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(54) **DECK SURFACING**

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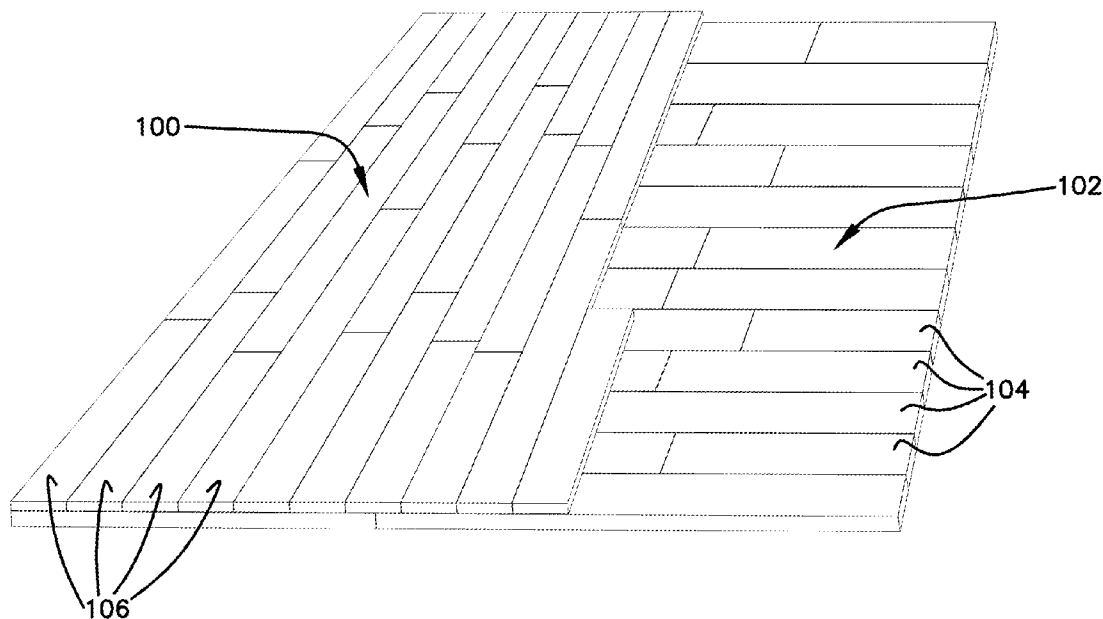
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(57) **ABSTRACT**

A deck surfacing system is installed over an existing surface. The deck surfacing system comprises a plurality of planks. Spacers are located between at least some of the planks. The planks have top, bottom, and side surfaces. The side surfaces of the planks have side recesses. When installed, portions of the spacers are embedded in the side recesses of the planks. In addition to spacing the planks horizontally, the spacers can resist vertical and/or lengthwise movement of adjacent planks.



