# (11) EP 2 586 936 A2

(12)

# **EUROPEAN PATENT APPLICATION**

(43) Date of publication: 01.05.2013 Bulletin 2013/18

(51) Int Cl.: **E04H 3/02** (2006.01)

E04B 2/82 (2006.01)

(21) Application number: 12190176.3

(22) Date of filing: 26.10.2012

(84) Designated Contracting States:

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB
GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO
PL PT RO RS SE SI SK SM TR

Designated Extension States:

**BA ME** 

(30) Priority: 26.10.2011 US 201113282245

(71) Applicant: Six Continents Hotels, Inc. Atlanta GA 30346 (US)

(72) Inventors:

 Johnson, Patrick Brian ATLANTA, GA Georgia 30316 (US)

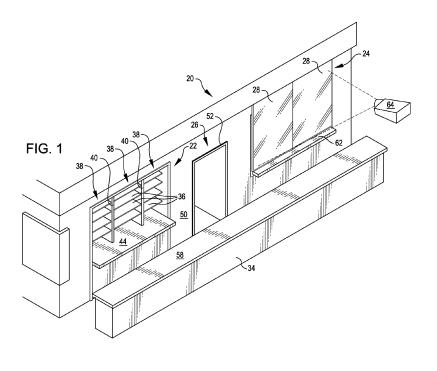
 Heimbuch, David Scott DECATUR, GA Georgia 30030 (US)

(74) Representative: Deambrogi, Edgardo et al Corso Emilia 8 10152 Torino (IT)

# (54) A sliding panel system for providing selective access to service areas, and corresponding combined service area

(57) A sliding panel system and a combined service area are disclosed. A sliding panel system for blocking access to disparate features of a room comprises a plurality of service areas (20; 22, 24), the service areas being separate regions of a room; and one or more panels (28; 128), the panel(s) being selectively movable to in front of the service areas (22, 24) so as to block access to one or more room features while leaving at least one other room feature at least partially accessible, and wherein the panel(s) (28; 128) are movable such that a user may

select a different room feature to expose or block. A combined service area (20) comprises a first service area (22), a second service area (24), and one or more panels (28; 128) movable between a first configuration wherein the first service area (22) is at least partially covered by the one or more panels (28; 128) and the second service area (24) is accessible; and a second configuration wherein the second service area (24) is at least partially covered by the one or more panels (28; 128) and the first service area (22) is accessible.



20

#### Description

#### **BACKGROUND**

**[0001]** Hotels and other lodging establishments often incorporate common space providing a multitude of services to their guests. Such services include dining venues, media lounges, business centers, bars serving alcoholic beverages and the like. Typically, each type of service has its own dedicated area within the larger common space. For example, a hotel may include separate eating and working areas.

**[0002]** Some hotel services are only applicable to specific times of the day, and require different workspaces or presentations. For example, a hotel bar may be open only at night, and an omelet station may be open only in the morning. Thus, areas providing certain services often stand idle at times of the day when such services would not be appropriate or profitable to provide to guests.

#### **BRIEF SUMMARY**

**[0003]** For a fuller understanding of the nature and advantages of the present invention, reference should be made to the ensuing detailed description and accompanying drawings.

[0004] Embodiments herein are directed to a sliding panel system for blocking access to disparate features of a room. The sliding panel system includes a plurality of service areas, the service areas being separate regions of a room; and one or more panels, the panel(s) being located in front of the service areas so as to block access to one or more room features while leaving at least one other room feature at least partially accessible, and wherein the panel(s) are movable such that a user may select a different room feature to expose or block.

**[0005]** The system can include a support structure located above the panels; and a sliding mechanism, the sliding mechanism being simultaneously attached to the panel(s) and the support structure, wherein the sliding mechanism enables the panel(s) to slide to selectively expose service areas.

**[0006]** In an embodiment, the service areas include: a beverage preparation and serving area, including a plurality of shelves having horizontal surfaces for supporting bottles; and a food preparation and serving area.

