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(54) **NETWORKING APPARATUS**

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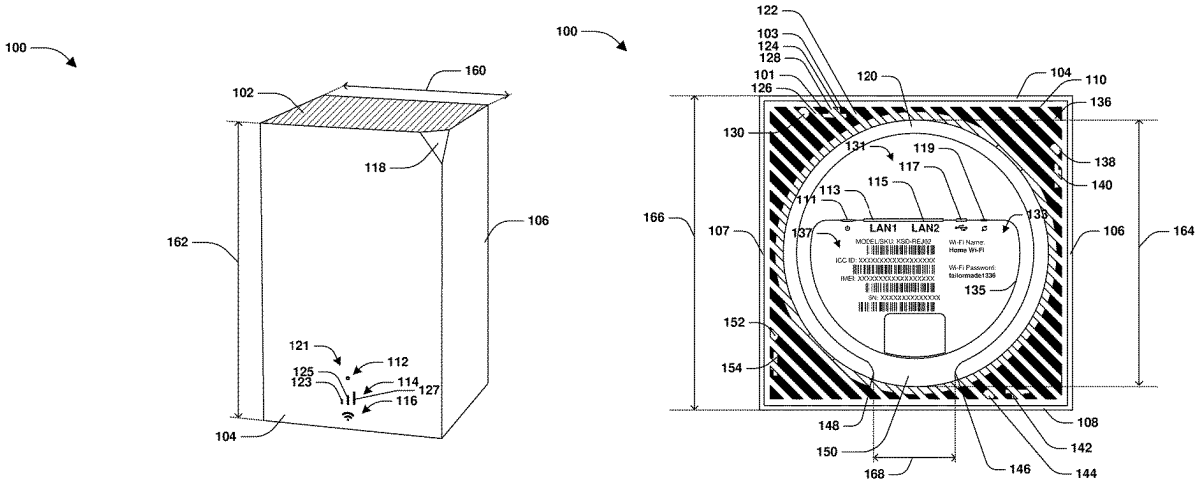
CPC ***H05K 5/0017*** (2013.01); ***H04L 43/0811*** (2013.01); ***H05K 5/0213*** (2013.01)

(57) **ABSTRACT**

In an example, a networking apparatus is provided. The networking apparatus includes a set of networking components, a housing assembly configured to house the set of networking components, a set of light sources, and a light guide disposed between the set of light sources and a first housing panel of the housing assembly. The first housing panel includes a first portion having a first thickness and a second portion adjacent the first portion and having a second thickness less than the first thickness. The light guide is configured to direct light from the set of light sources to an inner side of the second portion of the first housing panel to produce a networking icon on an outer side of the second portion of the first housing panel.



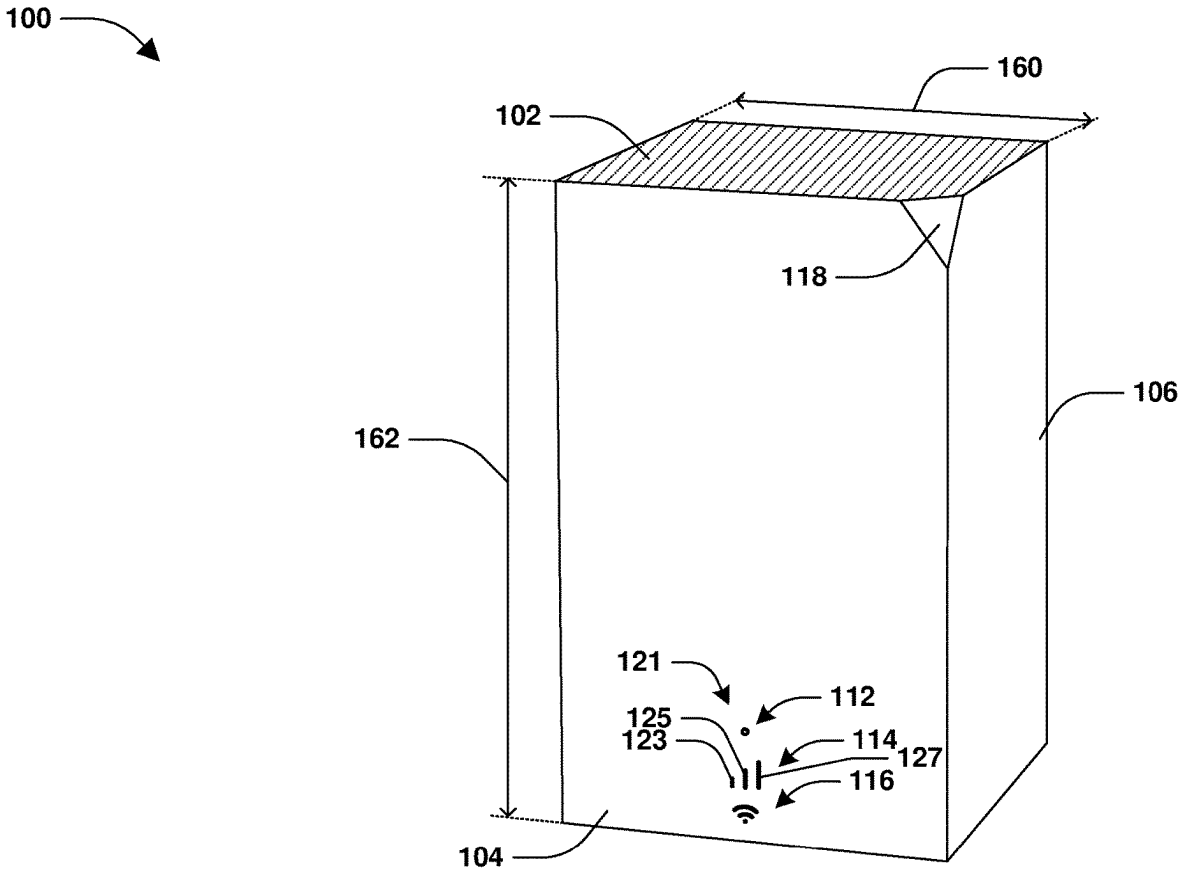
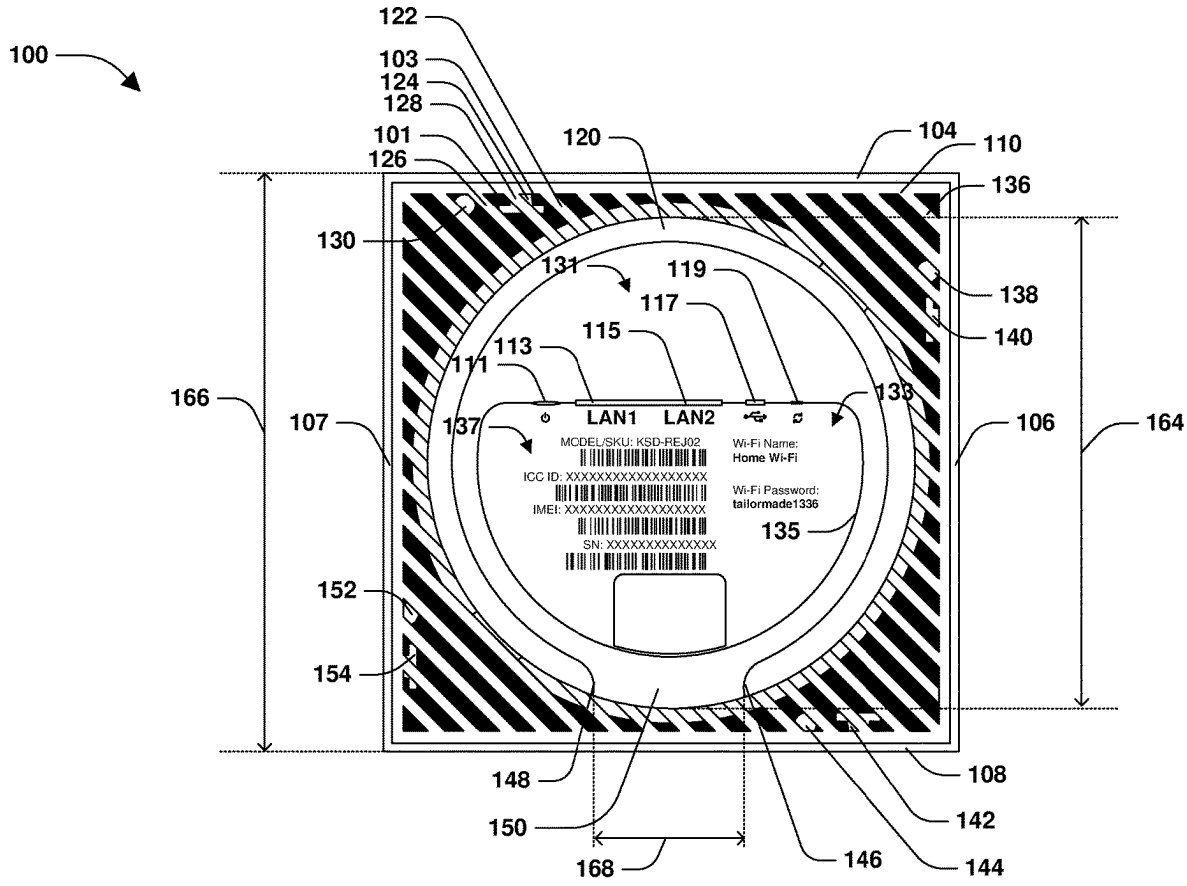


FIG. 1A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MODEL/SKU: KSD-REJ02
Wi-Fi Name:
Home Wi-Fi
ICC ID: XXXXXXXXXXXXXXXXXX
Wi-Fi Password:
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FIG. 1B