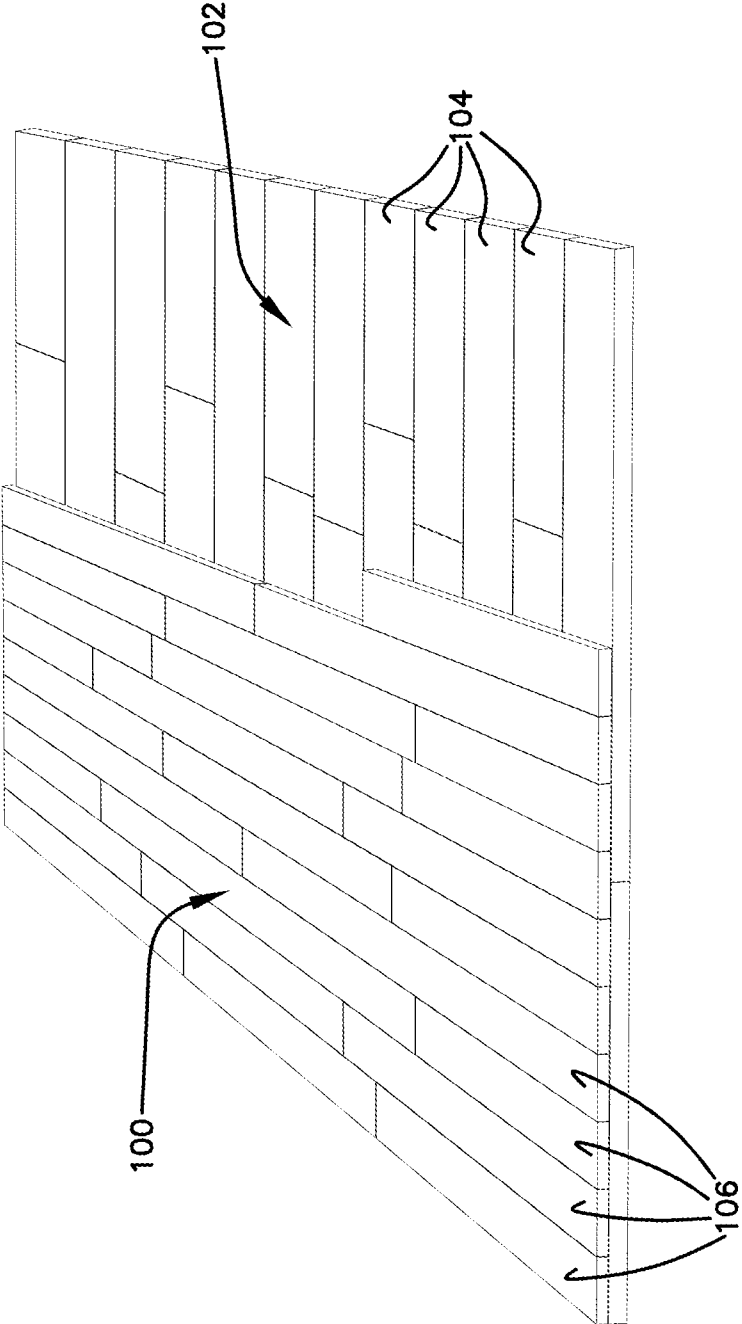


FIG. 1

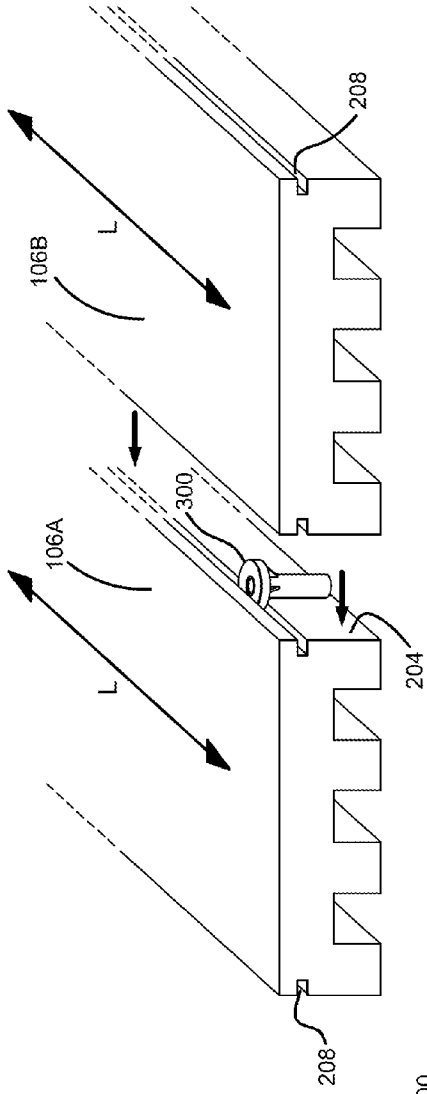


FIG. 3

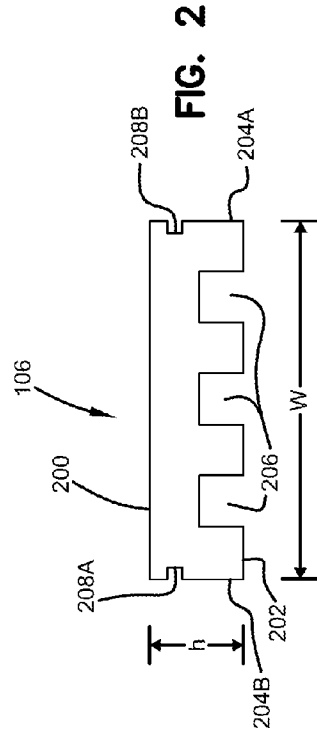


FIG. 2

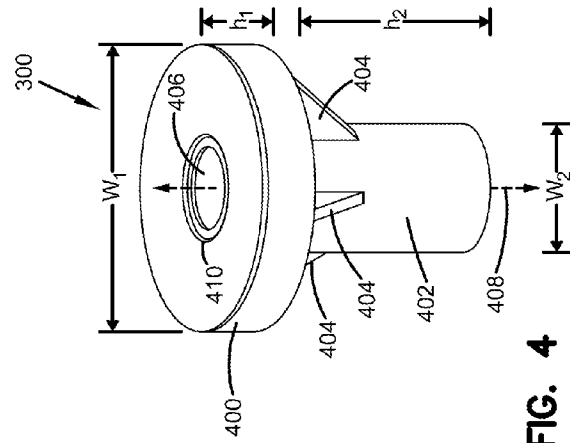


FIG. 4

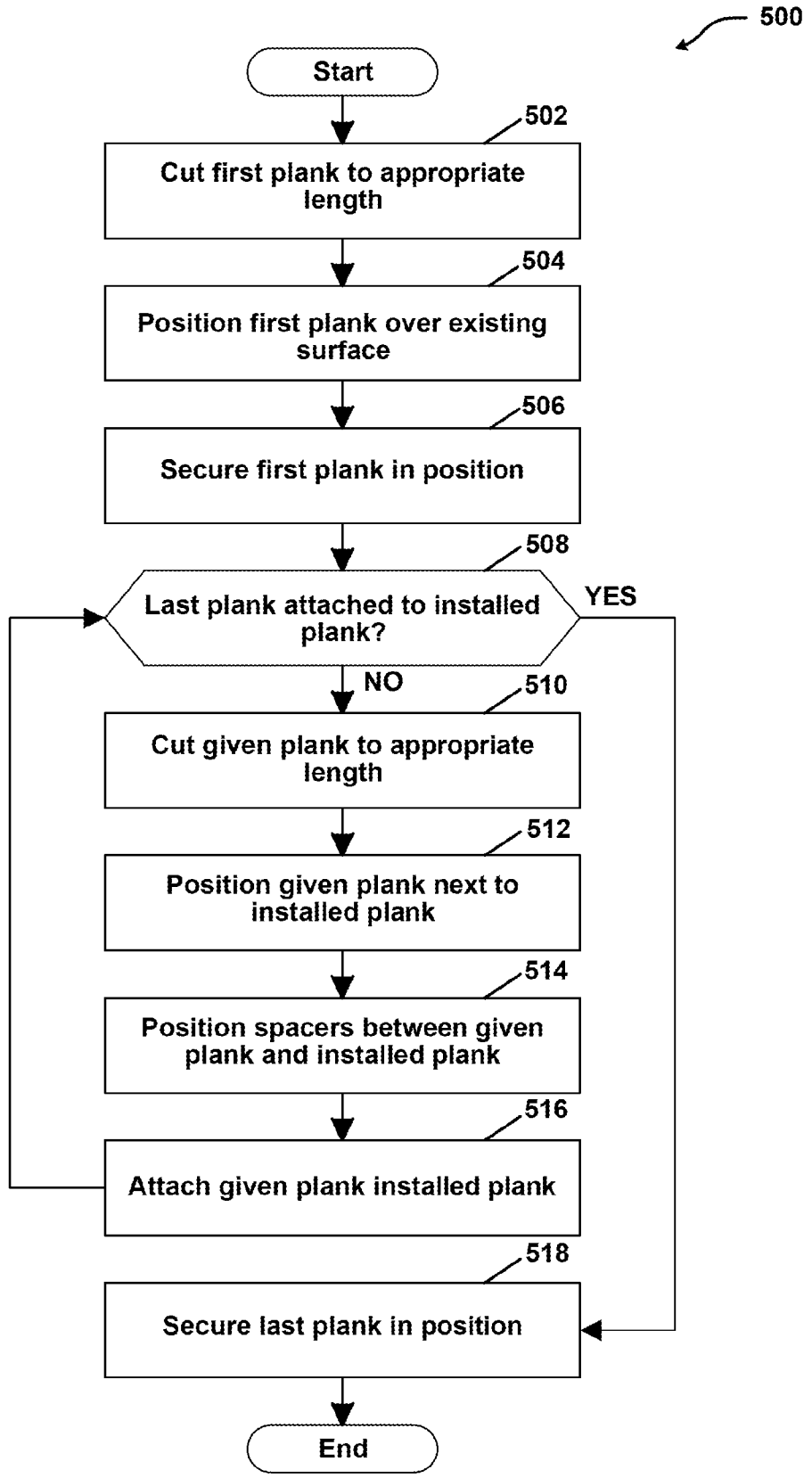


FIG. 5

FIG. 6A

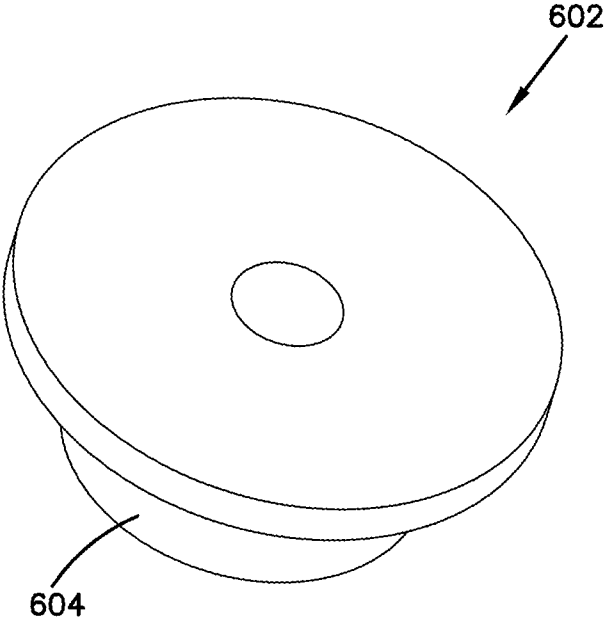
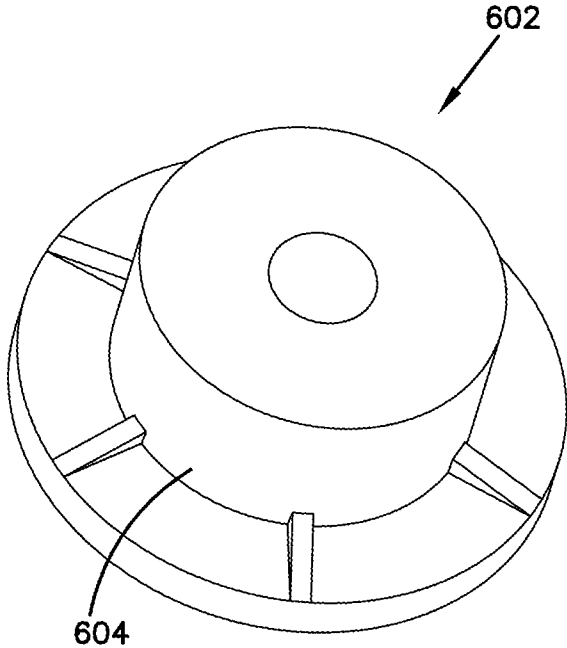


