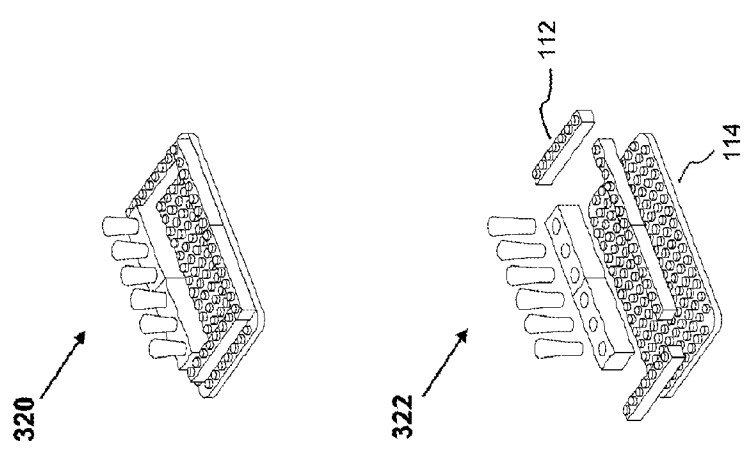
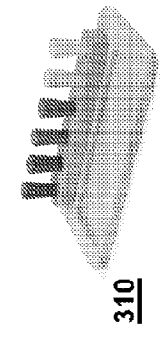
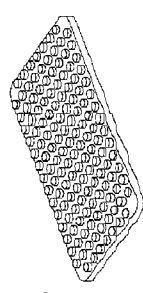
FIG. 3 		PCT/US20/51129 16 September 2020 (16.09.2020)				
ORIGINAL WOODEN TOY: PEG BOX 						
STANDARDIZED PARTS USED IN THIS TOY: <u>330</u>		SHARED WITH PRODUCTS BELOW: <u>340</u>				
<u>112</u>  X4		<u>341</u> 				
<u>114</u>  X1		<u>342</u> 				

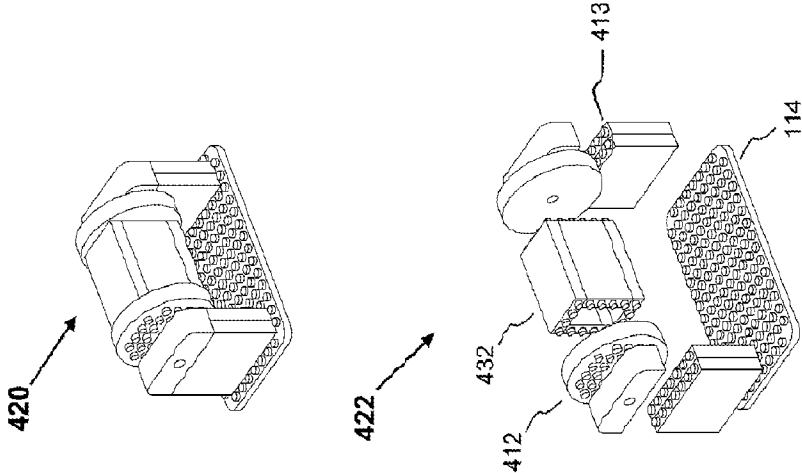
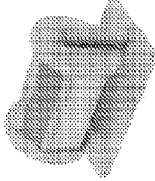
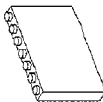
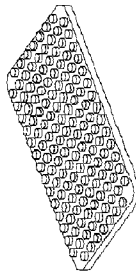
FIG. 4 		ORIGINAL WOODEN TOY: SPINNING DRUM <u>410</u> 		PCT/US20/51129 16 September 2020 (16.09.2020)	
STANDARDIZED PARTS USED IN THIS TOY: <u>430</u>		SHARED WITH PRODUCTS BELOW: <u>440</u>			
<u>412</u>  X2		<u>441</u> 			
<u>413</u>  X4		<u>442</u> 			
<u>114</u>  X1		<u>443</u> 			