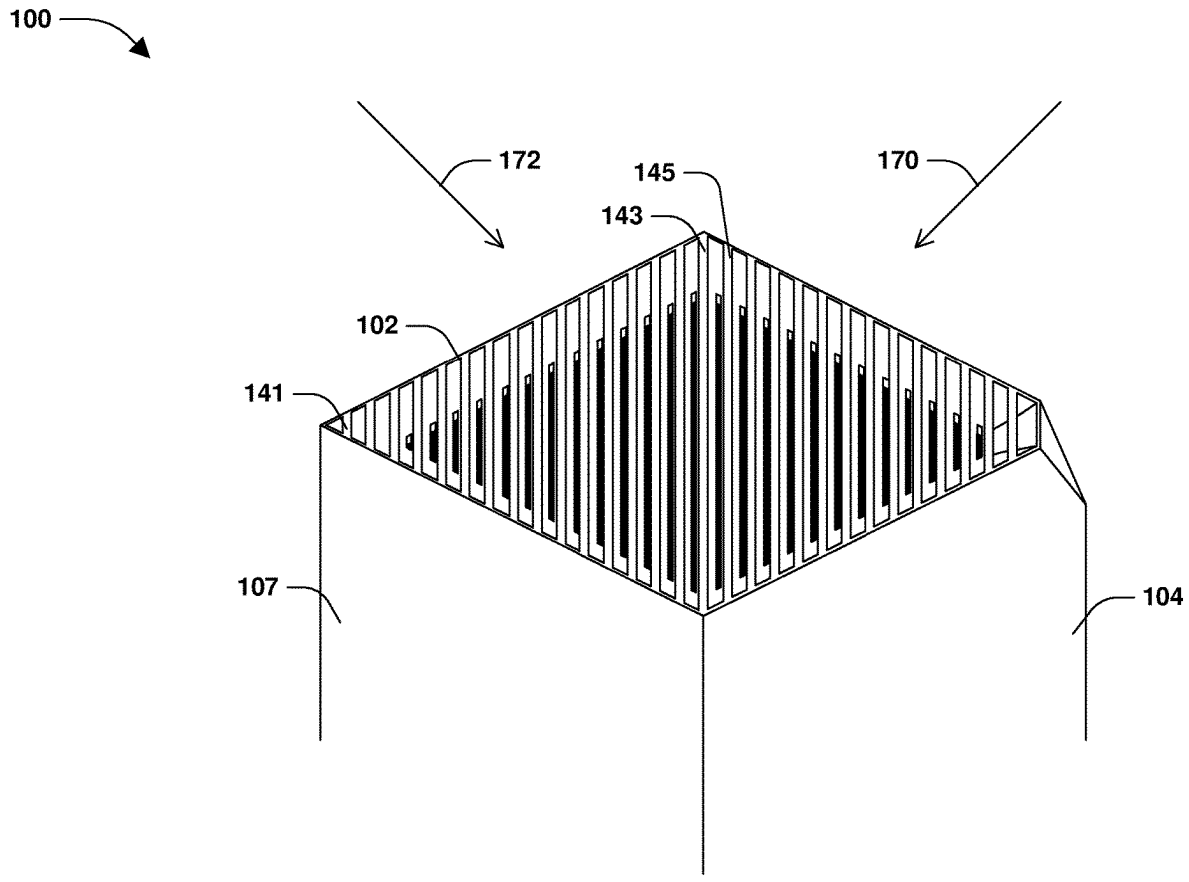

FIG. 1C

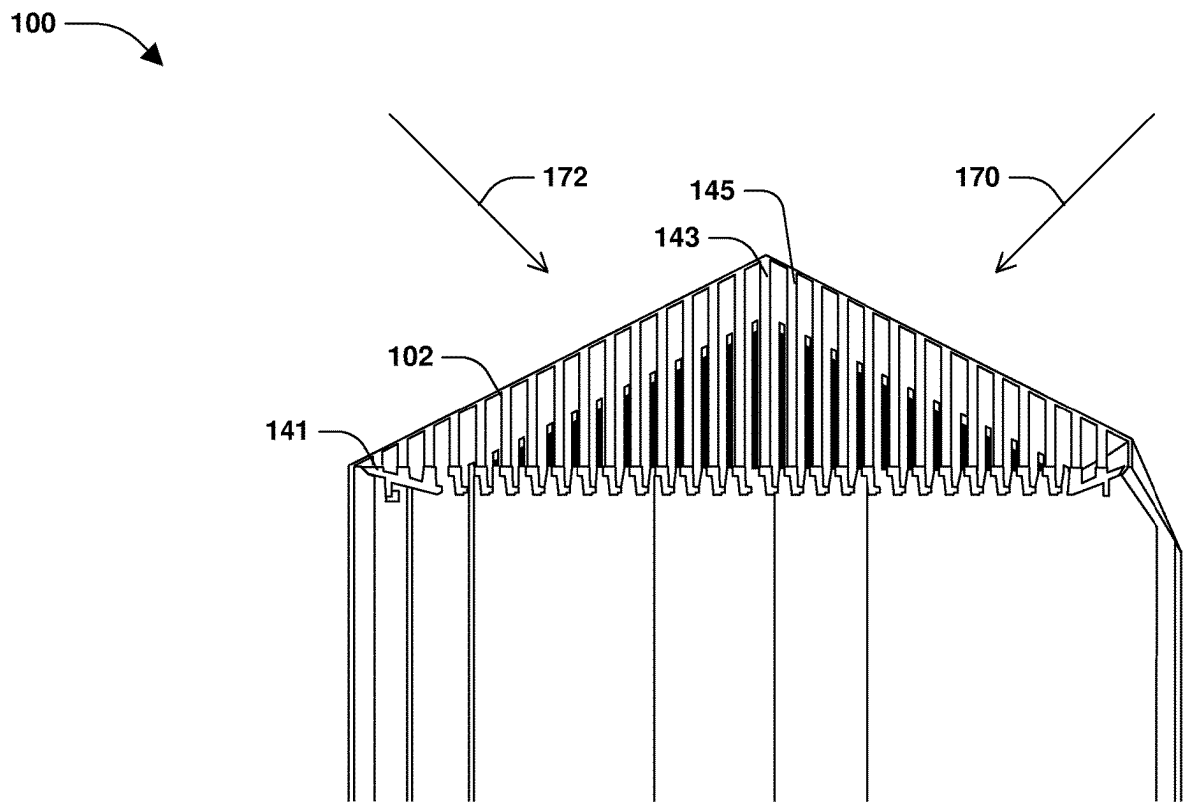

FIG. 1D

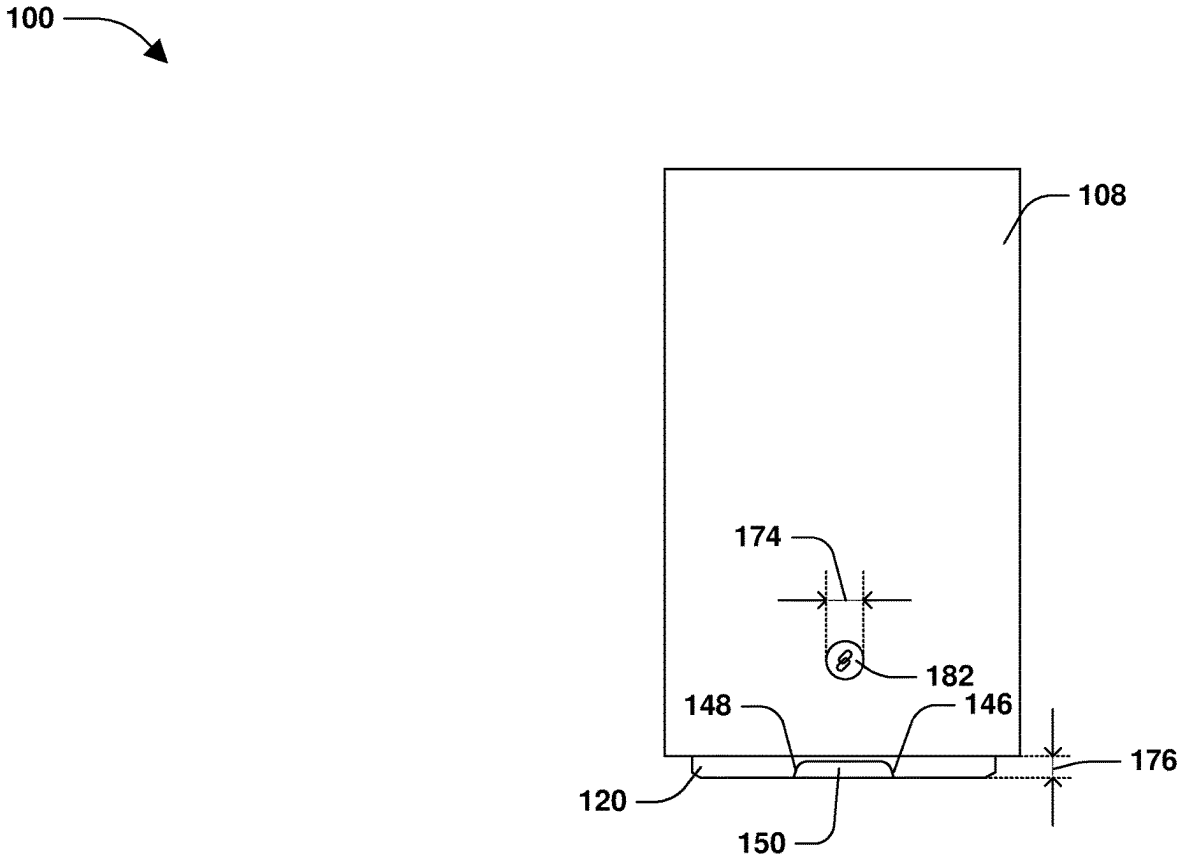

FIG. 1E

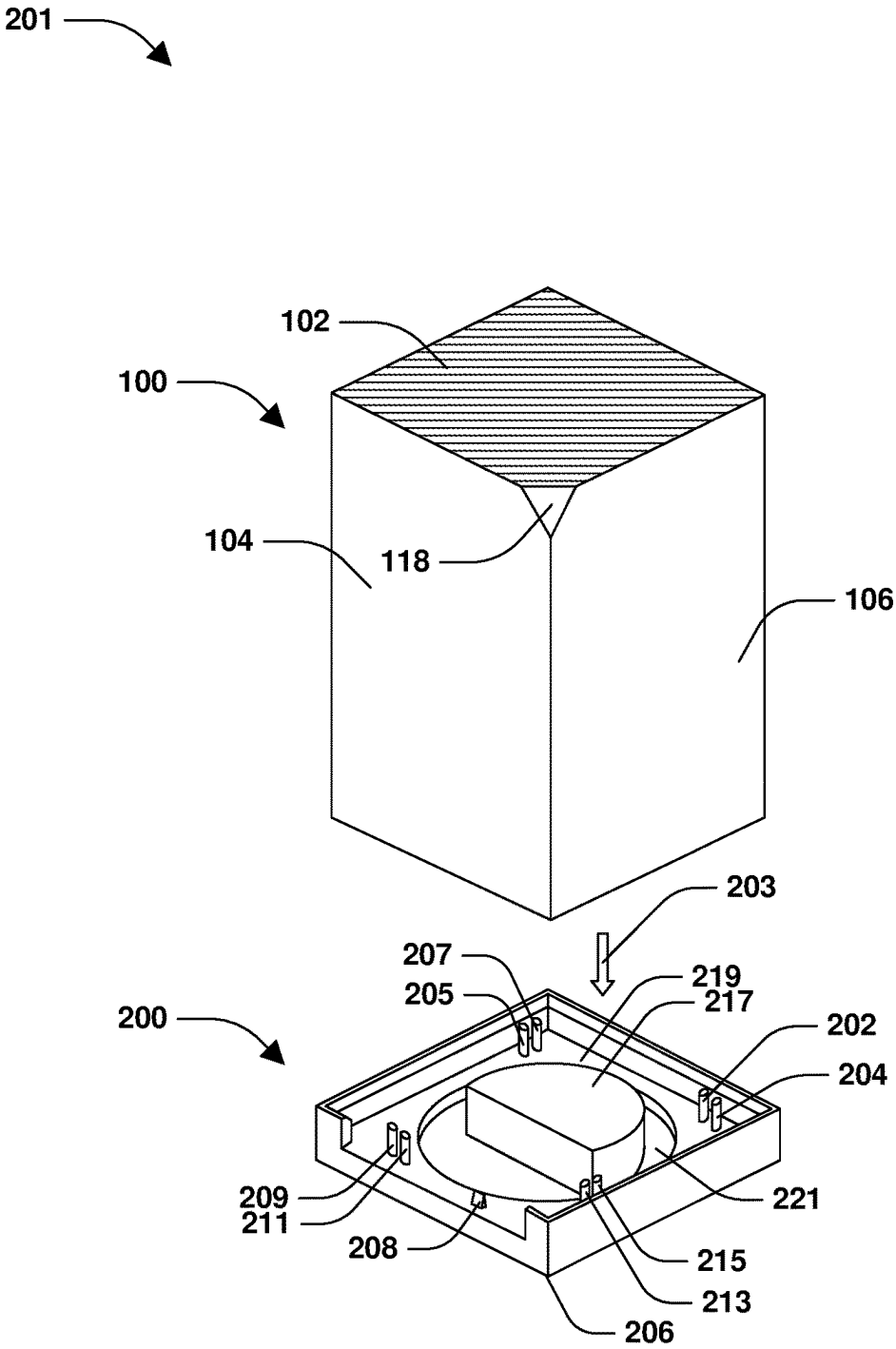
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FIG. 2A