FIG. 6B



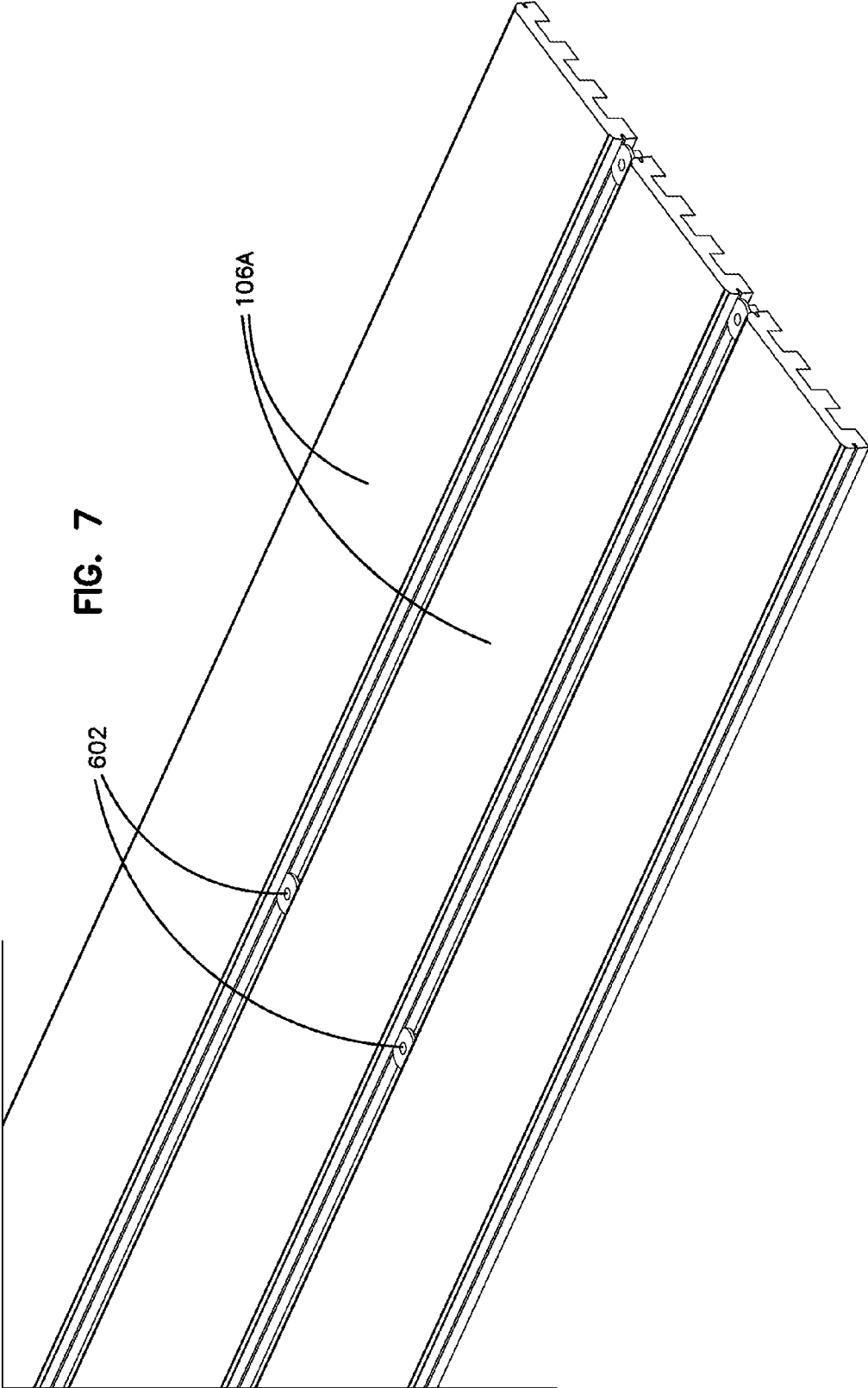
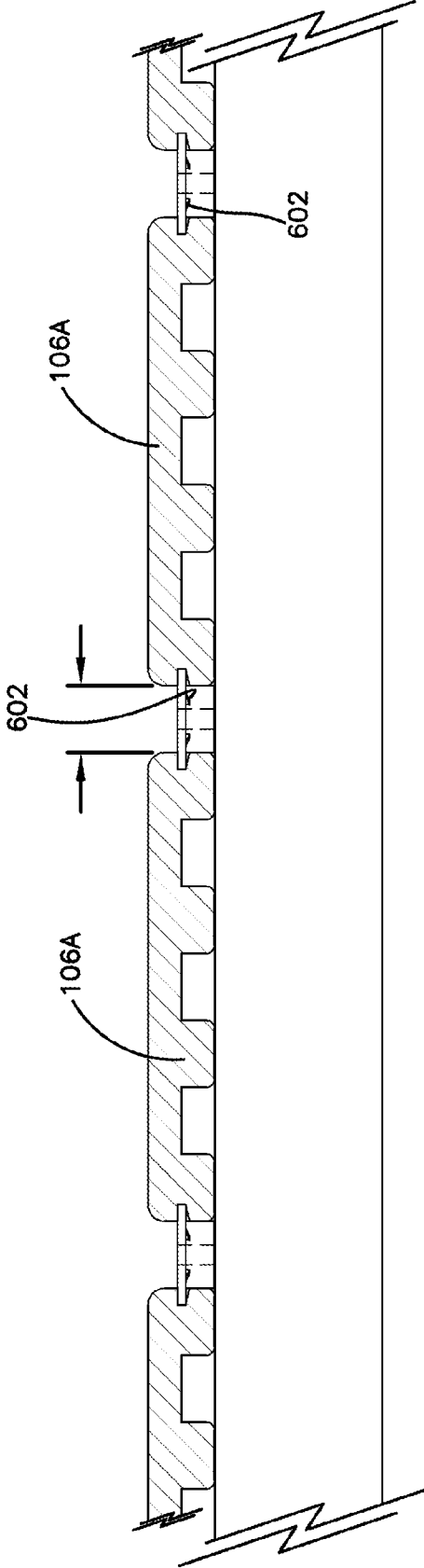