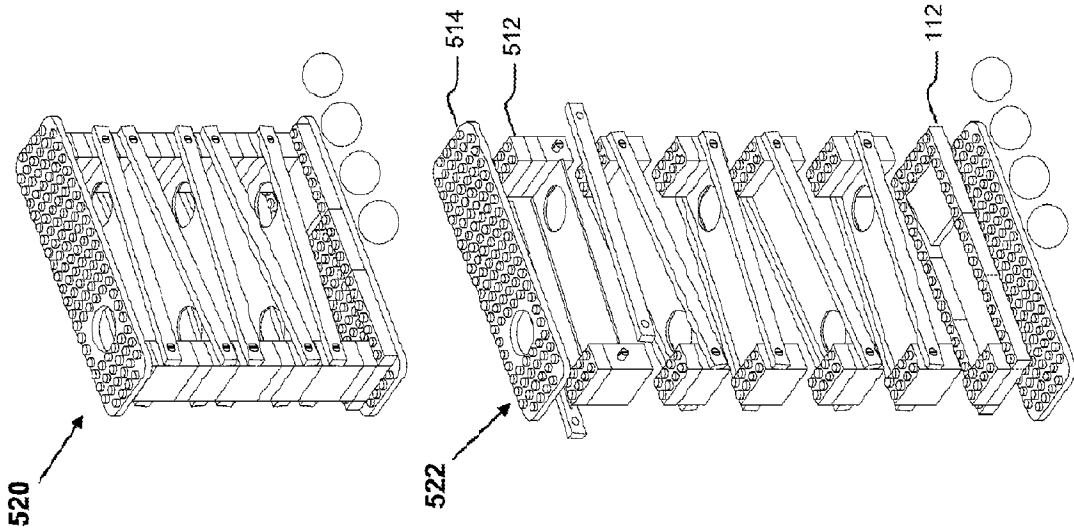
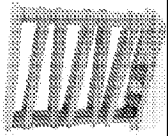
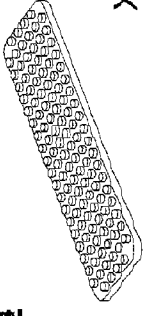
FIG. 5 		ORIGINAL WOODEN TOY: TRACKER <u>510</u> 		PCT/US20/51129 16 September 2020 (16.09.2020)	
STANDARDIZED PARTS USED IN THIS TOY:	SHARED WITH PRODUCTS BELOW:	<u>540</u> CLASSIC DUPLO BLOCK			
<u>512</u> 	X10	<u>542</u>    			
<u>112</u> 	X4	<u>543</u>    			
<u>514</u> 	X1				
	X4				

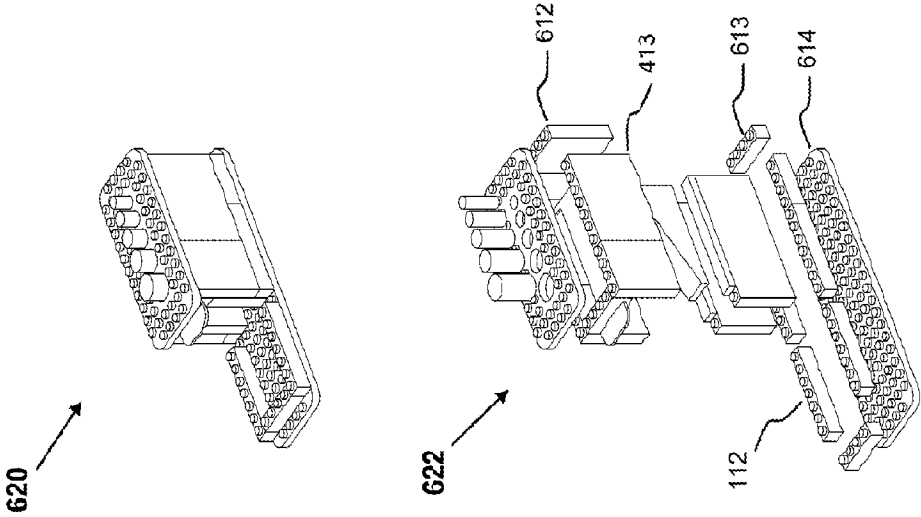
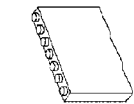
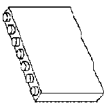
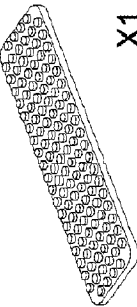
FIG. 6 		ORIGINAL WOODEN TOY: CYLINDER DROP 		PCT/US20/51129 16 September 2020 (16.09.2020)	
STANDARDIZED PARTS USED IN THIS TOY:		SHARED WITH PRODUCTS BELOW: <u>640</u>			
<u>612</u> 	X3	<u>641</u> 		<u>642</u> 	
<u>413</u> 	X2	<u>643</u> 		<u>644</u> 	
<u>613</u> 	X4	<u>645</u> 		<u>646</u> 	
<u>112</u> 	X4	<u>647</u> 		<u>648</u> 	
<u>614</u> 	X1	<u>649</u> 		<u>650</u> 	