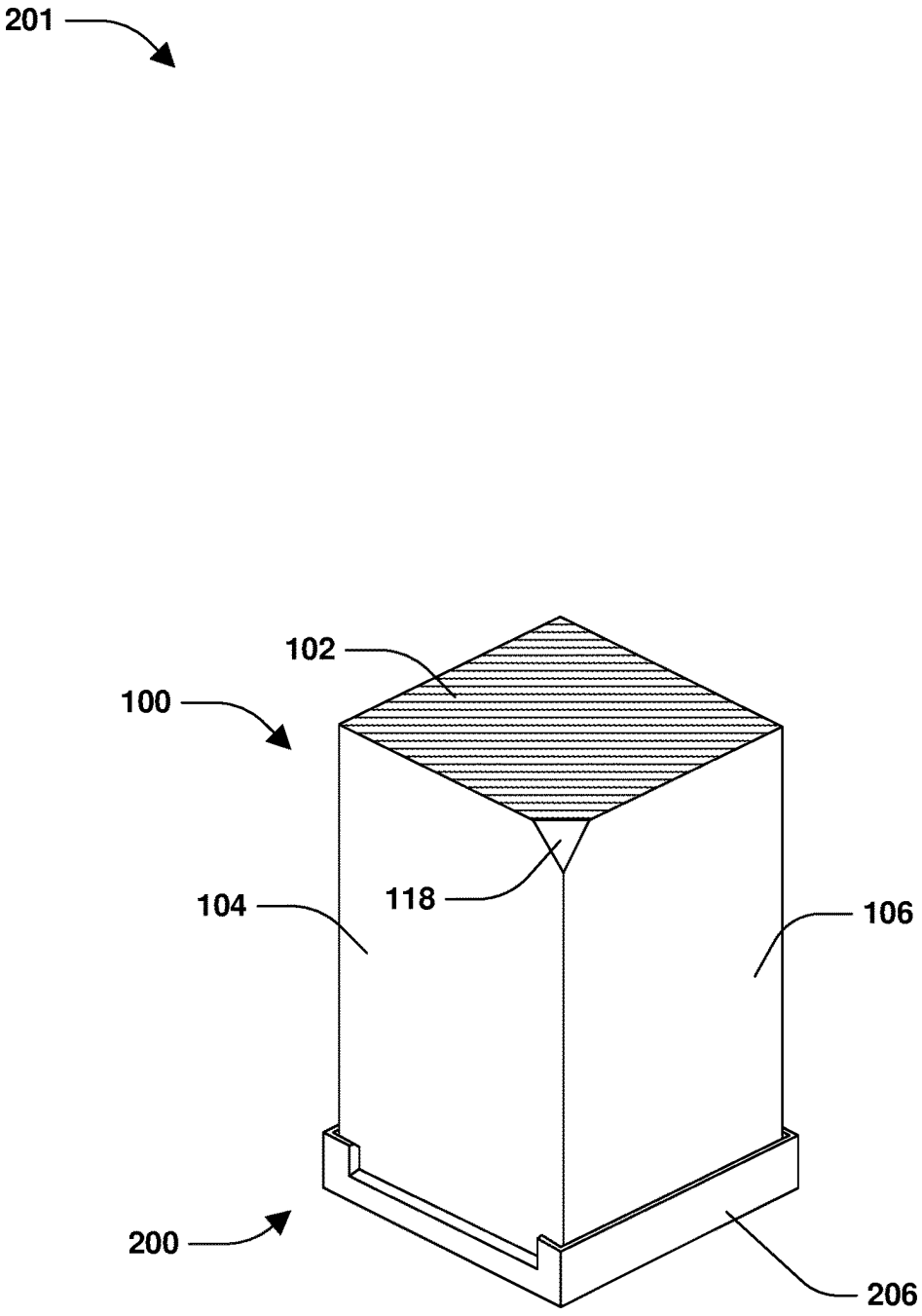

FIG. 2B

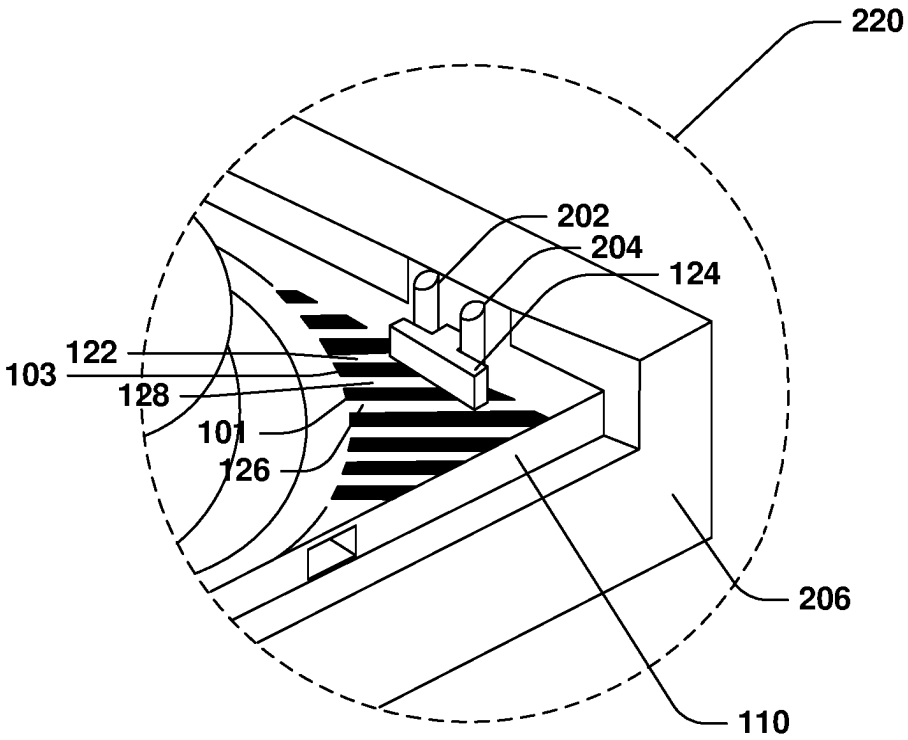

FIG. 2C

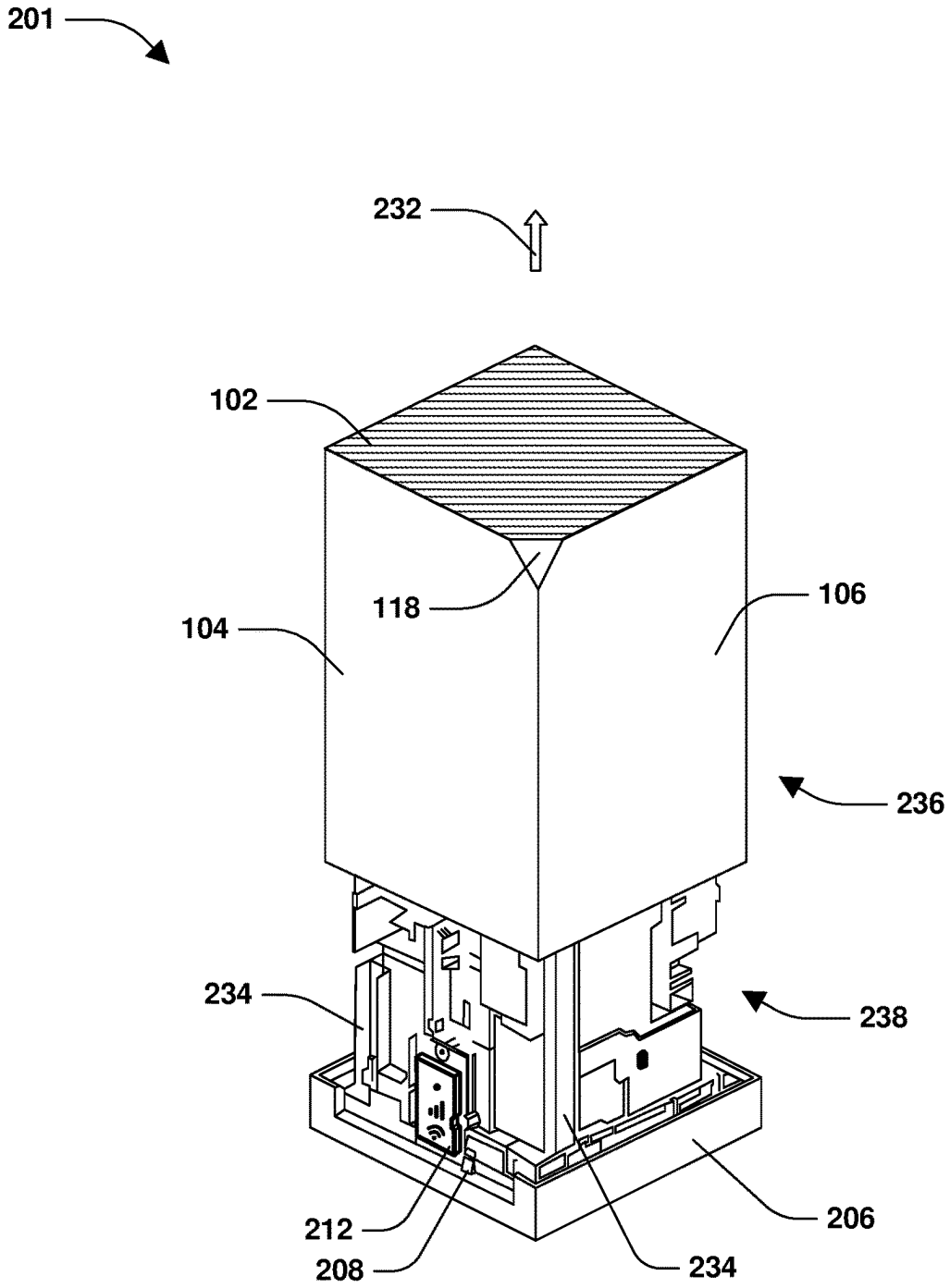

FIG. 2D

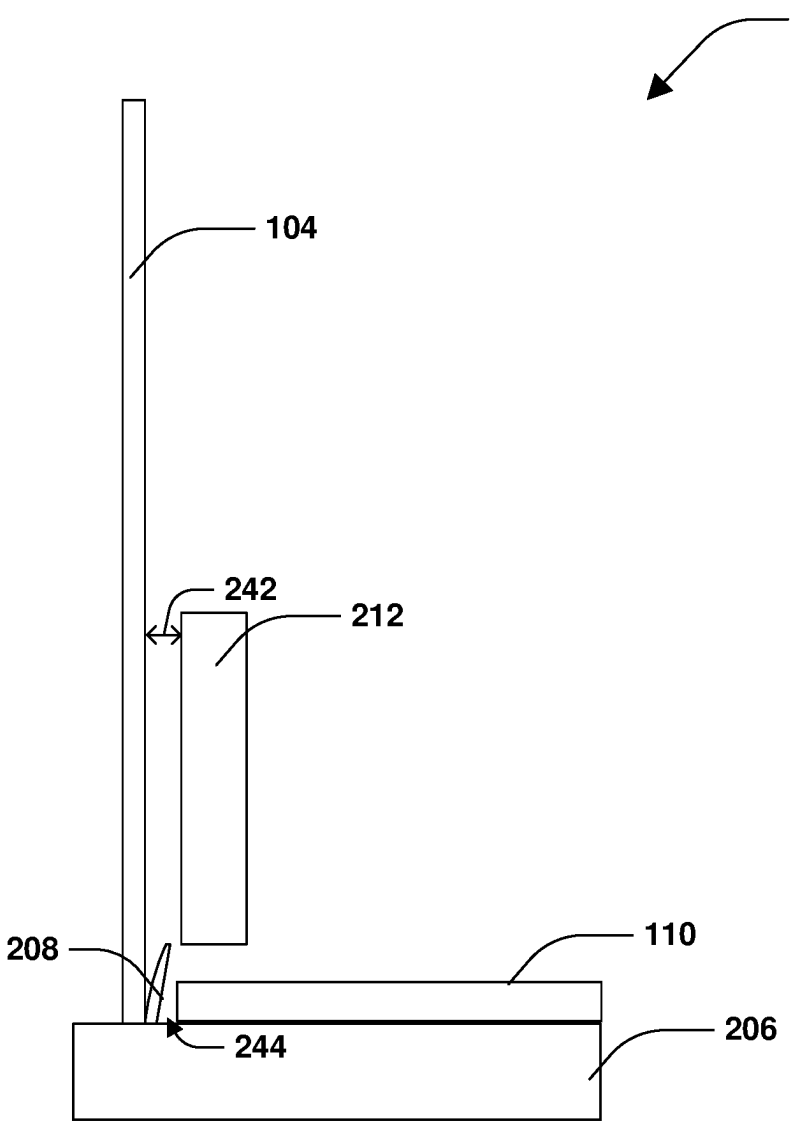

FIG. 2E

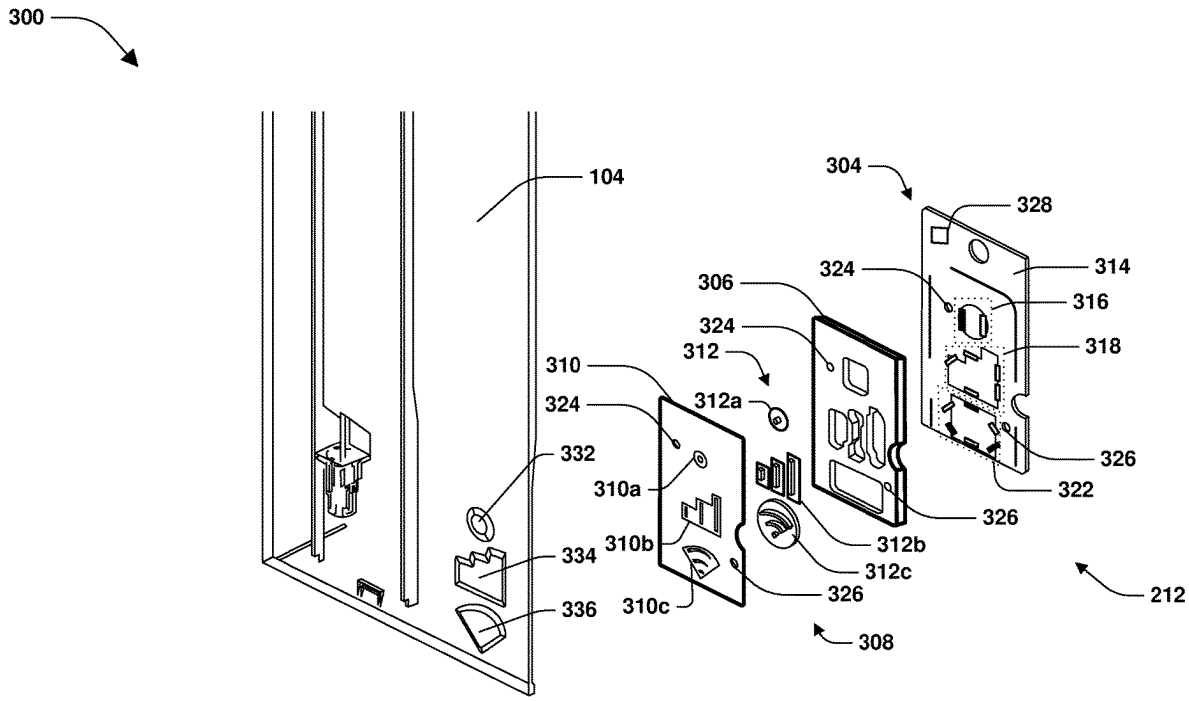
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FIG. 3