**[0007]** In still further embodiments, the room features include a media center, including one or more electronic display devices, one or more electronic media playback devices, and an enclosure to support and display said electronic display devices and electronic media playback devices; and a food preparation and serving area.

**[0008]** In still more embodiments, the system includes at least two panels, the panels being movable such that they can overlap one another.

**[0009]** In embodiments, wherein there is at least one non-functional area between two or more room feature(s).

**[0010]** In accordance with further embodiments, a combined service area is provided, comprising: a first service area; a second service area; and one or more panels movable between: a first configuration wherein the first service area is at least partially covered by the one or more panels and the second service area is accessible; and a second configuration wherein the second service area is at least partially covered by the one or more panels and the first service area is accessible.

**[0011]** In embodiments, the first service area comprises a bar, and the second area comprises a cooking or food service area. In another embodiment, the first service area comprises a media center, and the second service area comprises a breakfast bar. If a media center is used, the media center can include two televisions, wherein the second configuration comprises two panels, one each in front of the two televisions. A third configuration can be provided wherein the two panels are positioned, front to back, in front of either one of the two televisions.

**[0012]** In further embodiments, a stop may be provided for aligning one of the panels at a position in the combined service area. In embodiments where the panels are movable such that they can overlap one another, the stop can be a protrusion on one of the panels that is engaged by another of the panels.

**[0013]** For a fuller understanding of the nature and advantages of the present invention, reference should be made to the ensuing detailed description and accompanying drawings.

## BRIEF DESCRIPTION OF THE DRAWINGS

### [0014]

35

40

45

50

55

FIG. 1 shows a perspective view of a sliding panel system as adapted for nighttime use in accordance with an embodiment of the invention.

FIG. 2 shows a front view of the sliding panel system of FIG. 1.

FIG. 3 shows a perspective view of the sliding panel system of FIG. 1, as adapted for daytime use in accordance with an embodiment.

FIG. 4 shows a front view thereof.

FIG. 5 shows a perspective view of a sliding mechanism for the sliding panels of FIG. 1.

FIG. 6 shows a perspective view of an alternate sliding panel system adapted for media use.

FIG. 7 shows a front view thereof, with the panels in a breakfast bar access position.

FIG. 8 shows a front view thereof, with the panels in

15

25

30

40

45

4

a hybrid position with one television exposed and the other covered by the panels, with the panels stacked front to back.

#### **DETAILED DESCRIPTION**

[0015] In the following description, various embodiments of the present invention will be described. For purposes of explanation, specific configurations and details are set forth in order to provide a thorough understanding of the embodiments. However, it will also be apparent to one skilled in the art that the present invention may be practiced without the specific details. Furthermore, well-known features may be omitted or simplified in order not to obscure the embodiment being described.

**[0016]** Given that common space as described above is often limited in size, there is considerable value in being able to use a given area for multiple purposes, as well as to quickly and easily switch between such purposes, without detracting from the suitability for the area for each service it provides. The embodiments described below are demonstrative but in no way limiting.

**[0017]** In accordance with embodiments herein, a common area includes two or more service areas. These service areas may be, for example, a bar, a media center, a television module, a cooking area, a breakfast bar, or other areas available for access and/or use by service personnel and/or patrons. Embodiments herein are particularly of use in hotel common areas, but may be used in other service industries.

[0018] Referring now to the drawings, in which like reference numerals represent like parts throughout the several views, FIG. 1 shows a combined cooking and bar area 20. In accordance with embodiments, the combined cooking and bar area 20 is configurable between nighttime use, where a bar is available, and daytime use, where a cooking area is exposed. In the embodiment shown, the cooking and bar area 20 are configured for nighttime use in a typical lodging common area, in accordance with an embodiment. As shown in the drawing, an embodiment includes a bar 22 for making and serving beverages, a cooking area 24 (best shown in FIGS. 3 and 4) for preparing and serving food to the right of the bar, and a wall surface 26 that extends between the bar 22 and the cooking area 24. Two panels 28 are mounted for sliding movement across the front of the bar 22, the wall surface 26 and the cooking area 24. To this end, the panels are mounted on a sliding mechanism 30 (FIG. 5) that attaches to and slidingly supports the panels 28 from a ceiling 32. In the embodiment shown in the drawings, an eating counter 34 is positioned in front of the bar and is separated from the bar 22 by empty space, within which food preparers and other service personnel can move about.