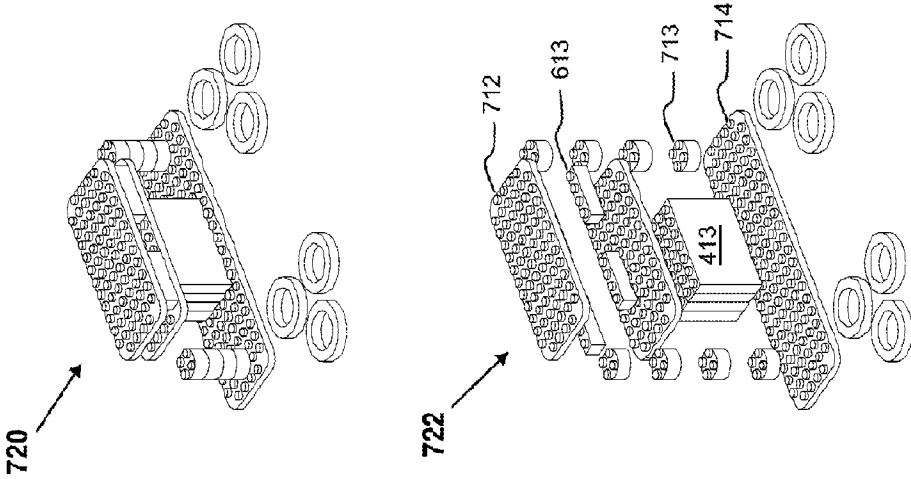
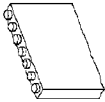
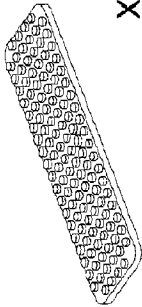
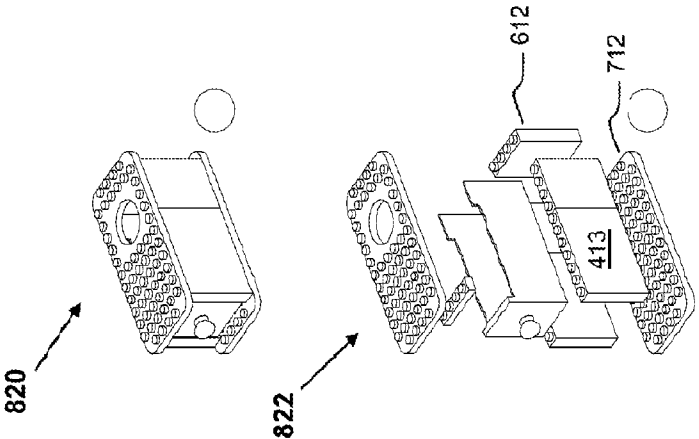
FIG. 7 	
ORIGINAL WOODEN TOY: RING SLIDER <u>710</u> 	
STANDARDIZED PARTS USED IN THIS TOY:	SHARED WITH PRODUCTS BELOW:
<u>712</u>  X2	<u>741</u> 
<u>713</u>  X4	<u>742</u> 
<u>413</u>  X4	<u>743</u> 
<u>613</u>  X4	<u>744</u> 
<u>714</u>  X1	<u>745</u> 

FIG. 8 		ORIGINAL WOODEN TOY: OBJECT PERMANENCE BOX 2 <u>810</u>				PCT/US20/51129 16 September 2020 (16.09.2020)	
STANDARDIZED PARTS USED IN THIS TOY:		SHARED WITH PRODUCTS BELOW: <u>840</u>					
<u>612</u>	 X3	 <u>841</u>		 <u>842</u>			
<u>413</u>	 X2			 <u>843</u>			
<u>712</u>	 X1						

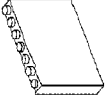
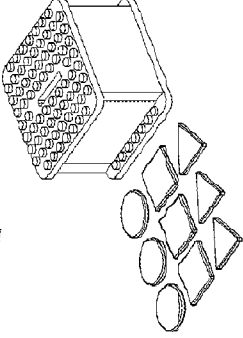
PCT/US20/51129 16 September 2020 (16.09.2020)					
ORIGINAL WOODEN TOY: COIN BOX 910 		SHARED WITH PRODUCTS BELOW: 940		940	
STANDARDIZED PARTS USED IN THIS TOY:		942		942	
413  X4		912  X1			