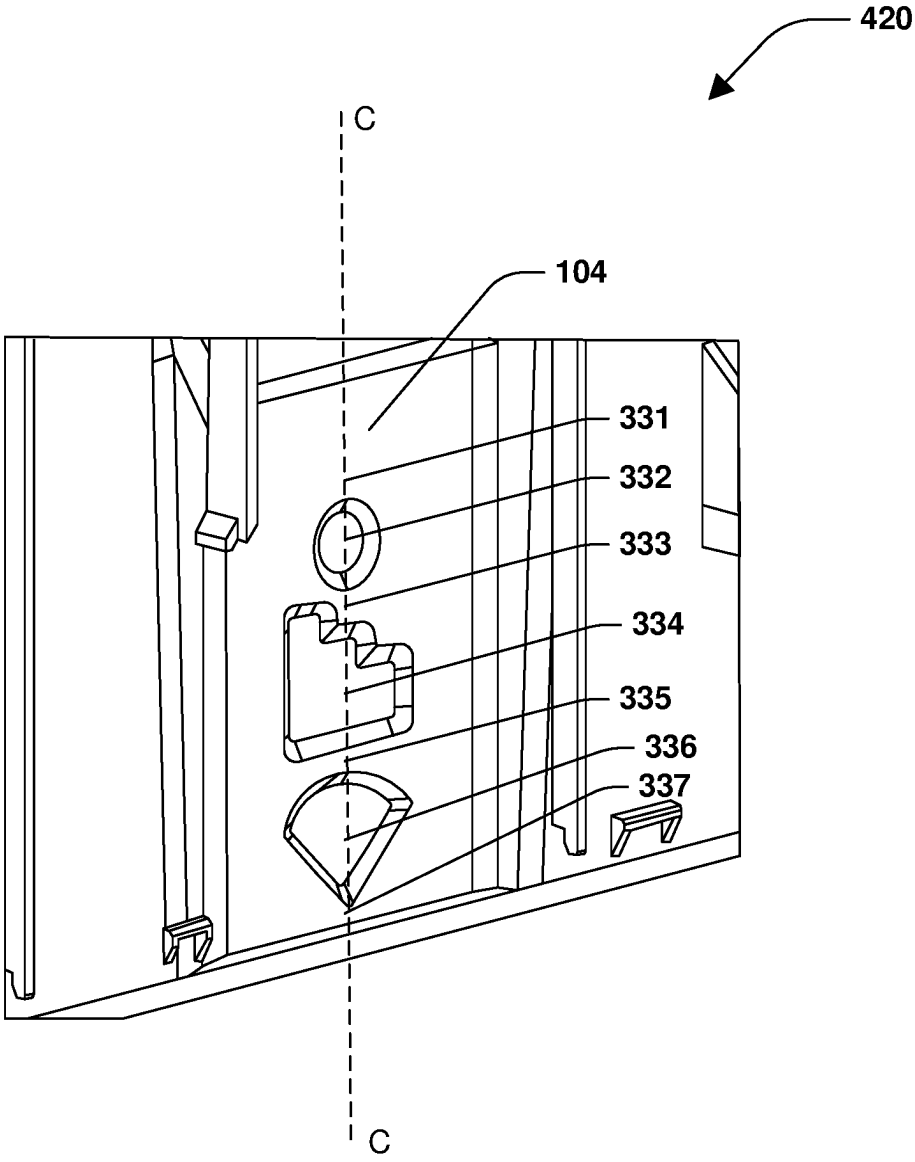

FIG. 4A

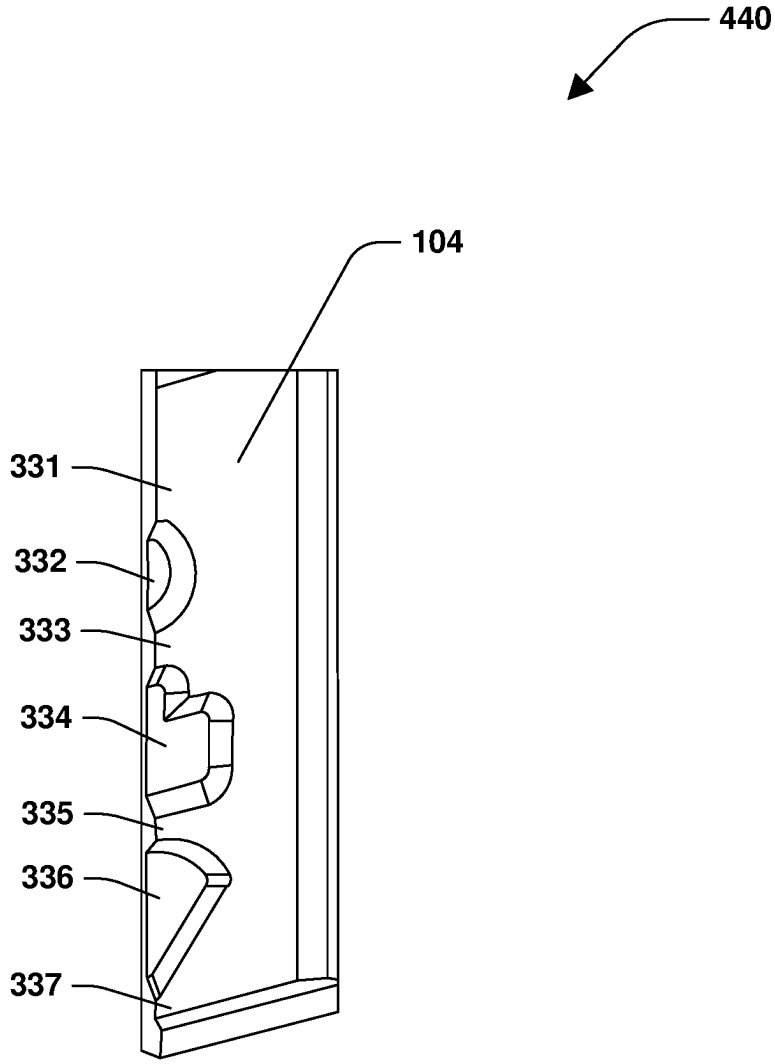

FIG. 4B

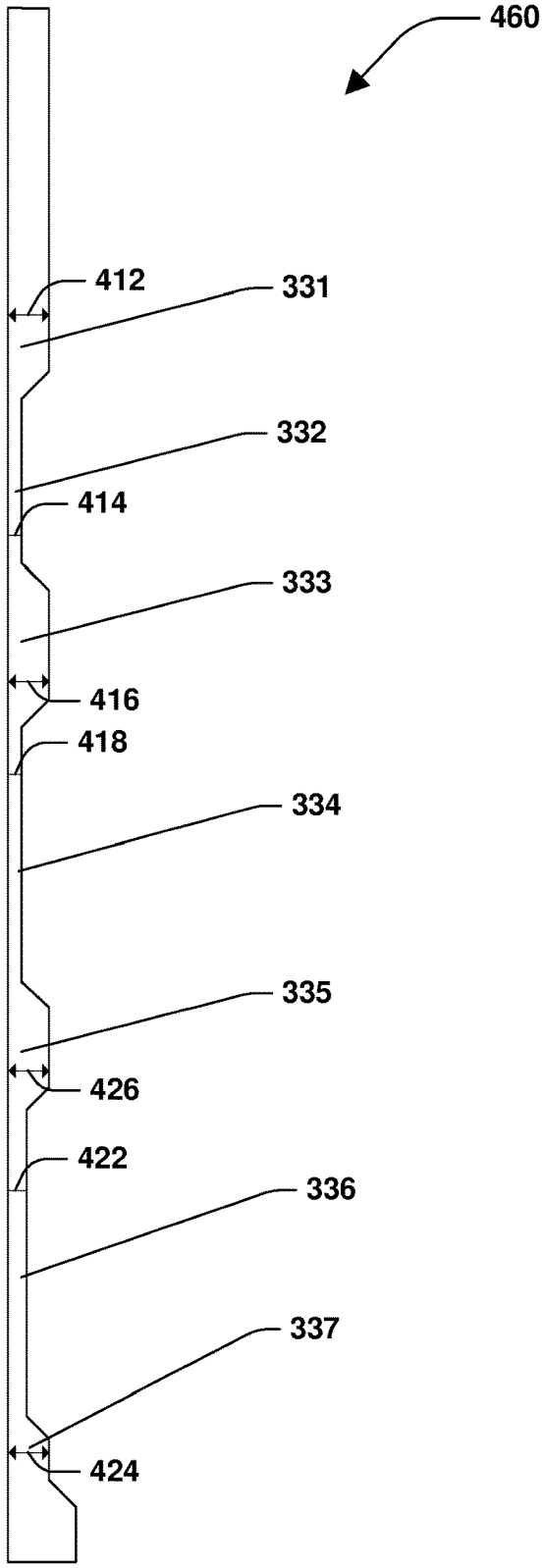

FIG. 4C

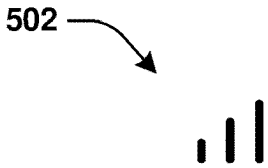

FIG. 5A

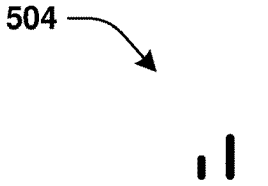

FIG. 5B

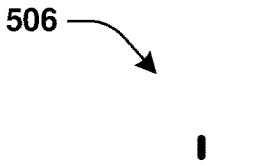

FIG. 5C

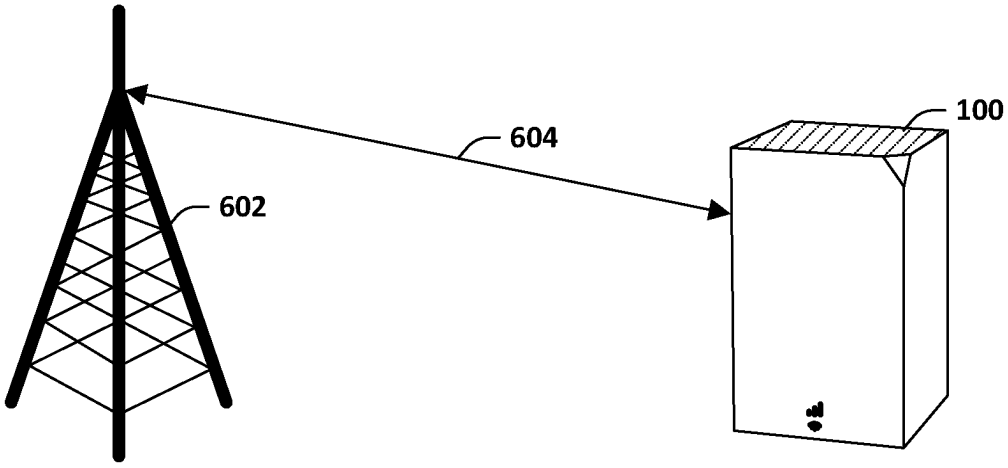

FIG. 6A

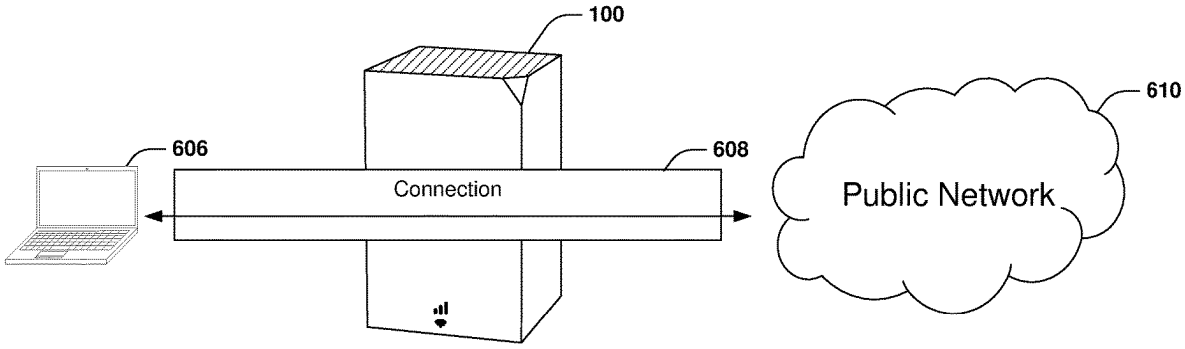

FIG. 6B

NETWORKING APPARATUS

BACKGROUND

[0001] A router is a networking device that communicates data packets between computer networks and/or performs traffic directing functions for networks which may include the Internet. A router may be used by a household, an office, etc. to establish a wireless network, configure a database and/or connect to the Internet.

BRIEF DESCRIPTION OF THE DRAWINGS

[0002] While the techniques presented herein may be embodied in alternative forms, the particular embodiments illustrated in the drawings are only a few examples that are supplemental of the description provided herein. These embodiments are not to be interpreted in a limiting manner, such as limiting the claims appended hereto.

[0003] FIG. **1**A is an illustration of a first perspective view of a networking apparatus according to some embodiments.

[0004] FIG. **1**B is an illustration of a bottom view of a networking apparatus according to some embodiments.

[0005] FIG. **1**C is an illustration of a second perspective view of a networking apparatus according to some embodiments.

[0006] FIG. **1**D is an illustration of a sliced perspective view of a networking apparatus according to some embodiments.

[0007] FIG. **1**E is an illustration of a backside view of a networking apparatus according to some embodiments.

[0008] FIG. **2**A is an illustration of a perspective view of a networking apparatus disassembly system comprising a networking apparatus and a jig according to some embodiments.

[0009] FIG. **2**B is an illustration of a perspective view of a networking apparatus disassembly system comprising a networking apparatus and a jig according to some embodiments.

[0010] FIG. **2**C is an illustration of a perspective view of one or more protrusions of a jig interacting with a first coupling feature according to some embodiments.

[0011] FIG. **2**D is an illustration of a perspective view of a networking apparatus disassembly system comprising a networking apparatus and a jig according to some embodiments.