**[0019]** In general, the bar may include alcoholic or non-alcoholic beverages, mixers, or other bar accoutrements that may be stored behind the panels 28. As illustrated in accordance with an embodiment, the bar 22 includes

a plurality of shelves 36, arranged as three vertical columns 38 with four flat, horizontal shelves 36 per column 38. The columns 38 of shelves 36 are separated by dividers 40 that protrude such that the shelves 36 are recessed relative to the dividers 40 and the surrounding wall surface 26. The shelves 36 are designed to hold, support and display a plurality of beverage bottles or other bar accoutrements (not shown, but known). The dividers 40 extend downward to a bar counter 44, which is attached to the wall surface 26 and provides a horizontal space 46 on which to prepare beverages and which can hold additional beverage bottles and/or beverage draft taps (not shown, but known). As discussed previously, the bar may take any configuration, and can include more or less shelves and/or columns than are shown, and/or can utilize different configurations.

[0020] The wall surface 26 surrounds both the bar 22 and the cooking area 24, and a portion 50 lies to the right of the bar 22 and to the left of the cooking area 24, effectively separating them. This portion 50 of the wall surface 26 contains an entryway 52 to an adjacent area or to the back of the cooking area 24. In an alternative embodiment, the bar 22 and the cooking area 24 are immediately adjacent, with no intervening portion 50 of the wall surface 26, and subsequently, no intervening entryway 52

[0021] As previously mentioned, the eating counter 34 is separated from the bar 22 by empty space and runs from the leftmost to the rightmost portion of the bar 22 and to and beyond the cooking area 24. Although not shown, the eating counter 34 can turn ninety degrees to run perpendicular to the wall surface 26, eventually intersecting with and ending at the wall surface 26, thus enclosing a service area between the cooking and bar area 20 and the counter 34. The eating counter 34 has a broad, flat horizontal surface 58 upon which food preparers can place prepared drinks and food for patrons, also located within the eating counter's 34 proximity, to consume.

[0022] In general, the cooking area 24 can include any structure at which food may be prepared or served, and which can be completely or partially covered by the movable panels 28. In an embodiment shown in FIG. 3, the cooking area 24 is recessed behind the wall surface 26, and includes a counter 62 that is attached to the wall surface 26 and that extends beyond the wall surface 26. The food serving counter 62 provides a surface upon which a person standing within the cooking area 24 and behind the food serving counter 62 may place food items that are ready to serve. In addition, if desired, a griddle or other cooking surfaces may be provided on or near the counter 62. The area behind the cooking area 24 may be accessed by food preparers via the entryway 52, or via a different doorway (not shown) that is beyond the cooking area 24.

**[0023]** In an embodiment, a TV projector 64 may be provided that projects an image on the panels 28 when in any position. In accordance with an embodiment, such

30

40

45

a feature is provided when the panels are in front of the cooking area. This arrangement allows enhanced television viewing when the combined area 20 is in a bar configuration.

[0024] As previously noted, the panels 28 are horizontally slidable via functionality enabled by the attached sliding mechanism 30. The panels 28, as shown in FIG. 3, are translucent and sized so that when slid to an appropriate position 66, they obscure the recessed area of the bar 22 and leave the cooking area 24 exposed. This configuration is appropriate for morning and daytime use, when the bar 22 has little applicability. Likewise, as shown in FIG. 1., the panels 28 are also sized such that the cooking area 24, of similar dimensions to the recessed area of the bar 22, is obscured if said panels 28 are slid to the appropriate position. This position of the panels 28 exposes the bar 22 and prevents access to the cooking area 24, as would be appropriate for nighttime use. The sliding operation of the panels 28 to obscure either the bar 22 or cooking area 24 does not, however, foreclose any part of the eating counter 34 from being accessed by either food preparers or patrons. In alternate embodiments, the invention may include either a single sliding panel 28 or three or more sliding panels 28, as differing needs dictate. Additionally, the panel(s) may be configured and positioned such that portions of the bar 22, cooking area 24 or other types of service areas are only partially obscured, or so that the bar and cooking area are both available at the same time, for example by aligning the panels 28 at a position against the wall area.

