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# SAUNA DEVICE HOLDER

#### **Abstract**

A sauna comprises a heating unit configured to generate heat, an enclosure configured to enclose at least one user and the heat, at least one seat located inside the enclosure; and a door. The door comprises an elongate handle having a groove running substantially along an upper surface of the elongated handle. The elongate handle is oriented horizontally on the exit side of the door and viewable by the at least one user when the at least one user is seated on the at least one seat. The groove of the elongate handle has a depth, width and length sufficient to engage an edge of an object such that the object is supported by the elongate handle. The object may be an electronic device including a display that faces the user.

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### **Background/Summary**

CROSS REFERENCE TO RELATED APPLICATIONS [0001] This Application claims priority to U.S. Provisional Patent Application No. 63/552,620 filed Feb. 12, 2024, the entire disclosure of which is hereby incorporated herein by reference.

#### **BACKGROUND**

[0002] The present disclosure relates generally to a device holder, and in particular, to a device holder for supporting an object in a sauna.

[0003] A sauna, or sudatory, is a small room or building designed as a place to experience dry or wet heat sessions. Purported advantages of using a sauna include stress and tension reduction, weight loss, toxin removal, and increased beneficial circulation, for example.

[0004] Typically, saunas are found at spas and similar commercial establishments, but more consumers are purchasing home saunas for their individual private use. However, some people may find it challenging to break away from their daily obligations or "disconnect" from the world long enough to adequately enjoy a sauna session. Others may prefer to "multitask" by watching a movie or reading a book while simultaneously enjoying the sauna.

[0005] Various features, aspects, and advantages of certain embodiments of the disclosure will become better understood with regard to the following description, appended claims, accompanying drawings and abstract.

## **Description**

#### BRIEF DESCRIPTION OF THE DRAWINGS

- [0006] FIG. 1 illustrates a sauna and a sauna device holder according to an embodiment.
- [0007] FIG. **2**A illustrates a perspective view of a sauna device holder according to an embodiment.
- [0008] FIG. **2**B illustrates a perspective view of a sauna device holder according to another embodiment.
- [0009] FIG. **3** illustrates a perspective view of a sauna device holder according to an embodiment.
- [0010] FIG. **4**A illustrates a cross-sectional, perspective view of a groove configuration for a sauna device holder according to one embodiment.
- [0011] FIG. **4**B illustrates a cross-sectional, perspective view of a groove configuration for a sauna device holder according to another embodiment.
- [0012] FIG. **4**C illustrates a cross-sectional, perspective view of a groove configuration for a sauna device holder according to yet another embodiment.
- [0013] FIG. **5** illustrates a perspective view of a sauna device holder according to an embodiment.
- [0014] FIG. 6 illustrates a sauna and a sauna device holder according to an embodiment.
- [0015] FIG. 7 illustrates a sauna and a sauna device holder according to an embodiment.

#### DETAILED DESCRIPTION

[0016] Described herein are sauna device holders. In the following description, for purposes of explanation, numerous examples and specific details are set forth in order to provide a thorough understanding of some embodiments. Various embodiments as defined by the claims may include some or all of the features in these examples alone or in combination with other features described below and may further include modifications and equivalents of the features and concepts described herein.

[0017] Features and advantages of the present disclosure include a number of beneficial object supports for saunas to make time spent in a sauna more enjoyable and productive.