[0012] FIG. **2**E is an illustration of a block representation of a side view of a first spacing tool, a first housing panel, an indicator light assembly, a base and/or a jig body relative to each other, according to some embodiments.

[0013] FIG. **3** is an illustration of an exploded view of an indicator light assembly relative to a first housing panel according to some embodiments.

[0014] FIG. **4**A is an illustration of a perspective view of a first housing panel according to some embodiments.

[0015] FIG. **4**B is an illustration of a sliced perspective view of a first housing panel according to some embodiments.

[0016] FIG. **4**C is an illustration of a cross-sectional view of a first housing panel according to some embodiments.

[0017] FIG. **5**A is an illustration of a first state of a signal strength indicator icon according to some embodiments.

[0018] FIG. **5**B is an illustration of a second state of a signal strength indicator icon according to some embodiments.

[0019] FIG. **5**C is an illustration of a third state of a signal strength indicator icon according to some embodiments.

[0020] FIG. **6**A is an illustration of a networking apparatus communicating with a telecommunication service site according to some embodiments.

[0021] FIG. **6**B is an illustration of a networking apparatus establishing a connection between a client device and a public network according to some embodiments.

DETAILED DESCRIPTION OF EXAMPLE EMBODIMENTS

[0022] Subject matter will now be described more fully hereinafter with reference to the accompanying drawings, which form a part hereof, and which show, by way of illustration, specific example embodiments. This description is not intended as an extensive or detailed discussion of known concepts. Details that are well known may have been omitted, or may be handled in summary fashion.

[0023] The following subject matter may be embodied in a variety of different forms, such as structures, apparatuses, methods, devices, components, and/or systems. Accordingly, this subject matter is not intended to be construed as limited to any example embodiments set forth herein. Rather, example embodiments are provided merely to be illustrative.

[0024] The term "overlying" and/or the like may be used to describe one element or feature being vertically coincident with and at a higher elevation than another element or feature. For example, a first element overlies a second element if the first element is at a higher elevation than the second element and at least a portion of the first element is vertically coincident with at least a portion of the second element.

[0025] The following provides a discussion of some types of scenarios in which the disclosed subject matter may be utilized and/or implemented.

[0026] FIGS. **1**A-**1**E illustrate aspects of a networking apparatus **100**, according to some embodiments. FIG. **1**A illustrates a first perspective view of the networking apparatus **100**. FIG. **1**B illustrates a bottom view of the networking apparatus **100**. FIG. **1**C illustrates a second perspective view of the networking apparatus **100**. FIG. **1**D illustrates a sliced perspective view of the networking apparatus **100**. FIG. **1**E illustrates a backside view of the networking apparatus **100**.

[0027] In some embodiments, the first housing panel **104** (e.g., a display panel) of the networking apparatus **100** comprises an icon display region **121** (shown in FIG. **1**A) in which one or more icons are displayed. The one or more icons may comprise a system status icon **112**, a signal strength indicator icon **114** and/or a wireless network status icon **116**. In some examples, a color and/or one or more other characteristics of an icon may be controlled to convey information, such as a status of the networking apparatus **100**.

[0028] In some examples, the networking apparatus **100** comprises a set of networking components, which may include, for example, an antenna, a carrier configured to hold the antenna, a wireless communication module connected to the antenna, etc. The set of networking components may be configured to perform networking operations to provide one or more telecommunication services (e.g., Internet service) to one or more users. For example, the networking apparatus **100** may establish a wireless network, such as a wireless

local area network (WLAN) (e.g., a Wi-Fi network). In some examples, the networking apparatus **100** may connect one or more client devices to one or more networks (by performing wide area network (WAN) routing, for example). The one or more networks may include the Internet, one or more remote networks, one or more remote private networks, etc.

[0029] The networking apparatus **100** may comprise a housing assembly comprising a first housing panel **104**, a second housing panel **106**, a third housing panel **108** (shown in FIG. **1**E) opposing the first housing panel **104**, a fourth housing panel **107** (shown in FIG. **1**C) opposing the second housing panel **106**, a fifth housing panel **102** (e.g., a top housing panel) and/or a base **110** (shown in FIG. **1**B) (e.g., a bottom housing panel) opposing the fifth housing panel **102**. The housing assembly may comprise a tapered corner **118** between the first housing panel **104**, the second housing panel **106** and/or the fifth housing panel **102**. The housing assembly may be configured to house the set of networking components. For example, the housing assembly may at least partially surround the set of networking components. The set of networking components may be disposed in a housing chamber defined by the housing assembly (e.g., the housing chamber may be defined by inner walls of housing panels of the housing assembly). In some examples, the fifth housing panel **102** may correspond to a top side of the networking apparatus **100**, and/or the base **110** may correspond to a bottom side of the networking apparatus **100**.

[0030] The base **110** may comprise a wall **120** (shown in FIGS. **1**B and **1**E), which may protrude from the base **110** such that the wall **120** interfaces with a surface (e.g., the surface of a desk, a table, a cabinet, etc.) upon which the networking apparatus **100** is set. The wall **120** may at least partially encircle a region **131**, which may include a groove **133** (e.g., a depression in the base **110**) defined by a sidewall **135** of the base **110**. In some examples, the base **110** may comprise one or more ports, such as a power port **111**, a first local area network (LAN) port **113**, a second LAN port **115** and/or a Universal Serial Bus (USB) port **117**. Other ports (for networking, data transfer, configuration installation, etc., for example) are within the scope of the present disclosure. In some examples, the one or more ports may face the groove **133**. The groove **133** may provide space for a connector (e.g., a power connector, a LAN connector, a USB connector, etc.) of a cable to be inserted into and/or coupled with a port of the one or more ports. In some examples, the wall **120** may define a cable space **150** for the cable to be disposed. The cable space **150** may be defined by a first end **146** of the wall **120** and a second end **148** of the wall **120**. Alternatively and/or additionally, the base **110** may comprise a reset button **119** adjacent the one or more ports (e.g., the reset button **119** may face the groove **133**).

[0031] In some examples, information **137** may be displayed by a surface (in the groove **133**, for example) of the base **110** (e.g., the information **137** may be printed on the surface and/or a label attached to the surface). The information **137** may comprise at least one of a name (e.g., a service set identifier (SSID)) of the wireless network (e.g., Home Wi-Fi), a password of the wireless network, a model identifier and/or stock keeping unit (SKU) associated with the networking apparatus **100**, an International Mobile Equipment Identity (IMEI) associated with the networking apparatus **100**, a serial number associated with the networking apparatus **100**, a quick-response (QR) code (not shown) (and/or other type of code) for connecting to the wireless network (e.g., the QR code may be used to automatically connect a client device to the wireless network without manually entering the password of the wireless network), and/or other information associated with the networking apparatus **100** and/or the wireless network.

[0032] In some examples, the base **110** comprises a first venting structure **136**, which may be used to exhaust air (e.g., relatively hotter air) out of the housing chamber and/or introduce air (e.g., relatively cooler air) into the housing chamber. The first venting structure **136** may comprise a first louver **126**, a second louver **128**, a third louver **122** and/or other louvers. In some examples, openings defined by louvers of the first venting structure **136** (e.g., a first vent opening **101** defined by the first louver **126** and the second louver **128**, a second vent opening **103** defined by the second louver **128** and the third louver **122**, etc.) may expose and/or may provide for access to one or more mechanisms of the housing assembly, such as one or more first coupling features, one or more first fasteners (e.g., a first fastener **130**, a second fastener **138**, a third fastener **144** and/or a fourth fastener **152**), and/or one or more other mechanisms. In some examples, a fastener (e.g., the first fastener **130**, the second fastener **138**, the third fastener **144** and/or the fourth fastener **152**) of the one or more first fasteners may comprise at least one of a clip, a screw, a bolt, a nut, etc.

[0033] In some examples, a coupling feature (e.g., a first coupling feature **124**, a second coupling feature **140**, a third coupling feature **142** and/or a fourth coupling feature **154**) of the one or more first coupling features may be used to couple the base **110** to a housing body (identified with reference number **236** in FIG. **2**D) of the housing assembly. The housing body **236** may comprise the first housing panel **104**, the second housing panel **106**, the third housing panel **108**, the fourth housing panel **107** and/or the fifth housing panel **102**. The first housing panel **104**, the second housing panel **106**, the third housing panel **108**, the fourth housing panel **107** and/or the fifth housing panel **102** may comprise two, three, four, five or more separate structures (e.g., five individual panels) that are attached, such as with mechanical fasteners, adhesives, etc. In some examples, the first housing panel **104**, the second housing panel **106**, the third housing panel **108**, the fourth housing panel **107** and/or the fifth housing panel **102** (e.g., a portion of the housing body **236** and/or the housing body **236** as a whole) may be integrally formed, one piece formed, a single composite piece, etc. Alternatively and/or additionally, the first housing panel **104**, the second housing panel **106**, the third housing panel **108**, the fourth housing panel **107** and/or the fifth housing panel **102** (e.g., a portion of the housing body **236** and/or the housing body **236** as a whole) may be formed via at least one of 3D printing (e.g., using 3D printable material, such as 3D printable plastic), additive manufacturing, etc.

[0034] A bottom view of at least one of the first housing panel **104**, the second housing panel **106**, the third housing panel **108** and/or the fourth housing panel **107** is shown in FIG. **1**B, in accordance with some embodiments. In an example, the first coupling feature **124** may couple the base **110** to the first housing panel **104** (when the first coupling feature **124** is in an engaged state, for example), the second coupling feature **140** may couple the base **110** to the second housing panel **106** (when the second coupling feature **140** is in an engaged state, for example), the third coupling feature **142** may couple the base **110** to the third housing panel **108** (when the third coupling feature **142** is in an engaged state,

for example), and/or the fourth coupling feature **154** may couple the base **110** to the fourth housing panel **107** (when the fourth coupling feature **154** is in an engaged state, for example).

[0035] Referring to FIG. **1**C, in some examples, the fifth housing panel **102** may comprise a second venting structure **141**. The second venting structure **141** may overlie at least some of the set of networking components (e.g., the second venting structure **141** may overlie at least one of the antenna, the carrier, etc.). In some examples, the second venting structure **141** may comprise a plurality of louvers. FIG. **1**D provides a sliced perspective view of the second venting structure **141** to show cross-sectional shapes of the plurality of louvers. In some embodiments of the present disclosure, such as shown in FIG. **1**D, a cross-sectional shape of at least some of the plurality of louvers may be z-shape. For example, one, some and/or all of the plurality of louvers of the second venting structure **141** may be z-shaped louvers. Other cross-sectional shapes of the plurality of louvers of the second venting structure **141** are within the scope of the present disclosure. The plurality of louvers may comprise a fourth louver **143** (e.g., a z-shaped louver), a fifth louver **145** (e.g., a z-shaped louver), etc.

[0036] In some examples, the plurality of louvers (i) obstructs visibility into the housing chamber (e.g., inner chamber of the housing assembly) from a first perspective **170** and/or (ii) allows visibility into the housing chamber from a second perspective **172**, such as due, at least in part, to the cross-sectional shape (e.g., z-shape) of at least some of the plurality of louvers. For example, a person viewing the networking apparatus **100** from the first perspective **170** may view less of the housing chamber (and/or may not be able to view the housing chamber) than a person viewing the networking apparatus **100** from the second perspective **172**. From the perspective of a person that is in front of the networking apparatus **100** and/or facing a front side (e.g., the first housing panel **104**) of the networking apparatus **100**, the person may view less of the housing chamber (and/or may not be able to view the housing chamber), as compared to the perspective of a person that is behind the networking apparatus **100** and/or facing a back side (e.g., the third housing panel **108**) of the networking apparatus **100**. Alternatively and/or additionally, in comparison with louvers that are not z-shaped, z-shaped louvers may provide for a more visually uniform appearance (e.g., less and/or zero shadows, less and/or zero negative space, etc.) from the perspective of a person that is in front of the networking apparatus **100** and/or facing the front side (e.g., the first housing panel **104**) of the networking apparatus **100** (and/or viewing the networking apparatus **100** from the first perspective **170**). Thus, the networking apparatus **100** may have a more visually appealing aesthetic, such as due, at least in part, to the plurality of louvers at least partially hiding inner components (e.g., at least one of the antenna, the carrier, etc.) of the networking apparatus **100** from a person proximate the networking apparatus **100** such that the inner components (and/or vent openings and/or louvers of the second venting structure **141**) appear invisible and/or at least partially hidden to the person.

[0037] Referring to FIG. **1**E, the third housing panel **108** may comprise a button **182** (e.g., a push button). The button **182** may be pressed to activate a feature, such as a first security feature. In some examples, the first security feature may correspond to Wi-Fi Protected Setup (WPS) (e.g., the button **182** may be a WPS button). In some examples, the button **182** may be pressed to initiate a WPS operation to connect a client device to the wireless network.