FIG. 7

106A

602

FIG. 8



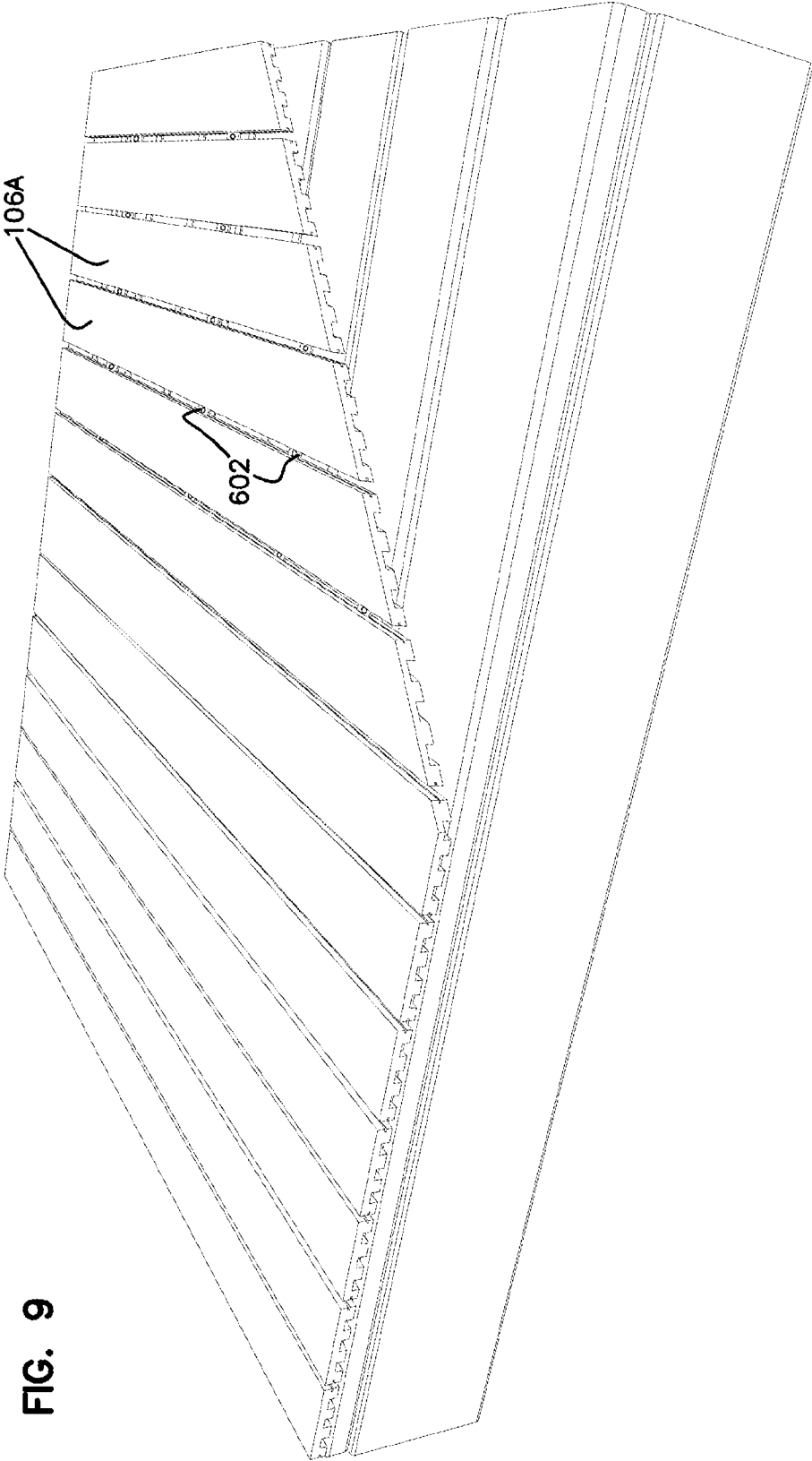


FIG. 9

FIG. 11

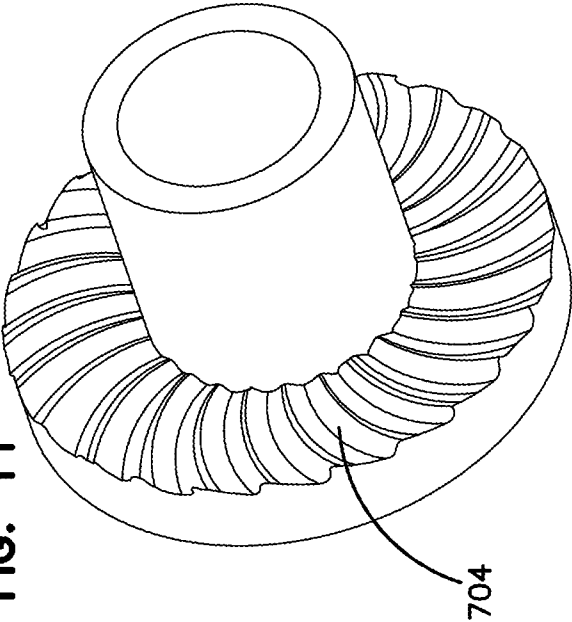


FIG. 10

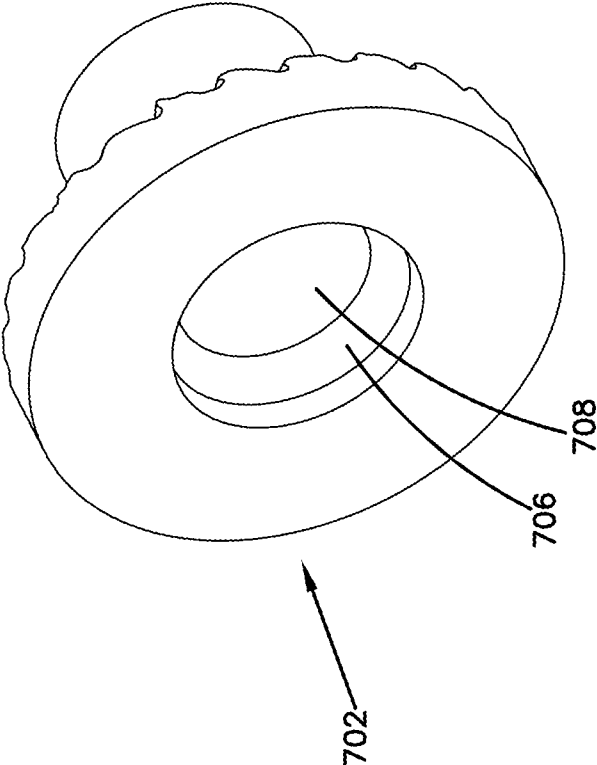


FIG. 13

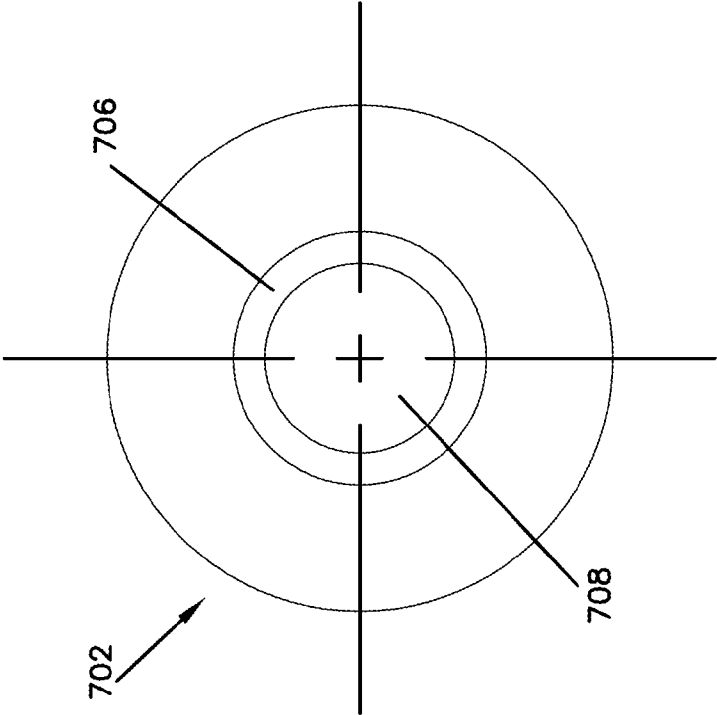
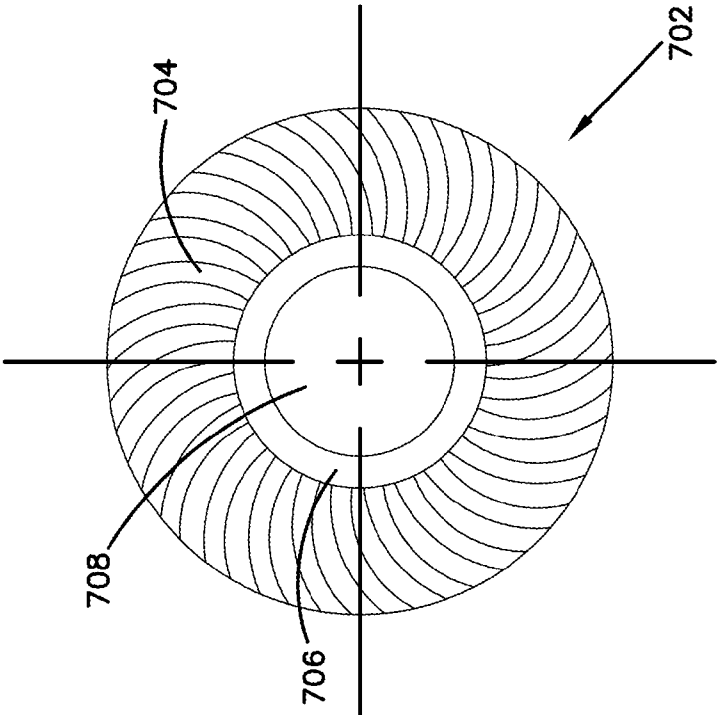


FIG. 12



DECK SURFACING

BACKGROUND

[0001] There are many settings in which it is desirable to provide a deck surface. A deck surface is a surface made of a series of planks. For example, decks for homes are popular deck surfaces. In another example, boardwalks are deck surfaces popular in parks and as sidewalks in public areas.

[0002] Deck surfaces can provide several attractive qualities. For example, deck surfaces can easily shed water because the water can drain off the deck surface between the planks. In another example, deck surfaces can provide a more natural appearance than concrete or asphalt surfaces.

[0003] However, deck surfaces can have drawbacks. For example, deck surfaces can be difficult to install and maintain. In this example, wood planks can splinter, warp, or become discolored over time, necessitating replacement of the planks or the entire deck surface. In another example, the solid wood planks used in deck surfaces can be expensive.

SUMMARY

[0004] In one embodiment, a deck surface system is installed over an existing surface, such as an existing deck surface. The deck surface system comprises a plurality of planks and a plurality of spacers. Each of the planks has two side surfaces, a top surface, and a bottom surface. The side surfaces have recesses designed to receive portions of the spacers. During installation, the installer positions the spacers between the planks. The installer then places planks adjacent to one another such that the head portions of the spacers enter the recesses in the side surfaces of the planks.

BRIEF DESCRIPTION OF THE DRAWINGS

[0005] FIG. 1 is a perspective view of an example deck surfacing system during installation of the deck surfacing system over an existing surface.

[0006] FIG. 2 is an end-on profile view of an example plank of the deck surfacing system.

[0007] FIG. 3 is a perspective view illustrating example planks of the deck surfacing system.

[0008] FIG. 4 is a perspective view of a spacer used in the deck surfacing system.

[0009] FIG. 5 is a flowchart illustrating an example operation to install the deck surfacing system.

[0010] FIG. 6A is a perspective view of another spacer.

[0011] FIG. 6B is another perspective view of the spacer of FIG. 6A.

[0012] FIG. 7 is a perspective view illustrating example planks of the deck surfacing system.

[0013] FIG. 8 is a cross-sectional view of a portion of the deck surfacing system of FIG. 7.

[0014] FIG. 9 is another perspective view of the deck surfacing system of FIG. 7.

[0015] FIG. 10 is a perspective view of another spacer.

[0016] FIG. 11 is another perspective view of the spacer of FIG. 10.

[0017] FIG. 12 is a bottom view of the spacer of FIG. 10.

[0018] FIG. 13 is a top view of the spacer of FIG. 10.

DETAILED DESCRIPTION

[0019] FIG. 1 is a perspective view of an example deck surfacing system 100 during installation of the deck surfacing system 100 over an existing surface 102. Readers will under-

stand that the Figures illustrate example embodiments and do not represent the only possible embodiments.