FIG. 9

920



922

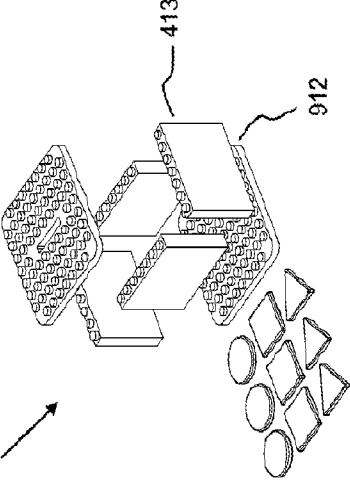


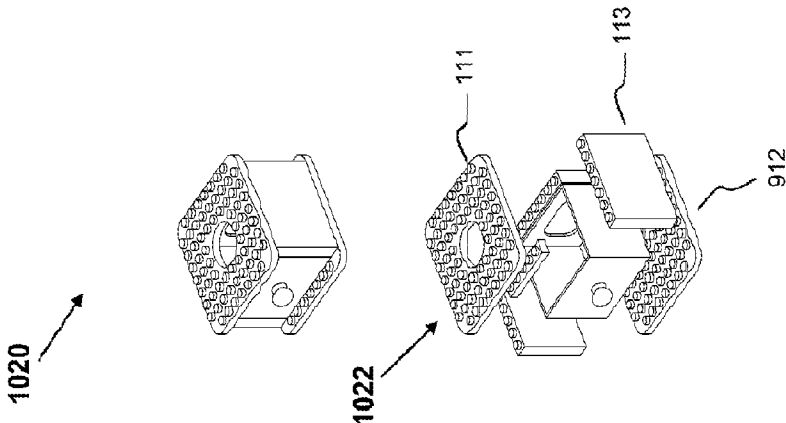
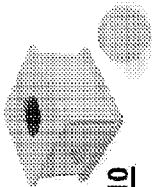
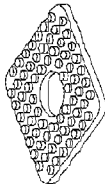
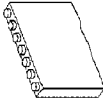
FIG. 10 		PCT/US20/51129 16 September 2020 (16.09.2020)	
ORIGINAL WOODEN TOY: MOTOR PLANNING BOX <u>1010</u> 		SHARED WITH PRODUCTS BELOW: <u>1040</u>	
<u>111</u>  X1	<u>1041</u> 		
<u>113</u>  X3	<u>1042</u> 		
<u>912</u>  X1	<u>1043</u> 		

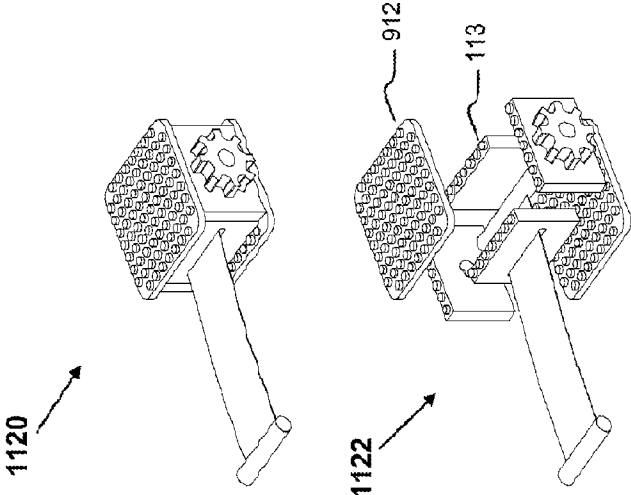
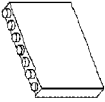
FIG. 11 	
ORIGINAL WOODEN TOY: FABRIC WINDER <u>1110</u> 	
PCT/US20/51129 16 September 2020 (16.09.2020)	
STANDARDIZED PARTS USED IN THIS TOY: <u>113</u>  X1	SHARED WITH PRODUCTS BELOW: <u>1140</u>  <u>1142</u> 
<u>912</u>  X2	

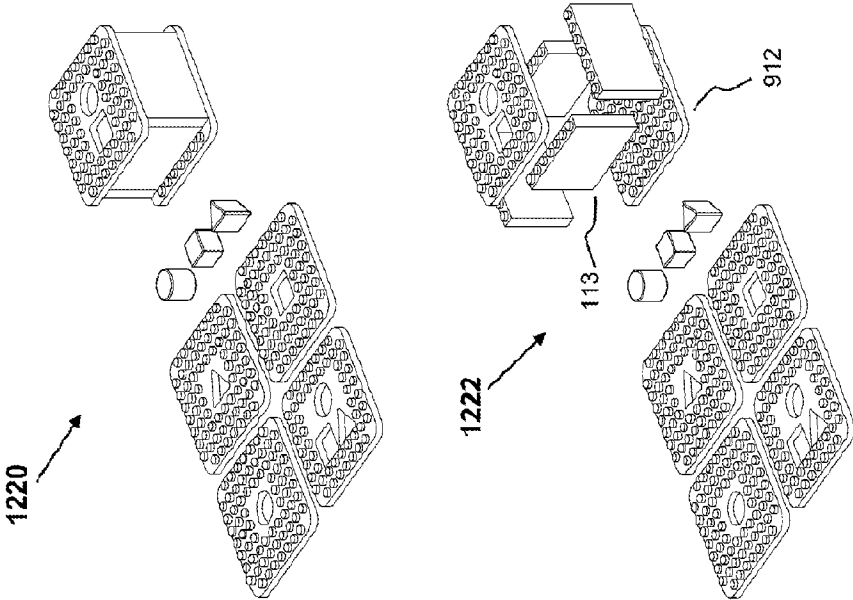
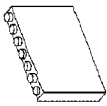
FIG. 12 		PCT/US20/51129 16 September 2020 (16.09.2020)	
ORIGINAL WOODEN TOY: MAILBOX  <u>1210</u>		SHARED WITH PRODUCTS BELOW: <u>1240</u>  <u>1240</u>	
STANDARDIZED PARTS USED IN THIS TOY:		<u>1242</u> 	
<u>113</u>  X3		<u>912</u>  X1	