[0025] FIG. 5 illustrates the sliding mechanism 30 in an embodiment of the invention. As noted, the sliding mechanism 30 provides support for the panels 28 from a ceiling 32 and enables the panels 28 to slide horizontally, providing the functionality as previously described. In the embodiment shown in the drawings, the sliding mechanism 30 includes rollers 70 mounted on the top of the panels 28 and that engage a rail 72 attached to the ceiling 32. Both panels may be mounted on a single rail, and abut one another in use, or the two panels 28 can be mounted on separate rails so that they can be positioned front to back and stored together in one location, such as against the wall portion, or to one side of the cooking area. This feature is described in more detail below in additional embodiments. Other sliding mechanisms configurations may be used, including bearings/tracks, slots/grooves, or other suitable arrangements. Translation of the panels 28 can be restricted by stops or caps (not shown). A second sliding apparatus may be replicated at the bottom of the panels in order to improve the system's structural characteristics, and a system involving different components, may be contemplated within the context of the invention. Embodiments contemplate manual translation of the panels 28, but the panels may be altered to provide electronic or motoroperated movement.

[0026] The invention's functionality is adaptable to ex-

pose or obscure other types of service areas in lodging common areas, such as media centers, breakfast areas and concierge stations. In accordance with yet another embodiment, FIG. 6 illustrates a combined media station and breakfast bar 84 including a television station 86 for storing and displaying televisions, media devices and like items, a breakfast bar 88 for serving, storing and displaying food items immediately to the right of the television station 86, and panels 128 in front of both the television station 86 and the breakfast bar 88, the panels 128 being slidably supported similar to the panels 28 described previously. The embodiment as illustrated shows the system configured for daytime or evening use, with the panels 28 obscuring the breakfast bar 88 in FIG. 6.

[0027] The television station 86 is situated to the left of and immediately adjacent to the breakfast bar 88. The television station 86 as illustrated consists of a left television enclosure 88 and right television enclosure 90, with a central storage area 92 in between. Each of the left television enclosure 88, the right television enclosure 90, and the central storage area 92 are of equal vertical height. The left television enclosure 88 and right television enclosure 90 each have a large television compartment 94 within which a television 96 or other display may be supported and displayed. A media device enclosure 98 that holds and displays a media device such as a game machine or video playback device is situated immediately below and adjacent to the television compartment 94. A covered storage unit 100 is located immediately below and adjacent to the media device enclosure 98. The covered storage unit 100 is split into left and right subsections 102 of horizontally and vertically equal size, each subsection 102 having a door to obscure the covered storage unit's 100 contents. A partially covered storage unit 106 is located above and immediately adjacent to the television compartment 94. The partially covered storage unit 106 is separated into four portions, the lower two subsections being situated side to side and of equal horizontal and vertical size, and the upper two subsections also being situated side to side, above and immediately adjacent to the lower two subsections, and of equal horizontal and vertical size.

**[0028]** The central storage area 92 in between the left 88 and right television enclosure 90 consists of four subsections in a vertical column. The television station 86 may take any different configuration than described here, such as having only one television enclosure, no central storage area, or differently configured storage units.

[0029] Moving to FIG. 7, an embodiment is shown where the sliding panels 128 have been configured to obscure the television station 86 and expose the breakfast bar 88. As illustrated, the breakfast bar 88 is situated immediately to the right of the television station 86 and includes a counter surface 122. The breakfast bar 88 may include a number of other features that permit it to be used as a service counter, such as a sneeze guard and cooking area. In embodiments, the breakfast bar may be any type of cooking or service area for a common

55

25

30

40

45

50

area, including, but not limited to, the functions described for the cooking area 24.