[0038] In some examples, a dimension **162** shown in FIG. **1**A (e.g., the dimension **162** may correspond to a height of the first housing panel **104** and/or the housing body **236**) is between at least about 160 millimeters to at most about 260 millimeters (and/or between at least about 210 millimeters to at most about 220 millimeters). In some examples, a dimension **160** shown in FIG. **1**A (e.g., the dimension **160** may correspond to a width of the first housing panel **104** and/or the housing body **236**) is between at least about 80 millimeters to at most about 180 millimeters (and/or between at least about 125 millimeters to at most about 135 millimeters). In some examples, a dimension **166** shown in FIG. **1**B (e.g., the dimension **166** may correspond to a width of the second housing panel **106** and/or the fourth housing panel **107** and/or a depth of the housing body **236**) is between at least about 80 millimeters to at most about 180 millimeters (and/or between at least about 125 millimeters to at most about 135 millimeters). In some examples, a dimension **164** shown in FIG. **1**B (e.g., the dimension **164** may correspond to a diameter of a circle at least partially defined by the wall **120**) is between at least about 60 millimeters to at most about 160 millimeters (and/or between at least about 105 millimeters to at most about 115 millimeters). In some examples, a dimension **168** shown in FIG. **1**B (e.g., the dimension **168** may correspond to a distance between the first end **146** and the second end **148** of the wall **120**) is between at least about 16 millimeters to at most about 36 millimeters (and/or between at least about 22 millimeters to at most about 30 millimeters). In some examples, a dimension **174** shown in FIG. **1**E (e.g., the dimension **174** may correspond to a diameter of the button **182**) is between at least about 5 millimeters to at most about 25 millimeters (and/or between at least about 10 millimeters to at most about 20 millimeters). In some examples, a dimension **176** shown in FIG. **1**E (e.g., the dimension **176** may correspond to a height of the wall **120**) is between at least about 1 millimeter to at most about 20 millimeters (and/or between at least about 5 millimeters to at most about 10 millimeters). In some examples, at least some of the housing assembly (e.g., exterior rigid components such as the first housing panel **104**, the second housing panel **106**, the third housing panel **108**, the fourth housing panel **107**, the fifth housing panel **102** and/or the base **110**) may comprise (e.g., may be at least partially made of) polycarbonate, acrylonitrile butadiene styrene (ABS) plastic (e.g., a PC/ABS blend comprising post-consumer recycled content), and/or other material. In some examples, the wall **120** and/or a rubber foot (e.g., a rubber foot that protrudes from the base **110** and/or interfaces with a surface, such as the surface of a desk, a table, a cabinet, etc.) may comprise thermoplastic polyurethane and/or other material.

[0039] FIGS. **2**A-**2**E illustrate aspects of a networking apparatus disassembly system **201**, in accordance with some embodiments. FIG. **2**A illustrates a perspective view of the networking apparatus disassembly system **201**. In some examples, the networking apparatus disassembly system **201** may comprise a jig **200** to disassemble the networking apparatus **100**. For example, the networking apparatus **100** may be disassembled using the jig **200** for at least one of repairing the networking apparatus **100**, refurbishing the networking apparatus **100**, reconfiguring the networking

apparatus **100**, investigating one or more aspects of the networking apparatus **100**, replacing one or more components (e.g., an electronic and/or networking component that functions incorrectly), cleaning one or more components of the networking apparatus **100**, etc.

[0040] In some examples, the jig **200** may comprise a jig body **206** and one or more first protrusions (e.g., one or more pins) protruding from the jig body **206**. In some examples, the one or more first protrusions comprise a first protrusion **202**, a second protrusion **204**, etc. In some examples, the first protrusion **202** and/or the second protrusion **204** may protrude from the jig body **206** and/or may interact with the first coupling feature **124**. For example, the first protrusion **202** and/or the second protrusion **204** may contact (e.g., directly and/or indirectly contact) the first coupling feature **124** when the networking apparatus **100** is set in a first position relative to the jig body **206** (e.g., when the networking apparatus **100** is placed upon the jig body **206**).

[0041] FIG. **2**B illustrates the networking apparatus disassembly system **201** when the networking apparatus **100** has the first position relative to the jig **200**, in accordance with some embodiments. In some examples, the first protrusion **202** and/or the second protrusion **204** may be moved in a first direction **203** (shown in FIG. **2**A) to transfer the networking apparatus **100** to the first position (e.g., the first protrusion **202** and/or the second protrusion **204** may contact the first coupling feature **124** during placement of the networking apparatus **100** onto the jig **200**). For example, the first protrusion **202** and/or the second protrusion **204** may contact the first coupling feature **124** while the networking apparatus **100** is moved in the first direction **203**. In some examples, the contact (e.g., direct and/or indirect contact) of the first protrusion **202** and/or the second protrusion **204** with the first coupling feature **124** may disengage the first coupling feature **124** to allow the housing body **236** to be moved relative to the base **110**.

[0042] FIG. **2**C illustrates a representation **220** of a perspective view of the first protrusion **202** and/or the second protrusion **204** of the jig **200** interacting with the first coupling feature **124**, in accordance with some embodiments. Structures and/or components other than the jig body **206**, the base **110** (comprising louvers of the first venting structure **136**), the first protrusion **202** and/or the second protrusion **204** are removed from the representation **220** provided in FIG. **2**C in order to show positions of the jig body **206**, the base **110** (comprising louvers of the first venting structure **136**), the first protrusion **202** and/or the second protrusion **204** relative to each other while the networking apparatus **100** has the first position relative to the jig **200**. The first protrusion **202** may extend through the second vent opening **103** defined by the second louver **128** and the third louver **122**. The second protrusion **204** may extend through the first vent opening **101** defined by the first louver **126** and the second louver **128**. In some examples, the first coupling feature **124** (and/or other coupling features of the networking apparatus **100**) may comprise a snap feature that is disengaged (e.g., released) by the first protrusion **202** and/or the second protrusion **204**. Other types of coupling mechanisms of the first coupling feature **124** (and/or other coupling features of the networking apparatus **100**) are within the scope of the present disclosure.

[0043] In some examples, the one or more first protrusions of the jig **200** comprise one or more other protrusions (in addition to the first protrusion **202** and/or the second protrusion **204**, for example) to interact with one or more other coupling features (e.g., the second coupling feature **140**, the third coupling feature **142** and/or the fourth coupling feature **154**) of the networking apparatus **100**. For example, when the networking apparatus **100** has the first position relative to the jig **200** (and/or while the networking apparatus **100** is transferred to the first position), (i) a protrusion **205** and/or a protrusion **207** (shown in FIG. **2**A) of the jig **200** may contact the second coupling feature **140**, which may disengage the second coupling feature **140**, (ii) a protrusion **209** and/or a protrusion **211** may contact the third coupling feature **142**, which may disengage the third coupling feature **142**, and/or (iii) a protrusion **213** and/or a protrusion **215** may contact the fourth coupling feature **154**, which may disengage the fourth coupling feature **154**. Thus, in accordance with some embodiments, coupling features of the networking apparatus **100** may be disengaged (automatically, for example) when the networking apparatus **100** has the first position (by way of the one or more first protrusions of the jig **200** contacting the coupling features, for example), which may release the base **110** from the housing body **236** such that the housing body **236** can be pulled apart and/or separated from the base **110**.

[0044] In some examples, a technician and/or a robot tasked with disassembling the networking apparatus **100** may (i) place the networking apparatus **100** in the first position relative to the jig **200** and/or (ii) (once the networking apparatus **100** is in the first position, for example) pull the housing body **236** (which may include the first housing panel **104**, the second housing panel **106**, the third housing panel **108**, the fourth housing panel **107** and/or the fifth housing panel **102**) in a second direction **232** (shown in FIG. **2**D) to separate the housing body **236** from the base **110**. In some examples, prior to (or after) placing the networking apparatus **100** in the first position relative to the jig **200**, the one or more first fasteners may be loosened and/or removed (by the technician and/or the robot, for example) using a tool such as at least one of a screwdriver, a drill, etc. The tool may access the one or more first fasteners via vent openings defined by louvers of the first venting structure **136** of the base **110**.

[0045] In some examples, a fastener (e.g., the first fastener **130**, the second fastener **138**, the third fastener **144** and/or the fourth fastener **152**) of the one or more first fasteners may comprise a captive fastener (e.g., a captive screw), which may provide a secure joining (between the base **110** and the housing body **236**, for example) and/or may be configured to remain attached to the networking apparatus **100**, even when the captive fastener is loosened, which may provide for safer and/or easier disassembly of the networking apparatus **100** (by way of avoiding loosened screws from escaping during disassembly of the networking apparatus **100**, for example). In some examples, when the one or more first fasteners are loosened and/or the one or more first coupling features are disengaged, the housing body **236** may be separated from the base **110** by the technician and/or the robot (i) gripping the housing body **236** and/or (ii) applying, to the housing body **236**, a force that moves the housing body **236** in the second direction **232**. Thus, in accordance with some embodiments, the networking apparatus disassembly system **201** enables the networking apparatus **100** to be more quickly disassembled with a reduced amount of (and/or zero) tools, screws, etc.

[0046] FIG. **2**D illustrates the housing body **236** being moved in the second direction **232** to separate the housing body **236** from the base **110**, in accordance with some embodiments. According to some embodiments, the housing assembly comprises a chassis **234** configured to support one or more components of the set of networking components. In some examples, the chassis **234** comprises an assembly of at least one of arms, posts, beams, etc. to which at least some of the set of networking components are mounted. In some examples, moving the housing body **236** relative to the base **110** (such as in the second direction **232** shown in FIG. **2**D) exposes at least some of the chassis **234** and at least some of the set of networking components. In this way, the technician and/or a robot may gain access to a component of the set of networking components (to at least one of service, test, clean, replace, etc. the component, for example).

[0047] According to some embodiments, the jig **200** comprises a first spacing tool **208** (shown in FIGS. **2**A, **2**D and **2**E) protruding from the jig body **206**. The first spacing tool **208** may be configured to (i) separate the first housing panel **104** from an indicator light assembly **212** (shown in FIGS. **2**D-**2**E), and/or (ii) mitigate a force from the first housing panel **104** to the indicator light assembly **212** (during the movement of the housing body **236** relative to the base **110**, for example), thereby protecting the indicator light assembly **212** from damage during disassembly of the networking apparatus **100**.

[0048] FIG. **2**E illustrates a block representation **240** of a side view of the first spacing tool **208**, the first housing panel **104**, the indicator light assembly **212**, the base **110**, and/or the jig body **206** (upon which the networking apparatus **100** is set, for example). Structures and/or components other than the first spacing tool **208**, the first housing panel **104**, the indicator light assembly **212**, the base **110** and/or the jig body **206** are removed from the block representation **240** provided in FIG. **2**E in order to show positions of the first spacing tool **208**, the first housing panel **104**, the indicator light assembly **212**, the base **110** and/or the jig body **206** relative to each other while the networking apparatus **100** has the first position relative to the jig **200**. The first spacing tool **208** may extend through an opening **244** between an opening **244** between the first housing panel and the base **110**. Embodiments are contemplated in which the first spacing tool **208** extends through a vent opening defined by the first venting structure **136** of the base **110**. In some examples, the first spacing tool **208** may interface with the first housing panel **104** to separate the first housing panel **104** from the indicator light assembly **212** by a distance **242** (which may be at least about 0.1 millimeters, for example). In some examples, the first spacing tool **208** may apply, to the first housing panel **104**, a force in a direction away from the indicator light assembly **212**, which may mitigate (e.g., prevent) collision of the first housing panel **104** with the indicator light assembly **212** (thereby protecting the indicator light assembly **212** from being damaged by the first housing panel **104**, for example).

[0049] For example, the first spacing tool **208** (e.g., a shim and/or a pry tool) may interface with a detent of the housing body **236** (e.g., a bottom edge of the first housing panel **104** may comprise the detent), which may allow the first spacing tool **208** to pry the first housing panel **104** away from the indicator light assembly **212** (and/or away from the center of the networking apparatus **100**). In some examples, during normal operation of the networking apparatus **100**, one or more respective portions of the indicator light assembly **212** may be disposed in (and/or pressed into) one or more recesses defined by the first housing panel **104** (e.g., the one or more recesses may be defined by a first locally thinned portion **332**, a second locally thinned portion **334** and/or a third locally thinned portion **336** of the first housing panel **104**). Alternatively and/or additionally, the one or more respective portions of the indicator light assembly **212** may be in contact with the first locally thinned portion **332**, the second locally thinned portion **334**, and/or the third locally thinned portion **336** during normal operation of the networking apparatus **100**. In some examples, one or more relatively thicker portions of the first housing panel **104** (e.g., portions **333**, **335** and **337** shown in FIG. **4**A) may interfere with the indicator light assembly **212** if the housing body **236** were pulled in the second direction **232** (to separate the housing body **236** from the base **110**, for example) without using the jig **200**. The first spacing tool **208** may deflect the first housing panel **104** a sufficient amount that the one or more relatively thicker portions the first housing panel **104** clear the indicator light assembly **212** while the housing body **236** is pulled off the base **110**, which may mitigate damage to the indicator light assembly **212** and/or one or more other portions of the networking apparatus **100**.

[0050] The jig body **206** may comprise a structure **217** (shown in FIG. **2**A). In some examples, the structure **217** may be within (e.g., may at least partially fill) the groove **133** of the base **110** when the networking apparatus **100** is in the first position relative to the jig **200**. In some examples, a first surface **219** and/or a second surface **221** of the jig body **206** are in contact (e.g., direct and/or indirect contact) with the base **110** of the networking apparatus **100** when the networking apparatus **100** is in the first position relative to the jig **200**.