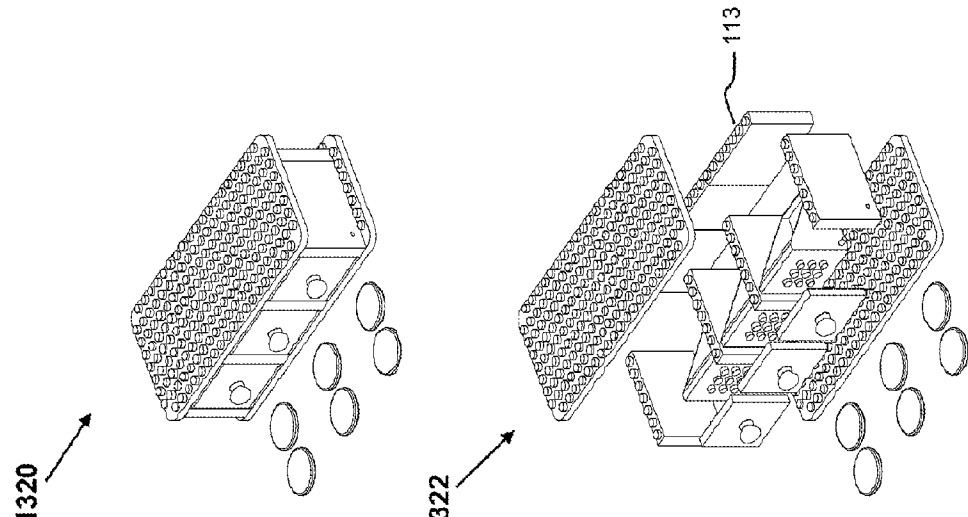
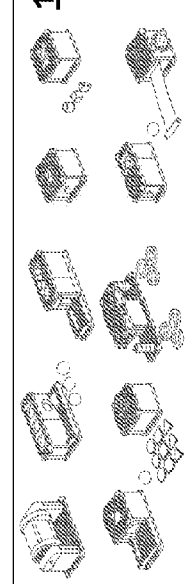
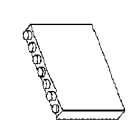
FIG. 13 		PCT/US20/51129 16 September 2020 (16.09.2020)			
ORIGINAL WOODEN TOY: BOX WITH BINS 		SHARED WITH PRODUCTS BELOW: <u>1340</u> 			
STANDARDIZED PARTS USED IN THIS TOY: 		X4			