[0020] The deck surfacing system 100 can be installed over various types of existing indoor or outdoor surfaces. For instance, in the example of FIG. 1, the existing surface 102 is a deck comprising a plurality of wood planks 104. For visual clarity, FIG. 1 does not include reference numbers for each of the wood planks 104. An installer is installing the deck surfacing system 100 directly on top of the wood planks 104. In another example, the installer can install the deck surfacing system 100 over other types of wood surfaces, such as boardwalks, exhibition platforms, wood bridges, and so on. In another example, the installer can install the deck surfacing system 100 over cement or asphalt surfaces, such as sidewalks, floors of buildings, swimming pool areas, and so on. In yet another example, the installer can install the deck surfacing system 100 over fiberglass or metal surfaces, such as the decks of boats or ships.

[0021] The deck surfacing system 100 comprises a plurality of planks 106. For visual clarity, FIG. 1 does not include reference numbers for each of the planks 106. The planks 106 can have various lengths and can be cut to size. In the example of FIG. 1, the planks 106 are installed parallel to one another. In other embodiments, the planks 106 can be installed according to other patterns. For example, the planks 106 can be installed in a herringbone pattern, a basketweave pattern, or another pattern.

[0022] In various embodiments, the planks 106 can comprise various materials. For example, in some embodiments, the planks 106 substantially consist of an engineered wood. For instance, in this example, the planks 106 can entirely consist of the engineered wood. Alternatively, in this example, the planks 106 can consist of 90% or more of the engineered wood. Example types of engineered wood include particleboard, fiberboard, wood-plastic composite board, parallel strand lumber, veneer-based engineered wood, medium-density fiberboard, waferboard, glued laminated timber, laminated veneer lumber, or other types of product that are manufactured by binding the strands, particles, fibers, or veneers of wood together with adhesives. In some embodiments, the planks 106 in the deck surfacing system 100 comprise different materials or the composition of the materials in the planks 106 can differ.

[0023] FIG. 2 is an end-on profile view of an example plank 106 of the deck surfacing system 100. Each of the planks 106 in the deck surfacing system 100 can have end-on profiles similar to the plank 106 illustrated in the example of FIG. 2.

[0024] As illustrated in the example of FIG. 2, the plank 106 has a height (marked h) and a width (marked w). In various embodiments, the plank 106 has various heights and widths. For example, the plank 106 can have a height of one inch and a width of five inches. In another example, the plank 106 can have a height of two inches and a width of six inches. In other examples, the height is less than (or equal to) one inch or less than (or equal to) two inches. In some examples, the width is less than (or equal to) four inches, less than (or equal to) five inches, or less than (or equal to) six inches.

[0025] In some embodiments, the height and the width of the plank 106 are substantially consistent along an entire length of the plank 106. For example, the height and the width of the plank 106 can be greater than 95% consistent along an entire length of the plank 106.

[0026] Furthermore, the plank 106 has a top surface 200, a bottom surface 202, and side surfaces 204A and 204B (col-

lectively, “side surfaces 204”). The top surface 200 and the bottom surface 202 are located on opposite sides of the plank 106 from one another. The side surfaces 204 are located on opposite sides of the plank 106 from one another.