[0030] The counter surface 126 provides a flat common surface for preparing, displaying and storing prepared food, and protrudes beyond the vertical plane of the television station 86. The cooking area 126 can include an embedded hot cooking surface, such as a griddle, that is surrounded by a splash guard to prevent food particles from leaving the cooking area 126 or for preventing access by patrons standing outside the cooking area 126. Empty space behind the breakfast bar 88 is provided within which food preparers may move about. The breakfast bar 88 may take any other configuration, and may include other features, such as a hot food trays, multiple griddles, or differently configured counter surfaces.

[0031] The panels 128 in the embodiments described herein have functionality similar to the panels 28 described in a previous embodiment. Analogously, the panels 128 may be manipulated such that part or all of the television station 86, breakfast bar 88 or any combination thereof is exposed and/or obscured. In the embodiment pictured in FIG. 6, when the panels 128 are configured such that the breakfast bar is partially or fully obscured, the counter surface 126 protrudes slightly relative to the front plane of the panels 28. In alternate embodiments, there may be any number of panels 28, the breakfast bar 88 and television station 86 may be configured differently relative to one another, the counter surface 126 may be flush with the panels 28, there may be a wall surface or any other feature intervening between the breakfast bar 88 and television station 86, or any other configuration not heretofore mentioned.

[0032] In accordance with an embodiment, as shown in FIGS. 7 and 8, the panels 128 may cover one or both of the television enclosures 88, 90. To this end, in FIG. 7, both panels 128 are shown as moved so that each covers a television enclosure 88, 90. Alternatively, the two panels 128 may be stacked, front to back, in front of only one of the stations, as shown in FIG. 8. As described above, to provide this feature, the two panels would need to be movable so that one is positioned in front of the other, for example, by providing two rails, one each for the two panels.

**[0033]** Also, if desired, a stop or other feature may be provided along the sliding mechanism or on one of the panels to provide an alignment function. For example, a protrusion may extend out of a front, side edge of the back panel that engages and stops the front panel when the two are stacked.

[0034] In embodiments, the panels may be aligned away from all service areas, so that all service areas are exposed. For example, the panels 28 may be stored on the wall surface 26, such that the bar 22 and the cooking area 24 are both available for use at the same time. The panels can be stacked away from the service areas, stored adjacent to one another, or may be positioned at different locations in the service areas, for example, one

each on opposite sides of the bar 22.

**[0035]** Other variations are within the spirit of the present invention. Thus, while the invention is susceptible to various modifications and alternative constructions, certain illustrated embodiments thereof are shown in the drawings and have been described above in detail. It should be understood, however, that there is no intention to limit the invention to the specific form or forms disclosed, but on the contrary, the intention is to cover all modifications, alternative constructions, and equivalents falling within the spirit and scope of the invention, as defined in the appended claims.

[0036] The use of the terms "a" and "an" and "the" and similar referents in the context of describing the invention (especially in the context of the following claims) are to be construed to cover both the singular and the plural, unless otherwise indicated herein or clearly contradicted by context. The terms "comprising," "having," "including," and "containing" are to be construed as open-ended terms (i.e., meaning "including, but not limited to,") unless otherwise noted. The term "connected" is to be construed as partly or wholly contained within, attached to, or joined together, even if there is something intervening. Recitation of ranges of values herein are merely intended to serve as a shorthand method of referring individually to each separate value falling within the range, unless otherwise indicated herein, and each separate value is incorporated into the specification as if it were individually recited herein. All methods described herein can be performed in any suitable order unless otherwise indicated herein or otherwise clearly contradicted by context. The use of any and all examples, or exemplary language (e.g., "such as") provided herein, is intended merely to better illuminate embodiments of the invention and does not pose a limitation on the scope of the invention unless otherwise claimed. No language in the specification should be construed as indicating any non-claimed element as essential to the practice of the invention.