[0051] FIG. **3** illustrates a representation **300** of an exploded view of the indicator light assembly **212** relative to the first housing panel **104**, in accordance with some embodiments. In some examples, the indicator light assembly **212** comprises a light source module **304**, an isolation structure **306** and/or a light guide **308** (e.g., glow-through light guide). In some examples, components of the indicator light assembly **212** (e.g., the light source module **304**, the isolation structure **306** and/or the light guide **308**) may be attached to each other using one or more fasteners (not shown), such as a fastener through openings **324** of the respective components and/or a fastener through openings **326** of the respective components).

[0052] In some examples, the light source module **304** may comprise light sources mounted to a printed circuit board (PCB) **314**. In some examples, the networking apparatus **100** comprises a controller **328** mounted to the PCB **314**. The controller **328** may be connected to and/or may control at least some of the light sources. In some examples, one, some and/or all of the light sources are each a light-emitting diode (LED). Other types of light sources of the light source module **304** are within the scope of the present disclosure. In some examples, at least some of the light sources are RGB (Red, Green, Blue) LEDs, at least some of the light sources are non-RGB LEDs (which may also be referred to as "white LEDs") and/or at least some of the light sources are (a single package comprising) White and RGB LEDs (which may also be referred to as "WRGB LEDs"). In FIG. **3**, RGB LEDs are shown with black-filled rectangles

and non-RGB LEDs are shown as white-filled rectangles, in accordance with some embodiments.

[0053] In some examples, the light source module **304** may comprise a first set of (one or more) light sources **316** associated with the system status icon **112**, a second set of (one or more) light sources **318** associated with the signal strength indicator icon **114** and/or a third set of (one or more) light sources **322** associated with the wireless network status icon **116**.

[0054] The isolation structure **306** may separate the light source module **304** from the light guide **308**. The isolation structure **306** may comprise (e.g., may be at least partially made of) foam (e.g., isolation foam), which may provide a buffer between the light source module **304** and the light guide **308** and/or may provide tolerance for disassembly and/or assembly of the networking apparatus **100**. The isolation structure **306** may comprise (e.g., may be at least partially made of) a light absorbing material.

[0055] The light guide **308** may comprise a double injection light guide (and/or may be produced via double injection molding). In some examples, the light guide **308** may comprise a first light guide component **312** and/or a second light guide component **310**. In some examples, a double injection molding process may comprise injecting two materials (e.g., two different materials comprising a first material of the first light guide component **312** and/or a second material of the second light guide component **310**). In some examples, a first shot (e.g., an initial shot) of the double injection molding process is performed to form the second light guide component **310** (which may comprise a plastic, such as a rigid plastic, for example). A second shot (e.g., after the first shot) of the double injection modeling process may be performed to form the first light guide component **312** (which may comprise a relatively soft and/or flexible material, for example). The first light guide component **312** may comprise (e.g., may be at least partially made of) a translucent material, such as a translucent polycarbonate resin (e.g., Covestro Makrolon® 2407) that may have engineered light diffusion properties. In some examples, using the translucent polycarbonate resin (e.g., Covestro Makrolon **2407**) for the first light guide component **312** may provide for improved uniformity of a resulting icon in the icon display region **121** without (unnecessarily) blurring an edge of the resulting icon. In some examples, the second light guide component **310** may be co-molded with the first light guide component **312**. The second light guide component **310** may comprise (e.g., may be at least partially made of) a light absorbing material act and thus as a light mask to mitigate bleeding from one icon of the icon display region **121** into a neighboring icon and/or into other (internal) regions of the networking apparatus **100**, thereby providing for improved user experience, improved light uniformity of icons in the icon display region **121** and/or improved brightness of the icons in the icon display region **121**. Other materials of the light guide **308** are within the scope of the present disclosure. Embodiments are contemplated in which (i) the networking apparatus **100** does not comprise the first light guide component **312** and/or (ii) the networking apparatus **100** leverages an open-air light chamber defined by the second light guide component **310** (e.g., light mask) to produce one or more icons of the icon display region **121**.

[0056] In some examples, the first light guide component **312** may comprise a first portion **312***a* associated with the system status icon **112**, a second portion **312***b* associated with the signal strength indicator icon **114** and/or a third portion **312***c* associated with the wireless network status icon **116**. The second light guide component **310** may comprise a first portion **310***a* associated with the system status icon **112**, a second portion **310***b* associated with the signal strength indicator icon **114** and/or a third portion **310***c* associated with the wireless network status icon **116**.

[0057] In some examples, light emitted by one or more light sources of the light source module **304** may be directed by the light guide **308** to the first housing panel **104** to produce a networking icon (in the icon display region **121**, for example). In some examples, the light may be directed to an inner surface of a locally thinned portion of the first housing panel **104** to produce the networking icon on an outer surface of the locally thinned portion. In some examples, the locally thinned portion may correspond to a portion, of the first housing panel **104**, that has a thickness that is less than a thickness of a portion (of the first housing panel **104**) adjacent the portion. In some examples, a thickness of the locally thinned portion of the first housing panel **104** is less than a threshold thickness to allow the light directed to the inner surface of the locally thinned portion to be visible at the outer surface of the locally thinned portion. In some examples, one or more portions of the first housing panel **104** (outside the locally thinned portion, for example) may have a thickness greater than the threshold thickness, which may provide for increased strength of the first housing panel **104** and/or improved protection of the networking apparatus **100**.

[0058] For example, first light emitted by the first set of light sources **316** may be conducted by the light guide **308** to a first locally thinned portion **332** of the first housing panel **104** to produce the system status icon **112**, which may comprise a circle and/or a dot (and/or other symbol). For example, the first light may be conducted through the first portion **312***a* of the first light guide component **312** and/or the first portion **310***a* of the second light guide component **310** to an inner surface of the first locally thinned portion **332** of the first housing panel **104** to produce the system status icon **112** on an outer surface of the first locally thinned portion **332** (which may be in the icon display region **121** shown in FIG. **1**A, for example). In some examples, a boundary (which may be defined by a change in thickness of the first housing panel **104**) of the first locally thinned portion **332** may have a shape corresponding to an outline (e.g., circle) associated with the system status icon **112**.

[0059] Alternatively and/or additionally, second light emitted by the second set of light sources **318** may be conducted by the light guide **308** to a second locally thinned portion **334** of the first housing panel **104** to produce the signal strength indicator icon **114** (shown in FIG. **1**A), which may comprise a first bar **123**, a second bar **125** and/or a third bar **127**. For example, the second light may be conducted through the second portion **312***b* of the first light guide component **312** and/or the second portion **310***b* of the second light guide component **310** to an inner surface of the second locally thinned portion **334** of the first housing panel **104** to produce the signal strength indicator icon **114** on an outer surface of the second locally thinned portion **334** (which may be in the icon display region **121** shown in FIG. **1**A, for example). In some examples, a boundary (which may be defined by a change in thickness of the first housing panel **104**) of the second locally thinned portion **334** may

have a shape corresponding to an outline (e.g., signal strength symbol outline) associated with the signal strength indicator icon **114**.

[0060] Alternatively and/or additionally, third light emitted by the third set of light sources **322** may be conducted by the light guide **308** to a third locally thinned portion **336** of the first housing panel **104** to produce the wireless network status icon **116** (shown in FIG. **1**A), which may comprise a Wi-Fi symbol and/or other symbol. For example, the third light may be conducted through the second portion **312***b* of the first light guide component **312** and/or the second portion **310***b* of the second light guide component **310** to an inner surface of the third locally thinned portion **336** of the first housing panel **104** to produce the wireless network status icon **116** on an outer surface of the third locally thinned portion **336** (which may be in the icon display region **121** shown in FIG. **1**A, for example). In some examples, a boundary (which may be defined by a change in thickness of the first housing panel **104**) of the third locally thinned portion **336** may have a shape corresponding to an outline (e.g., a Wi-Fi symbol outline) associated with the wireless network status icon **116**.

[0061] FIGS. **4**A-**4**C illustrate aspects of the first housing panel **104**, in accordance with some embodiments. FIG. **4**A illustrates a representation **420** of a perspective view of the first housing panel **104**, in accordance with some embodiments. FIG. **4**B illustrates a representation **440** of a sliced perspective view of the first housing panel **104**, in accordance with some embodiments. FIG. **4**C illustrates a representation **460** of a cross-sectional view of the first housing panel **104**, taken along line C-C of FIG. **4**A, in accordance with some embodiments. In some examples, the inner surface of the first housing panel **104** is apparent in FIGS. **4**A and **4**B.

[0062] In some examples, the first housing panel may comprise portions **331**, **333**, **335** and **337** (shown in FIGS. **4**A-**4**C). In some examples, the first locally thinned portion **332** may be adjacent (and/or between) portions **331** and **333**. In some examples, the second locally thinned portion **334** may be adjacent (and/or between) portions **333** and **335**. In some examples, the third locally thinned portion **336** may be adjacent (and/or between) portions **335** and **337**.

[0063] In some examples, a first thickness **414** (shown in FIG. **4**C) of the first locally thinned portion **332**, a second thickness **418** of the second locally thinned portion **334** and/or a third thickness **422** of the third locally thinned portion **336** may be less than (i) a thickness **412** of the portion **331**, (ii) a thickness **416** of the portion **333**, (iii) a thickness **426** of the portion **335**, and/or (iv) a thickness **424** of the portion **337**. In some examples, the first thickness **414**, the second thickness **418** and/or the third thickness **422** may be less than the threshold thickness. In some examples, thicknesses **412**, **416**, **426** and/or **424** of portions **331**, **333**, **335** and/or **337**, respectively, may be greater than (and/or equal to and/or less than) than the threshold thickness.

[0064] In some examples, the system status icon **112** is configured to convey information, such as a system status, associated with the networking apparatus **100**. For example, the system status icon **112** may be configured to convey a sign of life indication (e.g., an indication that the networking apparatus **100** is powered on). In some examples, the controller **328** controls a color and/or illumination level of the system status icon **112** to convey information. For example, the controller **328** may control the color of the system status icon **112** by controlling colors and/or illumination levels of the first set of light sources **316** (e.g., a RGB LED and a non-RGB LED). Light emitted by different light sources of the first set of light sources **316** may be blended together to achieve a desired color of the system status icon **112**. In some examples, the system status icon **112** may be controlled to have a first color during a firmware update (e.g., a person viewing the networking apparatus **100** may interpret, based upon the system status icon **112** having the first color, that the networking apparatus **100** is undergoing the firmware update) and/or may be controlled to have a second color while the networking apparatus **100** is performing a security function (e.g., a person viewing the networking apparatus **100** may interpret, based upon the system status icon **112** having the second color, that the networking apparatus **100** is performing the security function). The first color and/or the second color may be selected from a set of colors that the first set of light sources **316** are configured to emit (e.g., blue, green, orange, red, white and/or one or more other colors). Alternatively and/or additionally, the system status icon **112** may be controlled to be illuminated according to a first pattern (e.g., the system status icon **112** may blink a defined number of times) to indicate that the networking apparatus **100** is performing a booting up process.

[0065] In some examples, the signal strength indicator icon **114** is configured to convey signal strength information associated with the networking apparatus **100**. In some examples, the networking apparatus **100** (and/or the controller **328**) may monitor a signal strength of a telecommunication service provided by a telecommunication service site. In some examples, the controller **328** controls activation, deactivation and/or illumination level of the first bar **123**, the second bar **125** and/or the third bar **127** to convey the signal strength information. FIGS. **5**A-**5**C illustrate various states of the signal strength indicator icon **114**, in accordance with some embodiments. FIG. **5**A illustrates the signal strength indicator icon **114** in a first state in which (i) the first bar **123** is activated, (ii) the second bar **125** is activated and/or (iii) the third bar **127** is activated. The signal strength indicator icon **114** being in the first state may indicate that the signal strength is within a first range of signal strengths. FIG. **5**B illustrates the signal strength indicator icon **114** in a second state in which (i) the first bar **123** is activated, (ii) the second bar **125** is activated and/or (iii) the third bar **127** is deactivated. The signal strength indicator icon **114** being in the second state may indicate that the signal strength is within a second range of signal strengths. In some examples, a maximum value of the second range of signal strengths may be less than a minimum value of the first range of signals strengths. FIG. **5**C illustrates the signal strength indicator icon **114** in a third state in which (i) the first bar **123** is activated, (ii) the second bar **125** is deactivated and/or (iii) the third bar **127** is deactivated. The signal strength indicator icon **114** being in the third state may indicate that the signal strength is within a third range of signal strengths. In some examples, a maximum value of the third range of signal strengths may be less than a minimum value of the second range of signals strengths. Alternatively and/or additionally, an illumination level of a bar (e.g., the first bar **123**, the second bar **125** and/or the third bar **127**) may be controlled to convey information. For example, an illumination level of a bar (e.g., the first bar **123**, the second bar **125** and/or the third bar

127) may be reduced (e.g., from about 80% brightness to about 10% brightness) to indicate a reduction of the signal strength.