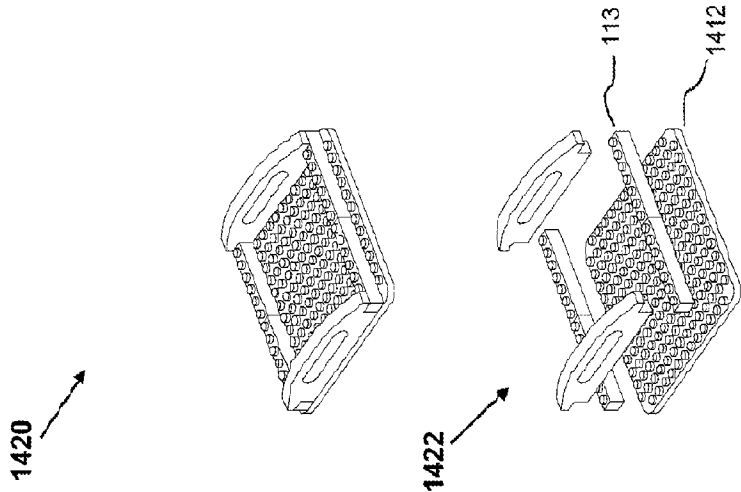
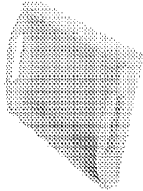
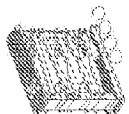
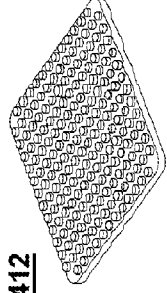
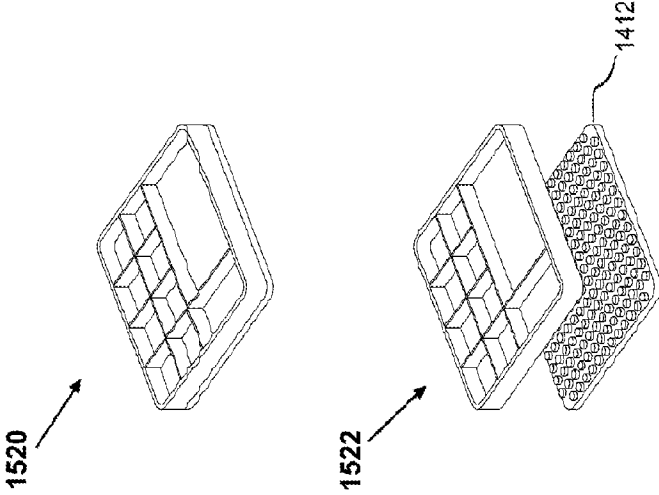
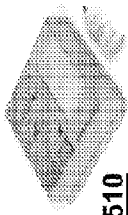
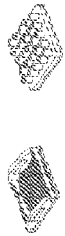
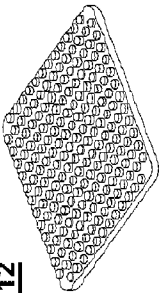
FIG. 14		PCT/US20/51129 16 September 2020 (16.09.2020)				
		ORIGINAL WOODEN TOY: TRAY	 1410			
		STANDARDIZED PARTS USED IN THIS TOY:	SHARED WITH PRODUCTS BELOW: 1440	 112 X4	 1441  1442 X1	

FIG. 15 		PCT/US20/51129 16 September 2020 (16.09.2020)				
ORIGINAL WOODEN TOY: GLUING SET 		SHARED WITH PRODUCTS BELOW: <u>1540</u> 				
STANDARDIZED PARTS USED IN THIS TOY:  X1						

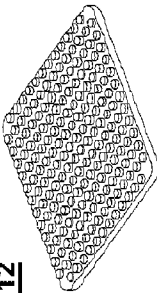
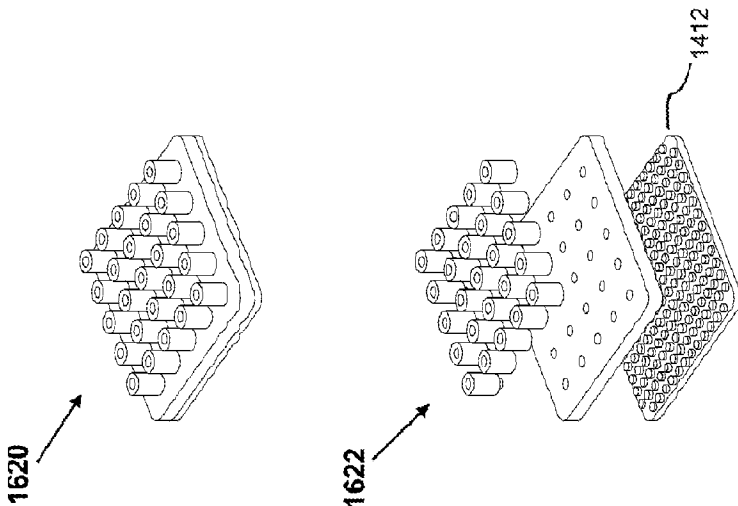
PCT/US20/51129 16 September 2020 (16.09.2020)								
ORIGINAL WOODEN TOY: PEG BOARD  <u>1610</u>	SHARED WITH PRODUCTS BELOW: <u>1640</u>	 <u>1641</u>	 <u>1412</u>	X1				

FIG. 16



1620

1622

1412

FIG. 17		PCT/US20/51129 16 September 2020 (16.09.2020)				
		ORIGINAL WOODEN TOY: ROCKING STACKER <u>1710</u>				
STANDARDIZED PARTS USED IN THIS TOY: <u>1730</u>		SHARED WITH PRODUCTS BELOW: <u>1740</u>				
<u>412</u>	 X1	 <u>1741</u>				
<u>713</u>	 X1	 <u>1742</u>				