[0027] In some embodiments, the top surface 200 has a decorative pattern. For example, the top surface 200 can have a wood grain pattern. In this example, patterned indentations in the top surface 200 can enhance the aesthetic appearance of the wood grain pattern and can make the plank 106 less slippery.

[0028] In some embodiments, the top surface 200 has a non-slip coating. For example, the top surface 200 can have a rubberized coating. The non-slip coating serves to make the plank 106 less slippery. The non-slip coating may be advantageous in areas that are frequently wet, such as the areas around swimming pools, boardwalks, residential decks, outdoor exhibition platforms, and so on.

[0029] In the example of FIG. 2, the bottom surface 202 is shaped to define bottom recesses 206. In some embodiments, the bottom recesses 206 extend substantially an entire length of the plank 106. For example, the bottom recesses 206 can extend an entire length of the plank 106 or to within two inches of the ends of the planks 106.

[0030] In the example of FIG. 2, the bottom surface 202 defines three bottom recesses 206. In other embodiments, the bottom surface 202 has other numbers of bottom recesses 206. For example, in some embodiments, the bottom surface 202 defines zero, one, two, four, or more bottom recesses 206. In the example of FIG. 2, the bottom recesses 206 have a generally square profile. In other embodiments, the bottom recesses 206 can have other profiles. For example, the bottom recesses 206 can have rectangular, semi-circular, semi-ellipsoid, triangular, or other profiles.

[0031] In some instances, the bottom recesses 206 can help to prevent the growth of mold between the bottom surface 202 of the plank 106 and the existing surface 102. The growth of mold between the bottom surface 202 of the plank 106 and the existing surface 102 can be undesirable because mold can generate allergens, bad odors, and can accelerate the decay of the existing surface 102. Mold frequently thrives in warm, moist environments. If freely-moving air was excluded from a sufficiently large area under the plank 106, water absorbed by the existing surface 102 would not be able to escape into the air. This effect could lead to a buildup of moisture, and consequently mold. The bottom recesses 206 decrease the area under the plank 106 excluded from freely-moving air, thereby allowing excess moisture to escape from the existing surface 102. Hence, the bottom recesses 206 can help prevent the growth of mold between the bottom surface 202 of the plank 106 and the existing surface 102.

[0032] The side surface 204A is shaped to define a side recess 208A. The side surface 204B is shaped to define a side recess 208B. This document can refer to the side recess 208A and the side recess 208B collectively as the “side recesses 208.” The side recesses 208 extend into the plank 106 from the side surfaces 204.

[0033] In the example of FIG. 2, the side recesses 208 have generally square-shaped profiles. In other embodiments, the side recesses 208 have differently-shaped profiles. For example, the side recesses 208 can have generally rectangular profiles, generally triangular profiles, generally semicircular profiles, generally semi-ellipsoid profiles, or profiles having other general shapes.

[0034] In some embodiments, the side recesses 208 are continuous grooves that extend substantially an entire length of the plank 106. For example, the side recesses 208 can be grooves that extend an entire length of the plank 106. In another example, the side recesses 208 can be grooves that extend most of the length of the plank 106, except within a few inches of each end of the plank 106. In such embodiments, the side recesses 208 are substantially parallel to the top surface 200 of the plank 106. For example, the side recesses 208 can be parallel to the top surface 200 of the plank 106 within 5%.

[0035] In other embodiments, the side recesses 208 can be a series of discrete, discontinuous indentations disposed at various locations along the lengths of the side surfaces 204. For example, the side surfaces 204 can define the side recesses 208 at regular intervals (e.g., every six inches) along the lengths of the side surfaces 204. In this example, each of the side recesses 208 can have lengths of one inch.

[0036] In various embodiments, the side recesses 208 can have various heights. For example, in some embodiments, the side recesses 208 have heights of approximately 1/8 inch. In another example, the side recesses 208 can have heights of 5/16 inch.

[0037] FIG. 3 is a perspective view illustrating example planks 106 of the deck surfacing system 100. As illustrated in the example of FIG. 3, the deck surfacing system 100 includes a plank 106A and a plank 106B. The plank 106A and the plank 106B are among the planks 106 in the deck surfacing system 100. In the example of FIG. 3, lengths of the planks 106A and 106B are marked “L.”

[0038] During installation of the deck surfacing system 100, an installer installs the plank 106A over the existing surface 102. After the plank 106A is installed, the installer places the plank 106B adjacent to the plank 106A. The installer then places a spacer 300 between the plank 106A and the plank 106B. The installer can place several spacers similar to the spacer 300 between the plank 106A and the plank 106B. The number of spacers used can depend on the lengths of the planks 106 and/or the preference of the installer.

[0039] FIG. 4 is a perspective view of an example spacer 300 used in the deck surfacing system 100. The spacer 300 can comprise various materials. For example, the spacer 300 can substantially consist of a metal, such as aluminum, tin, steel, iron, and so on. In another example, the spacer 300 can substantially consist of a plastic. In yet another example, the spacer 300 can comprise multiple materials, such as a metal and a plastic. In some embodiments, some or all surfaces of the spacer 300 can be painted.

[0040] As illustrated in the example of FIG. 4, the spacer 300 comprises a head 400, a foot 402, and multiple cleats 404. The reader will appreciate that other embodiments of the spacer 300 can comprise more or fewer parts.

[0041] In the example of FIG. 4, the head 400 has a cylindrical, puck-like shape. In other embodiments, the head 400 can have other shapes. For example, the head 400 can have a square shape, an oval shape, a rectangular shape, a hexagonal shape, a triangular shape, an octagonal shape, a star shape, a polygonal shape, or other shapes.

[0042] In the example of FIG. 4, “h₁” marks the height of the head 400 and “w₁” marks the width of the head 400. In various embodiments, the head 400 has various heights. For example, the head 400 can have a height of 1/8 inch. In some embodiments, the height of the head 400 substantially corresponds to the height of the side recesses 208. For example, the

height of the head **400** can be the same as the height of the side recesses **208**. In another example, the height of the head **400** can be 1/16 inch greater or less than the height of the side recesses **208**. In various embodiments, the head **400** has various widths. For example, the head **400** can have a width of 1/3 inch.

[0043] The head **400** of the spacer **300** overhangs the foot **402** of the spacer **300**. In various embodiments, the head **400** overhangs the foot **402** by various amounts. For example, in some embodiments, a distance by which the head **400** overhangs the foot **402** is greater than the depths of the side recesses **208** of the planks **106**. In this example, the head **400** can, for example, overhang the foot **402** by 1/8 inch and the side recesses **208** can have depths of 1/16 inch. In another example, the distance by which the head **400** overhangs the foot **402** is approximately the same as the depths of the side recesses **208** of the planks **106**.

[0044] When an installer installs the spacer **300** between the plank **106A** and the plank **106B**, portions of the head **400** enter the side recesses **208** of the planks **106A**, **106B**. By entering the side recesses **208** of the planks **106A**, **106B**, the head **400** can, in some embodiments, provide mechanical resistance to the vertical movement of the planks **106A**, **106B** relative to one another.

[0045] In the example of FIG. 4, “ h_2 ” marks the height of the foot **402** and “ w_2 ” marks the width of the foot **402**. In various embodiments, the foot **402** has a various heights. For example, the foot **402** can have a height that corresponds to a distance between a bottom of the side surfaces **204** and the bottom of the side recesses **208**. For example, if the distance between the bottom of the side surfaces **204** and the bottom of the side recesses **208** is 1/4 inch, the height of the foot **402** can also be 1/4 inch. Thus, in this example, when the spacer **300** rests upright on the foot **402**, the foot **402** has a height sufficient to generally align the head **400** with the side recesses **208**. Because the head **400** is generally aligned with the side recesses **208**, the installer does not need to provide external support for the spacer **300** to ensure that the head **400** of the spacer **300** enters the side recesses **208** during installation of the deck surfacing system **100**.