[0066] In some examples, the wireless network status icon **116** is configured to convey wireless network information associated with the networking apparatus **100**, such as a status associated with the wireless network established using the networking apparatus **100**. In some examples, the controller **328** controls a color and/or illumination level of the wireless network status icon **116** to convey the wireless network information. In some examples, the controller **328** may (i) control the wireless network status icon **116** to have a third color to indicate that the wireless network is enabled, (ii) control the wireless network status icon **116** to have a fourth color to indicate that the wireless network is disabled, (iii) control the wireless network status icon **116** to have a fifth color to indicate that a security feature (e.g., WPS) of the wireless network is enabled, and/or (iv) control the wireless network status icon **116** to have a sixth color to indicate that the security feature of the wireless network is disabled. In some examples, the third color, the fourth color, the fifth color and/or the sixth color may be selected from a set of colors that the third set of light sources **322** are configured to emit (e.g., blue, green, orange, red, white and/or one or more other colors).

[0067] FIG. **6**A illustrates the networking apparatus **100** communicating with a telecommunication service site **602**, such as a wireless communication site. For example, signals **604** (e.g., uplink signals and/or downlink signals) may be transmitted between the telecommunication service site **602** and the networking apparatus **100**. The networking apparatus **100** may be provided with a telecommunication service by the telecommunication service site **602**, such as at least one of cellular service (e.g., 5G service, 4G service and/or other type of cellular service), internet service (e.g., cellular internet service, satellite internet service, 5G internet service, 4G internet service, and/or other type of internet service), etc. In an example, the telecommunication service site **602** may be (and/or may comprise) at least one of an antenna branch, a base station, an antenna tower, a transmission and/or reception point (TRP), etc.

[0068] In some examples, the networking apparatus **100** determines a signal strength based upon one or more measurements (e.g., signal quality measurements, power measurements, Reference Signal Received Power (RSRP), etc.) of one or more signals (e.g., downlink signals among the signals **604**) received by the networking apparatus **100** from the telecommunication service site **602**. The signal strength indicator icon **114** may be controlled based upon the signal strength. The networking apparatus **100** may monitor for changes to the signal strength, and/or may update the signal strength indicator icon **114** in response to detecting a change to the signal strength.

[0069] FIG. **6**B illustrates the networking apparatus **100** establishing a connection **608** (e.g., an Internet connection) between a client device **606** (e.g., at least one of a phone, a laptop, a computer, a wearable device, a smart device, a television, any other type of computing device, hardware, etc.) and a public network **610** (e.g., the Internet), according to some embodiments. In some examples, the client device **606** is connected to the wireless network (e.g., WLAN, such as Wi-Fi network) established by the networking apparatus **100**. For example, the connection **608** may comprise a connection (e.g., an encrypted wireless connection over the wireless network) between the client device **606** and the networking apparatus **100** and/or a connection (e.g., an encrypted connection over a WAN) between the networking apparatus **100** and the public network **610**, which may be established using the telecommunication service provided by the telecommunication service site **602**. The client device **606** may access resources (e.g., internet resources, such as websites, webpages, web applications, etc.) over the connection **608**.

[0070] In some examples, the networking apparatus **100** may correspond to an Internet gateway. The networking apparatus **100** may comprise a client-side router (e.g., a home router, a broadband home router (BHR), a satellite office router, etc.). The client-side router may be positioned in a location (e.g., in at least one of a home, a home office, a satellite office, etc.) and/or may be used by one or more users (e.g., a household) at the location to access the Internet and/or one or more remote networks. Alternatively and/or additionally, the networking apparatus **100** may comprise a hotspot device. The hotspot device may provide devices (e.g., devices that are within range of the hotspot device) with network connections (e.g., Internet connections). The hotspot device may have internet service provided by the telecommunication service site **602** (e.g., the internet service may comprise at least one of cellular internet service, 5G internet service, 4G internet service, satellite internet service, and/or other type of internet service). The hotspot device may share the internet service with the client device **606** (over the WLAN, for example).

[0071] In accordance with some embodiments, a networking apparatus is provided. The networking apparatus includes a set of networking components, a housing assembly configured to house the set of networking components, a set of light sources, and a light guide disposed between the set of light sources and a first housing panel of the housing assembly. The first housing panel includes a first portion having a first thickness and a second portion adjacent the first portion and having a second thickness less than the first thickness. The light guide is configured to direct light from the set of light sources to an inner side of the second portion of the first housing panel to produce a networking icon on an outer side of the second portion of the first housing panel.

[0072] In accordance with some embodiments, a networking apparatus is provided. The networking apparatus includes a set of networking components and a housing assembly configured to house the set of networking components. The housing assembly comprises a venting structure overlying the set of networking components. The venting structure comprises a set of z-shaped louvers comprising a first z-shaped louver and a second z-shaped louver.

[0073] In accordance with some embodiments, a jig for disassembling a networking apparatus is provided. The jig includes a jig body and a first protrusion protruding from the jig body and configured to contact a first coupling feature of the networking apparatus when the networking apparatus is set in a first position relative to the jig body. When the first coupling feature is in an engaged state, the first coupling feature couples a housing panel of the networking apparatus to a housing body of the networking apparatus. The contact of the first protrusion with the first coupling feature disengages the first coupling feature to allow the housing body to be moved relative to the housing panel.

[0074] Unless specified otherwise, "first," "second," and/or the like are not intended to imply a temporal aspect, a

spatial aspect, an ordering, etc. Rather, such terms are merely used as identifiers, names, etc. for features, elements, items, etc. For example, a first object and a second object generally correspond to object A and object B or two different or two identical objects or the same object.

[0075] Moreover, "example" is used herein to mean serving as an example, instance, illustration, etc., and not necessarily as advantageous. As used herein, "or" is intended to mean an inclusive "or" rather than an exclusive "or". In addition, "a" and "an" as used in this application are generally be construed to mean "one or more" unless specified otherwise or clear from context to be directed to a singular form. Also, at least one of A and B and/or the like generally means A or B or both A and B. Furthermore, to the extent that "includes", "having", "has", "with", and/or variants thereof are used in either the detailed description or the claims, such terms are intended to be inclusive in a manner similar to the term "comprising".

[0076] Although the subject matter has been described in language specific to structural features and/or methodological acts, it is to be understood that the subject matter defined in the appended claims is not necessarily limited to the specific features or acts described above. Rather, the specific features and acts described above are disclosed as example forms of implementing at least some of the claims.

[0077] Also, although the disclosure has been shown and described with respect to one or more implementations, alterations and modifications may be made thereto and additional embodiments may be implemented based upon a reading and understanding of this specification and the annexed drawings. The disclosure includes all such modifications, alterations and additional embodiments and is limited only by the scope of the following claims. The specification and drawings are accordingly to be regarded in an illustrative rather than restrictive sense. In particular regard to the various functions performed by the above described components (e.g., elements, resources, etc.), the terms used to describe such components are intended to correspond, unless otherwise indicated, to any component which performs the specified function of the described component (e.g., that is functionally equivalent), even though not structurally equivalent to the disclosed structure. In addition, while a particular feature of the disclosure may have been disclosed with respect to only one of several implementations, such feature may be combined with one or more other features of the other implementations as may be desired and advantageous for any given or particular application.

What is claimed is:

1. A networking apparatus, comprising:

a set of networking components;

a housing assembly configured to house the set of networking components, wherein the housing assembly comprises a first housing panel comprising:

a first portion having a first thickness; and

a second portion adjacent the first portion and having a second thickness less than the first thickness;

a set of light sources; and

a light guide disposed between the set of light sources and the first housing panel and configured to direct light from the set of light sources to an inner surface of the second portion of the first housing panel to produce a networking icon on an outer surface of the second portion of the first housing panel.

2. The networking apparatus of claim **1**, wherein:

the set of light sources comprises a first light source;

the networking apparatus comprises a controller connected to the first light source and configured to control a color of light emitted by the first light source into the light guide to control a color of the networking icon; and

the color of the networking icon is representative of a status of the networking apparatus.

3. The networking apparatus of claim **2**, wherein:

the networking apparatus is configured to establish a wireless network with a client device; and

the controller is configured to at least two of:

control the networking icon to have a first color to indicate that the wireless network is enabled;

control the networking icon to have a second color to indicate that the wireless network is disabled;

control the networking icon to have a third color to indicate that a security feature of the wireless network is enabled; or

control the networking icon to have a fourth color to indicate that the security feature of the wireless network is disabled.

4. The networking apparatus of claim **1**, wherein:

the networking apparatus is configured to monitor a signal strength of a telecommunication service provided by a telecommunication service site;

the networking icon corresponds to a signal strength indicator comprising a plurality of bars comprising a first bar and a second bar;

the networking apparatus comprises a controller connected to the set of light sources; and

the controller is configured to at least two of:

activate the first bar and activate the second bar to indicate that the signal strength is within a first range of signal strengths;

activate the first bar and deactivate the second bar to indicate that the signal strength is within a second range of signal strengths; or

deactivate the first bar and deactivate the second bar to indicate that the signal strength is within a third range of signal strengths.

5. The networking apparatus of claim **3**, wherein:

the networking apparatus is configured to:

monitor a signal strength of a telecommunication service provided by a telecommunication service site; and

establish a connection between the client device and the Internet via the telecommunication service and the wireless network;

the networking apparatus comprises a second set of light sources;

the light guide is disposed between the second set of light sources and the first housing panel and configured to direct light from the second set of light sources to an inner surface of a third portion of the first housing panel to produce a second networking icon on an outer surface of the third portion of the first housing panel;

the second networking icon corresponds to a signal strength indicator comprising a plurality of bars comprising a first bar and a second bar; and

the controller is configured to at least two of:
activate the second bar and activate the third bar to indicate that the signal strength is within a first range of signal strengths;
activate the second bar and deactivate the third bar to indicate that the signal strength is within a second range of signal strengths; or
deactivate the second bar and deactivate the third bar to indicate that the signal strength is within a third range of signal strengths.

6. The networking apparatus of claim **1**, wherein:
the light guide comprises a double injection light guide.

7. The networking apparatus of claim **1**, wherein:
the light guide comprises polycarbonate.

8. The networking apparatus of claim **1**, wherein the housing assembly comprises:
a venting structure overlying the set of networking components and comprising a set of z-shaped louvers comprising:
a first z-shaped louver; and
a second z-shaped louver.

9. The networking apparatus of claim **8**, wherein:
the housing assembly defines a housing chamber in which the set of networking components are disposed;
the set of z-shaped louvers obstructs visibility into the housing chamber from a first perspective; and
the set of z-shaped louvers allows visibility into the housing chamber from a second perspective.

10. A networking apparatus disassembly system comprising:
the networking apparatus of claim **1**, comprising a first coupling feature that, when in an engaged state, couples a base of the housing assembly to a housing body of the housing assembly; and
a jig for disassembling the networking apparatus, the jig comprising:
a jig body; and
a first protrusion protruding from the jig body and configured to contact the first coupling feature when the networking apparatus is set in a first position relative to the jig body, wherein the contact of the first protrusion with the first coupling feature disengages the first coupling feature to allow the housing body to be moved relative to the base.

11. The networking apparatus disassembly system of claim **10**, wherein:
the housing assembly comprises a chassis configured to support one or more components of the set of networking components; and
the movement of the housing body relative to the base exposes at least some of the chassis and at least some of the set of networking components.

12. The networking apparatus disassembly system of claim **10**, wherein:
the first protrusion extends through an opening defined by the base to contact the first coupling feature.

13. The networking apparatus disassembly system of claim **12**, wherein:
the base comprises a venting structure comprising a first louver and a second louver; and
the opening is defined by the first louver and the second louver.

14. The networking apparatus disassembly system of claim **10**, wherein:
the housing body comprises the first housing panel;
the jig comprises a first spacing tool protruding from the jig body and configured to at least one of:
separate the first housing panel from an indicator light assembly comprising the light guide and the set of light sources by a first distance; or
mitigate a force from the first housing panel to the indicator light assembly during the movement of the housing body relative to the base.

15. A networking apparatus, comprising:
a set of networking components; and
a housing assembly configured to house the set of networking components, wherein the housing assembly comprises a venting structure overlying the set of networking components and comprising a set of z-shaped louvers comprising a first z-shaped louver and a second z-shaped louver.

16. The networking apparatus of claim **15**, wherein:
the housing assembly defines a housing chamber in which the set of networking components are disposed;
the set of z-shaped louvers obstructs visibility into the housing chamber from a first perspective; and
the set of z-shaped louvers allows visibility into the housing chamber from a second perspective.

17. A jig for disassembling a networking apparatus, the jig comprising:
a jig body; and
a first protrusion protruding from the jig body and configured to contact a first coupling feature of the networking apparatus when the networking apparatus is set in a first position relative to the jig body, wherein:
when the first coupling feature is in an engaged state, the first coupling feature couples a housing panel of the networking apparatus to a housing body of the networking apparatus; and
the contact of the first protrusion with the first coupling feature disengages the first coupling feature to allow the housing body to be moved relative to the housing panel.

18. The jig of claim **17**, wherein:
the movement of the housing body relative to the housing panel exposes at least some of a set of networking components of the networking apparatus.

19. The jig of claim **17**, wherein:
the first protrusion extends through an opening defined by the housing panel to contact the first coupling feature.

20. The jig of claim **19**, wherein:
the networking apparatus comprises a venting structure comprising a first louver and a second louver; and
the opening is defined by the first louver and the second louver.

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