PCT/US20/51129 16 September 2020 (16.09.2020)

FIG. 17A

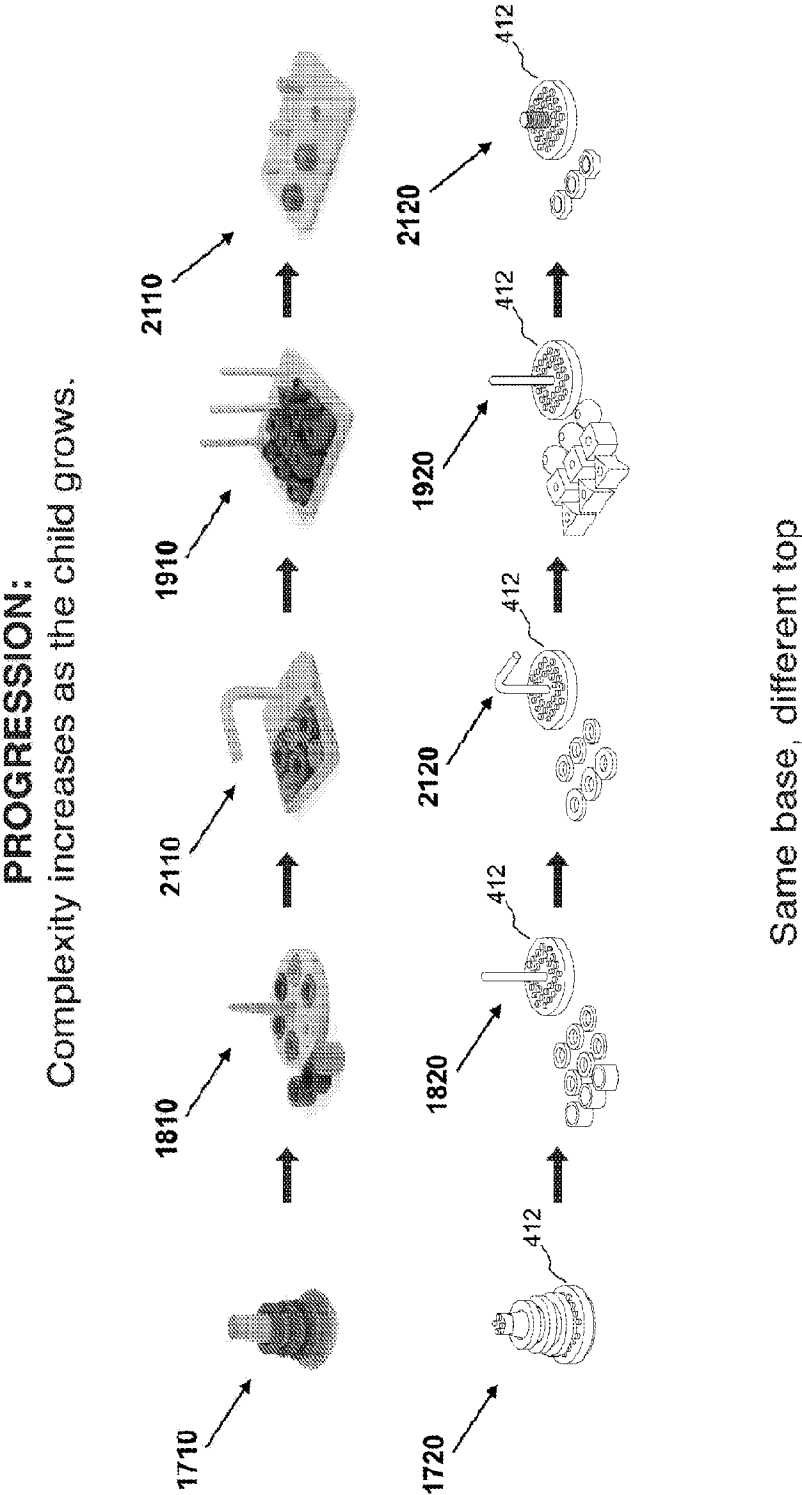
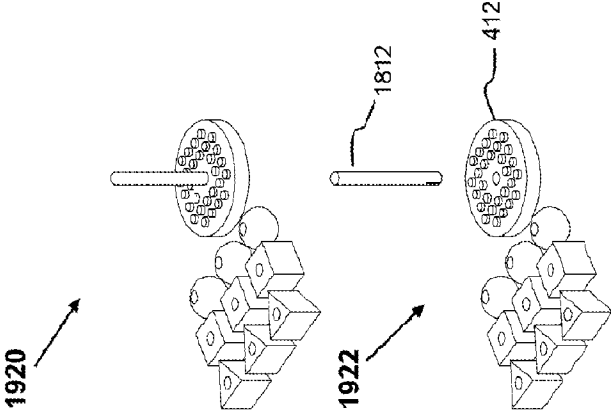
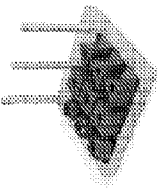
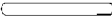
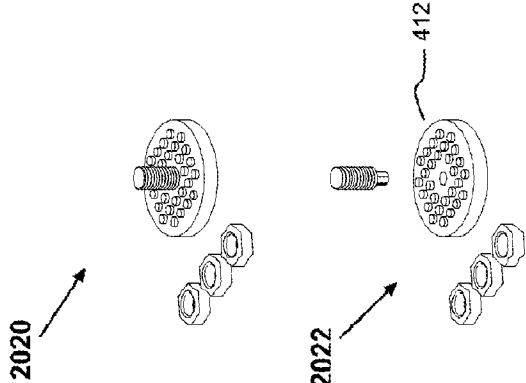