[0046] In various embodiments, the foot **402** can have various widths. For example, in some embodiments, the foot **402** can have a width of 1/4 inch. In another example, the foot **402** can have a width of 3/8 inch.

[0047] In some embodiments, the foot **402** contacts the side surfaces **204** of the adjacent planks **106A**, **106B** after installation of the adjacent planks. The example of FIG. 3 illustrates the foot **402** of the spacer **300** being in contact with the side surface **204** of the plank **106A**. The width of the foot **402** can correspond to a desired distance between the planks **106** after installation of the deck surfacing system **100**. For example, if the installer wants there to be a 1/4 inch gap between each of the planks **106**, the installer can use spacers that have feet with widths of 1/4 inch.

[0048] In the example of FIG. 4, the spacer **300** is shaped to define a central passage **406** that extends through the head **400** and the foot **402** of the spacer **300** along a central axis **408** of the spacer **300**. In the example of FIG. 4, the central passage **406** has a generally circular profile. In other embodiments, the central passage **406** can have other shapes, such as squares, rectangles, triangles, and so on.

[0049] In various embodiments, the central passage **406** can serve various purposes. For example, a manufacturer of the spacer **300** can conserve raw materials by forming the

spacer **300** with the central passage **406**. In other words, if the spacer **300** did not have the central passage **406**, more materials would be needed to manufacture the spacer **300**. In another example, the central passage **406** can act to reduce the visibility of the spacer **300** after installation of the deck surfacing system **100**.

[0050] Furthermore, in the example embodiment of FIG. 4, the top opening of the central passage **406** has a lip **410**. The top opening of the central passage **406** is an end of the central passage **406** located in the head **400** of the spacer **300**. The lip **410** tapers inward from top to bottom. In other words, the top of the lip **410** is wider than a bottom of the lip **410**.

[0051] In some embodiments, the width of the top of the lip **410** substantially corresponds to the width of the foot **402**. The top of the lip **410** can thus help the installer visually determine whether the foot **402** contacts the side surfaces **204** of the planks **106A**, **106B**. For instance, when the installer views the spacer **300** from above, the installer is not able to see the foot **402**. Thus, the installer cannot see whether the planks **106A**, **106B** are in contact with the foot **402**. As mentioned above, in some embodiments, the planks **106** are properly installed when the planks **106** are in contact with the foot **402**. By observing that the side surfaces **204** of the planks **106A**, **106B** are approximately aligned with the upper end of the lip **410**, the installer can learn that the foot **402** is in contact with the side surfaces **204** of the adjacent planks **106A**, **106B**.

[0052] Furthermore, in some embodiments, the installer can insert a fastener, such as a screw or a nail, through the central passage **406** of the spacer **300**. The fastener secures the spacer **300** to the existing surface **102**. Securing the spacer **300** to the existing surface can help to prevent movement of the planks **106A**, **106B**. In such embodiments, the lip **410** can help guide the fastener into the central passage **406**. In addition, the lip **410**, in conjunction with a head of the fastener, can resist vertical movement of the spacer **300**.

[0053] The cleats **404** project from the spacer **300** in a direction substantially perpendicular to the lengths of the planks **106**. For example, the cleats **404** can project upward or downward from the head **400** at angles between 75 and 90 degrees. In the example of FIG. 4, the cleats **404** are triangular pieces projecting downward from the lower surface of the head **400**. In other embodiments, the cleats **404** can have various other shapes and configurations. For example, the cleats **404** can be generally rectangular, box-like projections located on the lower surface or upper surface of the head **400**. In another example, the cleats **404** can be triangular projections extending upward from the upper surface of the head **400**.

[0054] In the example of FIG. 4, the spacer **300** has four cleats **404**. The fourth cleat **404** is not visible in FIG. 4 due to the perspective. In the example of FIG. 4, the cleats **404** are spaced apart from one another by angles of approximately 90°. In other embodiments, the spacer **300** can have other numbers of cleats and the cleats can be spaced apart from one another by various angles. For example, some embodiments of the spacer **300** have two, three, five, or more cleats spaced apart from one another by equal or differing angles.

[0055] In various embodiments, the cleats **404** serve various purposes. For example, in some embodiments, the planks **106** tend to expand or contract lengthwise due to changes in temperature. Because different planks **106** in the deck surfacing system **100** are exposed to different temperatures (e.g., due to some of the planks **106** being in sunlight and other ones of the planks **106** being in shade) different planks **106** can

expand or contract by different amounts. This effect can lead to the planks **106** moving lengthwise relative to one another. The movement of the planks **106** relative to one another is typically not desirable. When an installer installs the spacer **300** between the adjacent planks **106A**, **106B**, some or all of the cleats **404** become embedded in the side surfaces **204** of the planks **106A**, **106B**. Because the cleats **404** are embedded in the side surfaces **204** of the planks **106A**, **106B**, the cleats **404** provide mechanical resistance to the relative lengthwise motion of the planks **106A**, **106B**.

[0056] FIG. 5 is a flowchart illustrating an example operation **500** to install the deck surfacing system **100**. As illustrated in the example of FIG. 5, the installer begins the operation **500** to install the deck surfacing system **100** by cutting a first plank to an appropriate length (**502**). In various embodiments, the installer can use various tools to cut the planks **106**. For example, the installer can use a circular saw, a handsaw, a reciprocating saw, a jigsaw, or another type of tool to cut the planks **106**.

[0057] The installer then positions the first plank at an appropriate location over the existing surface **102** (**504**). In various embodiments, the installer positions the first plank at various locations over the existing surface **102**. For example, where the existing surface **102** is a residential deck, the installer can position the first plank at one edge of the deck. In this example, the installer can install the deck surfacing system **100** by progressively installing the planks **106** to the left or right of the first plank. In another example, the installer can position the first plank at a given position on the existing surface **102** and build the deck surfacing system **100** outward from both sides of the first plank.

[0058] In some embodiments, there is only a side recess on one side surface of the first plank. In other embodiments, both side surfaces of the first plank have side recesses.

[0059] After the installer positions the first plank at the appropriate location, the installer secures the first plank to the existing surface **102** (**506**). In various embodiments, the installer secures the first plank to the existing surface **102** in various ways. For example, the installer can bolt, clamp, nail, glue, rivet, screw, or otherwise fasten the first plank to the existing surface **102**.

[0060] If, at this point, a last plank in the deck surfacing system **100** has not yet been attached to an already-installed plank in the deck surfacing system **100** (“NO” of **508**), the installer cuts a given plank to an appropriate length (**510**). Next, the installer positions the given plank next to a plank in the deck surfacing system **100** that has already been installed (**512**). The installer positions the given plank such that the lengthwise axis of the given plank is generally parallel to the lengthwise axis of the already-installed plank.

[0061] The installer then positions one or more spacers between the given plank and the already-installed plank (**514**). In some embodiments, the spacers are of the type illustrated in the examples of FIGS. 3 and 4. In such embodiments, the installer positions the spacers such that the spacers rest on their feet, not their sides or heads. In this way, the heads of the spacers can generally align with the side recesses of the given plank and the already-installed plank.