[0018] FIG. 1 depicts a sauna 100 according to an embodiment. The sauna 100 comprises a heating unit 102 configured to generate heat, an enclosure 109 configured to enclose at least one user 106

and the heat. At least one seat **103** is located inside the enclosure **109**. A door **104** to the sauna **100** has an entry side and an exit side opposite the entry side, the door **104** configured to allow the at least one user **106** to enter and exit the enclosure **109**. The door **104** comprises a device holder **105** having a groove **107** running substantially along an upper surface of the device holder. In this example, the device holder acts as a door handle. However, in other embodiments, the device holder may not be a door handle. The device holder 105 is oriented horizontally on the exit side of the door **104** and is viewable by the at least one user **106** when the at least one user **106** is seated on the at least one seat **103**. The groove **107** of the elongate handle **105** has a depth, width, and length sufficient to engage an edge of an object **101** such that the object **101** is supported, partially (e.g., along one edge with another edge leaning against the door or wall) or completely, by the device holder **105**. The object **101** may be an electronic device and the electronic device comprises a display facing the user **106**. Specifically, the electronic device may be a smartphone, a tablet computer, or an eReader (i.e., electronic reader), such as an Amazon Kindle® or Rakuten Kobos®, for example. The object **101** may also be a print publication such as a newspaper or magazine, for example. A cross-sectional view of the groove of the device holder is comprised of one or more right angles, curved angles, acute angles, or any combination thereof as further explained below with regard to FIGS. **4**A, **4**C and **4**C. In this example, the device holder is configured to serve as a towel rack or a grab bar in addition to supporting the object **101** as further explained below with reference to FIGS. **5** and **7**. In this example, the at least one user **106** faces the device holder when the at least one user **106** is seated on the at least one seat **103**.

[0019] While the heating unit **102** is located under the seat **103** as shown in FIG. **1**, the locations of the heating unit **102** and seat **103** could be in a variety of locations and configurations. It is contemplated that additional seats and/or heating units may be provided within enclosure **109**. For example, the heating unit **102** (e.g., an infrared heater) may be located on one of the walls, such as the back wall, of the sauna **100**. In fact, many of the walls of the enclosure **109** may be equipped with multiple heating units to heat the body of the user(s) **106**. Additional heating units may be placed at the foot of the seat **103** as well in other locations, for example. Sauna **100** may include temperature sensors (not shown) placed at various locations around the sauna to measure the temperature inside the sauna **100**.

[0020] FIGS. **2**A and **2**B illustrate perspective views of a sauna device holder according to an embodiment. FIG. **2**A is a perspective view of a device holder **201** with a groove **203** supporting an object **202** as viewed from inside the enclosure **109** shown in FIG. **1**. FIG. **2**B is a perspective view of device holder **201** with a groove **203** supporting an object **202** as viewed from outside the enclosure **109** in FIG. **1**.

[0021] The object **202** may be an electronic device (e.g., tablet computer, smartphone) or a print publication (e.g., newspaper, magazine). The groove **203** is configured to engage an edge of the object to support the object against a vertical surface (e.g., door or wall). In this example, the device holder **201** is attached to a door **208** via supports **204** and **205** with fasteners **207***a* and **207***b* as shown in FIG. **2B**. The supports provide a space between the vertical surface, such as a door **208**, and the elongate handle **201**. While the supports **205** are shown at opposite ends **206** of the device holder **201**, it is contemplated that one or multiple supports can be located at other locations and in other configurations along the length of the device holder **201**. It is also contemplated that other numbers of supports and fasteners could be used to secure the device holder **201** to the vertical surface (e.g., wall or door). Such supports and fasteners are commonly known to those of skill in the art.

[0022] Turning now to FIG. **3**, a perspective view of a device holder **301** is shown according to an embodiment. The device holder **301** comprises a horizontal rod with an upward facing surface comprising a groove supporting an object **302** as viewed from inside the enclosure **109** shown in FIG. **1**.

[0023] The groove **303** is configured to engage an edge of the object **302** to support the object

against a vertical surface (e.g., door or wall). In this example, the device holder **301** is attached to a transparent door **307** via supports and fasteners as explained previously with regard to FIGS. **2**A and **2**B. The support **304** provides a space between the vertical surface, such as a transparent door **307**, and the device holder **301**. While the support **304** is shown at end of the device holder **301**, it is contemplated that the support(s) can be located at other locations and in other configurations along the length of the device holder **301**.