FIG. 18		PCT/US20/51129 16 September 2020 (16.09.2020)	
ORIGINAL WOODEN TOY: STABLE STACKER <u>1810</u>		SHARED WITH PRODUCTS BELOW: <u>1840</u> <u>1841</u>	
STANDARDIZED PARTS USED IN THIS TOY: <u>412</u> X1		<u>1842</u>	
<u>1812</u> X1			

FIG. 19 		PCT/US20/51129 16 September 2020 (16.09.2020)	
ORIGINAL WOODEN TOY: SHAPES ON PEGS  <u>1910</u>		SHARED WITH PRODUCTS BELOW: <u>1940</u>  <u>1941</u>	
STANDARDIZED PARTS USED IN THIS TOY: <u>412</u>  X1		<u>1942</u>  <u>1812</u>  X1	

ORIGINAL WOODEN TOY: BOLT BOARD	PCT/US20/51129 16 September 2020 (16.09.2020)				
	 <u>2010</u>				
STANDARDIZED PARTS USED IN THIS TOY:	 <u>412</u> X1	SHARED WITH PRODUCTS BELOW:	 <u>2040</u>  <u>2041</u>		

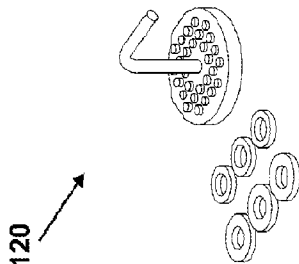
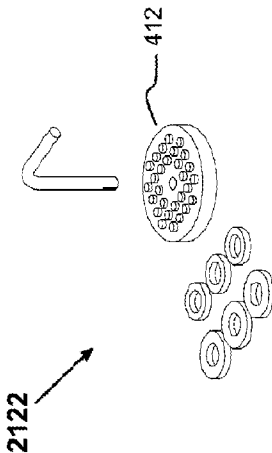
FIG. 20



2020

2022

412

FIG. 21 2120  2122 		PCT/US20/51129 16 September 2020 (16.09.2020)							
ORIGINAL WOODEN TOY: CURVED DOWEL 2110 		STANDARDIZED PARTS USED IN THIS TOY: 412  X1		SHARED WITH PRODUCTS BELOW: 2140  2141					

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2020/051129

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A63H 33/08; A63H 33/00; A63H 33/04; A63H 33/06; A63H 33/10 (2020.01)

CPC - A63H 33/086; A63H 33/00; A63H 33/04; A63H 33/06; A63H 33/062; A63H 33/08; A63H 33/082; A63H 33/088; A63H 33/10; A63H 33/101 (2020.08)

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)

see Search History document

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

see Search History document

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

see Search History document

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 2006/0276100 A1 (GLICKMAN) 07 December 2006 (07.12.2006) entire document	1, 8 --- 2-7, 9-14
Y	WO 2018/152440 A1 (MONTI KIDS, INC.) 23 August 2018 (23.08.2018) entire document	2-7, 9-14
A	US 4,897,066 A (TAPDRUP et al) 30 January 1990 (30.01.1990) entire document	1-14
A	US 2015/0283472 A1 (DREAMUP TOYS LLC) 08 October 2015 (08.10.2015) entire document	1-14
A	US 2018/0140962 A1 (CHROME CHERRY DESIGN STUDIO (PTY) LTD) 24 May 2018 (24.05.2018) entire document	1-14

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

* Special categories of cited documents:

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"E" earlier application or patent but published on or after the international filing date

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