[0062] After positioning the spacers, the installer attaches the given plank to the already-installed plank (**516**). The installer attaches the given plank to the already-installed plank such that the heads of the spacers enter the side recesses of the given plank and the already-installed plank. In some embodiments, the feet of the spacers contact the side surfaces

of the given plank and the next plank when the installer attaches the given plank to the already-installed plank.

[0063] In various embodiments, the installer can perform various actions to attach the given plank to the already-installed plank. For example, the installer can use a hammer or similar tool to tap the side surface of the given plank opposite the spacers. The force exerted by the hammer moves the given plank toward the already-installed plank. Furthermore, the force exerted by the hammer causes the heads of the spacers to enter the side recesses of the given plank and the already-installed plank. In addition, the force exerted by the hammer causes the cleats of the spacers to become embedded in the given plank and the already installed plank.

[0064] After attaching the given plank to the already-installed plank, the installer determines again whether the last plank in the deck surfacing system **100** has already been attached to an installed plank in the deck surfacing system **100**. If the installer has already attached the last plank to an already installed plank (“YES” of **508**), the installer secures the last plank in position over the existing surface **102** (**518**). In various embodiments, the installer secures the last plank to the existing surface **102** in various ways. For example, the installer can bolt, clamp, nail, glue, rivet, screw, or otherwise fasten the last plank to the existing surface **102**. The operation **500** to install the deck surfacing system **100** is then complete.

[0065] In some embodiments, the installer does not directly secure one or more interior planks to the existing surface **102**. Interior planks are the planks **106** that are between two other planks **106** in the deck surfacing system **100**. Exterior planks are the planks **106** that are only adjacent to one other plank in the deck surfacing system **100**. For example, in some embodiments, the first and last planks can be exterior planks. In some such embodiments, the installer only secures the first and last planks to the existing surface **102**.

[0066] In some embodiments, there is only a side recess on one side surface of the last plank. In other embodiments, both side surfaces of the last plank have side recesses.

[0067] Referring now to FIGS. 6-9, another example system is shown. In this example, a spacer **602** is used between planks **106A**. The spacer **602** is similar to that described above, except a foot **604** is sized to be shorter.

[0068] Referring now to FIGS. 10-12, another example spacer **702** is shown. The spacer **702** is similar to those described above, except that the spacer **702** includes a knurled surface **704** that provides enhanced gripping of the planks **106A** when positioned therebetween. In addition, the spacer **702** includes a main bore **708** for receiving a fastener, and a stepped-out portion **706** of the main bore **708** that is enlarged to receive the head of a screw or other fastener to thereby further hide the head. Other configurations are possible.

[0069] The various embodiments described above are provided by way of illustration only and should not be construed as limiting. Those skilled in the art will readily recognize various modifications and changes that may be made without following the example embodiments and applications illustrated and described herein. For example, operations shown in the Figures are examples. In various embodiments, similar operations can include more or fewer steps than those shown in the Figures. Furthermore, in other embodiments, similar processes can include the steps of the operations shown in the Figures in different orders.

The claimed invention is:

- 1. A deck surfacing system:
 - a plurality of planks, each of the planks comprising:
 - a top surface;
 - a first side surface;
 - a second side surface, the second side surface disposed opposite to the first side surface, the first side surface and the second side surface shaped to define side recesses;
 - a bottom surface, the bottom surface disposed opposite the top surface; and
 - a plurality of spacers positioned between the planks, portions of each of the spacers disposed within the side recesses of adjacent ones of the planks.
- 2. The deck surfacing system of claim 1, wherein the planks include exterior planks and interior planks, each of the interior planks positioned between two or more of the planks, one or more of the interior planks not secured directly to an existing surface.
- 3. The deck surfacing system of claim 1, wherein one or more of the spacers comprises one or more cleats embedded in the planks, the cleats projecting from the spacers in a direction substantially perpendicular to lengths of the planks
- 4. The deck surfacing system of claim 3, wherein the cleats act to resist motion of adjacent ones of the planks relative to each other.
- 5. The deck surfacing system of claim 1, wherein the spacers include a given spacer and the planks include a given plank, the given spacer comprising a foot and a head, the head entering the side recess of the given plank, the foot having a height sufficient to align the head with the side recess of the given plank when the given spacer rests on the foot.
- 6. The deck surfacing system of claim 5, wherein prior to installation of the given plank, an amount by which the head overhangs the foot is greater than a depth of the side recess of the given plank.
- 7. The deck surfacing system of claim 6, wherein after installation of the given plank, the foot is in contact with the side surface of the given plank.
- 8. The deck surfacing system of claim 1, wherein the planks include a given plank, wherein the side recesses of the given plank comprise grooves that extend at least a portion of a length of the given plank.
- 9. The deck surfacing system of claim 1, wherein the planks include a given plank, the bottom surface of the given plank having a shape that defines a bottom recess, the bottom recess extending upward into the given plank, the bottom recess extending substantially an entire length of the given plank.
- 10. The deck surfacing system of claim 9, the bottom recess permitting airflow between the given plank and an existing surface on which the given plank is installed.
- 11. The deck surfacing system of claim 1, wherein the planks substantially consist of engineered wood.
- 12. A method for installing a deck surfacing system over an existing surface, the method comprising:
 - positioning a first plank on the existing surface, the first plank having a top surface, a first side surface, a second side surface, and a bottom surface, the first side surface of the first plank opposite the second side surface of the first plank, the second side surface of the first plank shaped to define a first side recess;

- positioning a second plank on the existing surface adjacent to the first plank, the second plank having a top surface, a first side surface, a second side surface, and a bottom surface, the first side surface of the second plank opposite the second side surface of the second plank, the first side surface of the second plank shaped to define a second side recess;
- positioning a spacer on the existing surface between the first plank and the second plank; and
- attaching the first plank to the second plank such that portions of the spacer enter the first side recess and the second side recess.
- 13. The method of claim 12,
 - wherein after attaching the first plank to the second plank, a head of the spacer is disposed within the first side recess and the second side recess; and
 - wherein positioning the spacer comprises positioning the spacer such that the spacer rests upright on a foot of the spacer, the head of the spacer being approximately a same distance above the existing surface as the first and second side recesses are above the existing surface when the spacer rests upright on the foot of the spacer.
- 14. The method of claim 12,
 - wherein after attaching the first plank to the second plank, a head of the spacer is disposed within the first side recess and the second side recess; and
 - wherein after attaching the first plank to the second plank, cleats of the spacer are embedded in the first plank and the second plank, the cleats projecting substantially vertically from the head of the spacer.
- 15. The method of claim 14,
 - wherein prior to attaching the first plank to the second plank, a distance by which the head of the spacer overhangs a foot of the spacer is greater than a depth of the first side recess;
 - wherein prior to attaching the first plank to the second plank, the distance by which the head of the spacer overhangs the foot of the spacer is greater than a depth of the second side recess; and
 - wherein after attaching the first plank to the second plank, the foot of the spacer contacts the first plank and the second plank.
- 16. The method of claim 14, wherein after attaching the first plank to the second plank, the second side surface of the first plank and the first side surface of the second plank are approximately aligned with an upper end of a lip of a passage that extends through the spacer along a central axis of the spacer.
- 17. The method of claim 12, when the existing surface is an existing deck.
- 18. The method of claim 12, further comprising securing the first plank to the existing surface and not securing the second plank to the existing surface.
- 19. The method of claim 12, wherein attaching the first plank to the second plank comprises using a hammer to force the second plank toward the first plank.
- 20. The method of claim 12, wherein the second side surface of the first plank is shaped to define a series of discontinuous side recesses.

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