[0024] In this example, the horizontal rod of the device holder **301** is attached, via a support, to an exterior handle **305** through the transparent door **307** and secured with a mounting unit **306** or other fastener. Accordingly, handle **305** is on an opposite surface of the door **307** such that the handle **305** is external to the sauna and the device holder **301** is interior to the sauna and acts as an interior door handle, for example. In this example, the exterior handle **305** is oriented vertically with respect to the device holder **301**; however, other types of handles and knobs could be used. Furthermore, it should be appreciated that the door is not limited to a transparent door. For example, the door could be solid, translucent, semi-transparent, etc. so long as it allows a user to enter and exit the sauna. [0025] FIG. **4**A is a cross-sectional perspective view of a curve-shaped or U-shaped groove configuration **403***a* for a sauna handle object support **401** according to an embodiment. [0026] FIG. **4**B is a cross-sectional perspective view of an acutely-angled or V-shaped groove configuration **403***b* for a sauna handle object support **401** according to another embodiment. [0027] FIG. **4**C is a cross-sectional perspective view of a right angle-shaped or square-shaped groove configuration **403***c* for a sauna handle object support **401** according to yet another embodiment.

[0028] The shape of the groove may be another shape (or combinations of shapes) so long as the groove includes a depth, width and length sufficient to engage an edge of an object such that the object is supported. The exemplary embodiments depicted in FIGS. **4**A-**4**C provide a few examples of the many other groove shapes and configurations that may be utilized to sufficiently support an object as disclosed herewith.

[0029] In another embodiment as shown in FIG. 5, the device holder **501** is configured to hold an electronic device **502** (or another object) and/or a towel **503**. The towel **502** may be positioned around the device holder **501** similar to how a towel is hung over a towel bar, for example. In this way, the towel is conveniently available to the user to remove sweat during a sauna session. [0030] Turing now to FIG. 6, the sauna 600 comprises an enclosure 609, a door 604 configured in the enclosure **609**, a seat **603** inside the enclosure **609**; and a device holder (e.g., an elongate door handle) **605** inside the enclosure **609**. The device holder **605** comprises a horizontal rod comprising an upward facing surface. The upward facing surface comprises a groove **607**. The device holder **605** may be mounted on the door **604**. The sauna **600** further comprises a door handle **601** mounted to the door **604** outside the enclosure **609**. A first end of the door handle is coupled through the door to a first end of a mounting unit of the device holder as explained previously with regard to FIG. **3**. The device holder **605** is mounted opposite the seat **603**. The horizontal rod comprises a first end and a second end. The first end is coupled to a first mounting unit coupled between the first end of the horizontal rod and one of a wall of the enclosure or the door and the second end is coupled to a second mounting unit coupled between the second end of the horizontal rod and one of the wall or the door. The device holder **605** is configured to hold one of an electronic device **502** or a towel **503** as shown in FIG. **5**. The enclosure **609** comprises four walls shown as **708***a*, **708***b*, **708***c*, and **708***d* in the enclosure **702** in FIG. **7**. The seat **603** (FIG. **6**) and **703** (FIG. **7**) is configured between a first wall and a second wall and runs parallel to the third and fourth walls. The door **604** is configured in the third wall. The device holder **605** is mounted to the door **604** opposite to, and in parallel with, the seat **603**. The horizontal rod is circular or square and the groove comprises U-shaped cross section or a square-shaped cross section as shown in FIGS. 4A and **4**C, for example. Of course, the horizontal rod may be other shapes as well. [0031] FIG. 7 includes a sauna 701. The sauna 701 comprises an enclosure 702, a door 704

