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displays a steady visual light indicating port 115 is active, but not currently sending output or receiving input, or displays a blinking light when either receiving input or sending output, or is blank and displays no light when port 115 is inactive.

Attached to label holder 150 is label 155, which includes a visual representation of the actual connections of faceplate 110, referred to as connection images, and the images of identification marks associated with the actual connections of faceplate 110. Label 155 maps the positions of the connection images to correspond to the positions of the associated connection ports of faceplate 110.

Label 155 may be made of paper material, cellulose acetate material, or other material on which the features and information of a faceplate, such as faceplate 110, can be applied. The connection images and identification marks may be placed on these materials by printing, copying, drawing, painting engraving, staining, screen printing, and in some cases, chemical or laser etching. Label 155 is a visual reproduction of the connection ports and information of faceplate 110. Label 155 is modified to provide for the display of port status indicators, such as label indicator 160, and comprised of a material on which visual reproductions can be placed, for example, by printing.

Label 155 is attached to the surface of label holder 150 in a manner that allows the status indicators on label holder 150 to display the status of their corresponding connection port. For example label indicator 160, which is attached to label holder 150, remains visible after label 155 is attached to the front surface of label holder 150 (see attachment surface 350, FIG. 3B) and receives duplicate status indication signals as status indicator 125, which is the corresponding indicator on faceplate 110. Both status indicator 125 and label indicator 160 display the status associated with port 115. In one embodiment of the present invention, status indicator 125 is not required for indication of the status of port 115 as a result of implementing label 155 and label holder 150 that includes label indicator 160.

FIG. 1B is a functional block diagram illustrating label assembly 100, including a relocated label housing 130, in accordance with an embodiment of the present invention. In an alternative embodiment, label holder 150 is attached at its distal end by connection point 187 (not shown), to an internal component of label housing 130, vertically aligned in a central position within label housing 130. Label housing 130 is depicted as anchored to surface 117 of electronic device 105, with positioning to provide unobstructed access and electrical connection enabling the status indicators, for example, label indicator 160 on label holder 150. The length of label holder 150 retracts into label housing 130 with a portion of label holder 150 remaining extended, enabling label holder 150 to be extended by a pulling force applied to the proximal end of label holder 150 at connection point 185. Various connectors may be attached to connection point 185 to facilitate grasping and extending label holder 150. Label holder 150 retracts into label housing 130 when the pulling force is removed.

FIG. 2A illustrates a block diagram illustrating a view through the top of label housing 130, in accordance with an embodiment of the present invention. Label housing 130 is depicted with label holder 150 partially retracted, through housing slot 135, in a spiral orientation, within label housing 130. Retraction rod 210 is located at a center position within label housing 130 and in one embodiment, serves as a point of attachment for the proximal end of label holder 150 at connection point 185 (not shown).

FIG. 2B depicts a block diagram illustrating a view through the side of label housing 130 including retractable label holder 150 and label 155, in accordance with an embodiment

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of the present invention. Label 155 is shown attached to label holder 150, which includes label indicators, such as label indicator 160. Positioned at the distal end of label holder 150 is connection point 187, which attaches to electrical device 105. Label housing 130 includes retraction rod 210, retraction spring housing 220, retraction housing base 225, and housing slot 135. Retraction rod 210 is attached at a lower end to a central position of retraction spring housing 220, and extending through the upper surface of retraction spring housing 220. Retraction rod 210 is attached at its upper end to the top of label housing 130. The attachment of both the upper end and lower end of retraction rod 210 allows for free rotation of retraction rod 210.

Retraction spring housing 220 is a shallow cylindrical shaped disk with a top surface oriented towards the top of label housing 130, and an open end facing away from the top of label housing 130, towards the open end of retraction housing base 225. Retraction spring housing 220 has a diameter greater than retraction rod 210 and is attached at its center position to the lower end of retraction rod 210, which extends through the center of the top surface of retraction spring housing 220.

Retraction housing base 225 is a shallow cylindrical shaped disk attached to the bottom surface of label housing 130 and with side walls extending upward to an open end. The diameter of retraction housing base 225 is less than the diameter of retraction spring housing 220 so that retraction spring housing 220 fits over the side wall and sets on retraction housing base 225, allowing rotation of retraction spring housing 220. Retraction housing base 225 includes a spring for self-retraction of label holder 150 within label housing 130. The spring is coiled in a spiral orientation within retraction housing base 225 and is attached at one end to the lower end of retraction rod 210 extending through retraction spring housing 220. The other end of the spring is attached to retraction housing base 225. The spring is coiled to create tension when retraction rod 210 is rotated in a direction associated with extending label holder 150 and tension is relieved when label holder 150 is retracted within label housing 130.

FIG. 3A is a block diagram depicting label 155, in accordance with an embodiment of the present invention. Label 155 is an attachable sheet that includes markings for label port IDs 355 and 365, label connector port images 360 and 370, label indicator clearance spaces 380 and 390, and label indicator IDs 375 and 385. Label 155 includes visible surface markings that represent the position and arrangement of connection ports and connection port IDs of faceplate 110, attached to electronic device 105. Images from faceplate 110 may be placed on these materials by printing, copying, drawing, painting, engraving, staining, screen printing, and in some cases, chemical or laser etching. Label 155 also includes clearance spaces, which are areas in which label material has been removed, that are aligned with the position of label indicators on label holder 150 and allow the visual status indications to be viewed.

In one embodiment of the present invention, label 155 is a photographic image of a connection port faceplate for an electrical device, which is attached to label holder 150 providing accurate representation of connection ports, connection IDs and any additional information associated with faceplate 110 of electronic device 105. Label 155 is positioned on label holder 150 so that label indicator clearance space 380 overlays label indicator 160, and label indicator clearance space 390 overlays label indicator 320 (FIG. 3B). Label indicator clearance space 380 and 390 represent areas of label 155 at which label material has been removed, leaving an open, visible area free of coverage from label material. Alterna-