configured in the enclosure **702**, a seat **703** inside the enclosure **702**, and a device holder means **705** inside the enclosure **702**. The device holder means **705** for holding a first edge of an electronic device **707** offset from one of a wall **708***d* of the enclosure **702** or the door **704** so that a second edge **708** of the electronic device **707**. In various embodiments, the holder means may support the electronic device completely or partially such that the device may lean against said one of the walls **708***d* or the door **704**. The enclosure **702** comprises four walls **708***a*, **708***b*, **708***d*, a ceiling **709** and a floor **710**. The seat **703** is configured between a first wall **708***a* and a second wall **708***d* and runs parallel to a third wall **708***c* and a fourth wall **708***b*. The door **704** is configured in the third wall **708***c*. The device holder is mounted to the door **704** opposite to, and in parallel with, the seat **703**. The device holder means **705** comprises an upward facing groove **706**. EXAMPLE EMBODIMENTS

[0032] In accordance with one example embodiment, a sauna is provided. The sauna comprises a heating unit configured to generate heat, an enclosure configured to enclose at least one user and the heat and heating unit, at least one seat located inside the enclosure; and a door. The door has an entry side and an exit side opposite the entry side. The door is configured to allow the at least one user to enter and exit the enclosure. The door comprises an elongate handle having a groove running substantially along an upper surface of the elongated handle. The elongate handle is oriented horizontally on the exit side of the door and viewable by the at least one user when the at least one user is seated on the at least one seat. The groove of the elongate handle has a depth, width, and length sufficient to engage an edge of an object such that the object is supported by the elongate handle. In various example embodiments, the object may be an electronic device and the electronic device comprises a display facing the user. Specifically, the electronic device may be a smartphone, a tablet computer, or an eReader (i.e., electronic reader), such as an Amazon Kindle® or Rakuten Kobos®, for example. The object may also be a print publication. A cross-sectional view of the groove of the elongate handle is comprised of one or more angles, curves, acute angles, or any combination thereof. The elongate handle is configured to serve as a towel rack or a grab bar in addition to supporting the object. The at least one seat is configured parallel to the door. The at least one user faces the elongate handle when the at least one user is seated on the at least one seat. [0033] Another example embodiment provides a sauna comprising an enclosure, a door configured in the enclosure, a seat inside the enclosure, and a device holder inside the enclosure. The device holder comprises a horizontal rod comprising an upward facing surface. The upward facing surface comprises a groove. The device holder may be mounted on the door. The sauna further comprises a door handle mounted to the door outside the enclosure. A first end of the door handled is coupled through the door to a first end of a mounting unit of the device holder. The device holder is mounted opposite the seat. The horizontal rod comprises a first end and a second end. The first end is coupled to a first mounting unit coupled between the first end of the horizontal rod and one of a wall of the enclosure or the door and the second end is coupled to a second mounting unit coupled between the second end of the horizontal rod and one of the wall or the door. The device holder is configured to hold one or more of: an electronic device or a towel. The enclosure comprises four walls. The seat is configured between a first wall and a second wall and runs parallel to the third and fourth walls. The door is configured in the third wall. The device holder is mounted to the door opposite to, and in parallel with, the seat. The horizontal rod is circular or square and the groove comprises U-shaped cross section or a square-shaped cross section.

[0034] In yet another example embodiment, a sauna comprises an enclosure, a door configured in the enclosure, a seat inside the enclosure, and a device holder means inside the enclosure. The device holder means for holding a first edge of an electronic device offset from one of a wall of the enclosure or the door so that a second edge of the electronic device leans against said one of the wall or the door. The enclosure comprises four walls, a ceiling and a floor. The seat is configured between a first wall and a second wall and runs parallel to a third wall and a fourth wall. The door is configured in the third wall. The device holder is mounted to the door opposite to, and in parallel

with, the seat. The device holder means comprises an upward facing groove.

[0035] The above description illustrates various embodiments along with examples of how aspects of some embodiments may be implemented. The above examples and embodiments should not be deemed to be the only embodiments and are presented to illustrate the flexibility and advantages of some embodiments as defined by the following claims. Based on the above disclosure and the following claims, other arrangements, embodiments, implementations, and equivalents may be employed without departing from the scope hereof as defined by the claims.

[0036] Although embodiments of the disclosure have been described in considerable detail with reference to certain preferred versions thereof, other embodiments are possible. Therefore, the spirit and scope of the appended claims should not be limited to the description of the embodiments above.

#### **Claims**

- **1.** A sauna comprising: a heating unit configured to generate heat; an enclosure configured to enclose at least one user and the heating unit; at least one seat located inside the enclosure; and a door having an entry side and an exit side opposite the entry side, the door configured to allow the at least one user to enter and exit the enclosure; wherein the door comprises an elongate handle having a groove running substantially along an upper surface of the elongated handle, the elongate handle oriented horizontally on the exit side of the door and viewable by the at least one user when the at least one user is seated on the at least one seat.
- **2**. The sauna of claim 1, wherein the groove of the elongate handle has a depth, width and length sufficient to engage an edge of an object such that the object is supported by the elongate handle.
- **3**. The sauna of claim 2, wherein the object is an electronic device.
- **4.** The sauna of claim 3, wherein the electronic device comprises a display facing the user.
- **5.** The sauna of claim 3, wherein the electronic device is a smartphone, a tablet computer, or an ereader.
- **6.** The sauna of claim 2, wherein the object is a print publication.
- 7. The sauna of claim 2, wherein a cross-sectional view of the groove of the elongate handle comprises one of: a right angle, a curve, or an acute angle.
- **8.** The sauna of claim 2, wherein the elongate handle is configured to serve as a towel rack or a grab bar in addition to supporting the object.
- **9**. The sauna of claim 1, wherein the at least one seat and the door are configured in parallel.
- **10**. A sauna comprising: an enclosure; a door configured in the enclosure; a seat inside the enclosure; and a device holder inside the enclosure, the device holder comprising a horizontal rod comprising an upward facing surface, the upward facing surface comprising a groove.
- **11**. The sauna of claim 10, wherein the device holder is mounted on the door to form an internal door handle.
- **12**. The sauna of claim 11, further comprising an external door handle mounted to the door outside the enclosure, wherein a first end of the external door handled is coupled through the door to a first end of a mounting unit of the device holder.
- **13**. The sauna of claim 10, wherein the device holder is mounted opposite the seat.
- **14.** The sauna of claim 10, wherein the horizontal rod comprises a first end and a second end, wherein the first end is coupled to a first mounting unit coupled between the first end of the horizontal rod and one of a wall of the enclosure or the door and the second end is coupled to a second mounting unit coupled between the second end of the horizontal rod and one of the wall or the door.
- **15**. The sauna of claim 10, wherein the device holder is configured to hold one or more of: an electronic device and a towel.
- **16**. The sauna of claim 10, wherein the enclosure comprises four walls; wherein the seat is

configured between a first wall and a second wall and runs parallel to the third and fourth walls; wherein the door is configured in the third wall; and wherein the device holder is mounted to the door opposite to, and in parallel with, the seat,

- **17**. The sauna of claim 10, wherein the horizontal rod is circular or square; and wherein the groove comprises U-shaped cross section or a square-shaped cross section.
- **18**. A sauna comprising: an enclosure; a door configured in the enclosure; a seat inside the enclosure; and device holder means inside the enclosure, the device holder means for holding a first edge of an electronic device offset from one of a wall of the enclosure or the door so that a second edge of the electronic device leans against said one of the wall or the door.
- **19**. The sauna of claim 18, wherein the enclosure comprises four walls, a ceiling and a floor; wherein the seat is configured between a first wall and a second wall and runs parallel to a third wall and a fourth wall; wherein the door is configured in the third wall, and wherein the device holder is mounted to the door opposite to, and in parallel with, the seat.
- **20**. The sauna of claim 18, wherein the device holder means comprises an upward facing groove.