Preferred embodiments of this invention are de-[0037] scribed herein, including the best mode known to the inventors for carrying out the invention. Variations of those preferred embodiments may become apparent to those of ordinary skill in the art upon reading the foregoing description. The inventors expect skilled artisans to employ such variations as appropriate, and the inventors intend for the invention to be practiced otherwise than as specifically described herein. Accordingly, this invention includes all modifications and equivalents of the subject matter recited in the claims appended hereto as permitted by applicable law. Moreover, any combination of the above-described elements in all possible variations thereof is encompassed by the invention unless otherwise indicated herein or otherwise clearly contradicted by context.

**[0038]** All references, including publications, patent applications, and patents, cited herein are hereby incorporated by reference to the same extent as if each reference were individually and specifically indicated to be

10

15

20

35

45

50

incorporated by reference and were set forth in its entirety herein.

#### Claims

A sliding panel system for blocking access to disparate features of a room, characterized in that it comprises:

a plurality of service areas (20; 22, 24), the service areas being separate regions of a room; and one or more panels (28; 128), the panel(s) being selectively movable to in front of the service areas (22, 24) so as to block access to one or more room features while leaving at least one other room feature at least partially accessible, and wherein the panel(s) (28; 128) are movable such that a user may select a different room feature to expose or block.

2. The sliding panel system for blocking access to disparate features of a room as claimed in claim 1, further comprising:

a support structure (32) located above the panels (28; 128); and a sliding mechanism (30), the sliding mechanism (30) being simultaneously attached to the panel(s) (28; 128) and the support structure (32), wherein the sliding mechanism (30) enables the panel(s) (28; 128) to slide to selectively expose

3. The sliding panel system for blocking access to disparate features of a room as claimed in claim 1, wherein the service areas include:

service areas (22,24).

a beverage preparation and serving area (22), including a plurality of shelves (36) having horizontal surfaces for supporting bottles; and a food preparation and serving area (24).

**4.** The sliding panel system for blocking access to disparate features of a room as claimed in claim 1, wherein the room features include:

a media center (86), including one or more electronic display devices (96), one or more electronic media playback devices, and an enclosure (88, 90, 98) to support and display said electronic display devices (96) and electronic media playback devices; and a food preparation and serving area (88).

**5.** The sliding panel system for blocking access to disparate features of a room as claimed in claim 1, wherein the system comprises at least two panels

(28; 128), the panels being movable such that they can overlap one another.

- **6.** The sliding panel system for blocking access to disparate features of a room as claimed in claim 1, wherein there is at least one non-functional area (50) between two or more room feature(s).
- 7. A combined service area (20), **characterized in that** it comprises:

a first service area (22); a second service area (24); and one or more panels (28; 128) movable between:

a first configuration wherein the first service area (22) is at least partially covered by the one or more panels (28; 128) and the second service area (24) is accessible; and a second configuration wherein the second service area (24) is at least partially covered by the one or more panels (28; 128) and the first service area (22) is accessible.

- 25 8. The combined service area (20) of claim 7, wherein the first service area (22) comprises a bar and the second service area (24) comprises at least one of a cooking area and a food service area.
- 30 9. The combined service area (20) of claim 7, further comprising a television projector (64) for projecting an image onto the one or more panels (28; 128).
  - **10.** The combined service area (20) of claim 7, wherein the first service area (22) comprises a media center (86) and the second service area comprises a breakfast bar (88).
  - 11. The combined service area of claim 10, wherein the media center (86) comprises two televisions (96), and wherein the second configuration comprises two panels (128), one each in front of the two televisions.
  - **12.** The combined service area of claim 11, further comprising a third configuration wherein the two panels (128) are positioned, front to back, in front of one of the two televisions (96).
  - **13.** The combined service area of claim 10, wherein the media center (86) comprises two televisions (96), and wherein the second configuration comprises two panels (128) positioned, front to back, in front of one of the two televisions (96).
- **14.** The combined service area of claim 7, further comprising a stop for aligning one of the panels (28; 128) at a position in the combined service area (20).

**15.** The combined service area of claim 14, wherein the panels (28; 128) comprise at least two panels, the panels (28; 128) being movable such that they can overlap one another, and wherein the stop comprises a protrusion on one of the panels that is engaged by another of the panels.

**16.** The combined service area of claim 7, wherein the panels (28; 128) comprises at least two panels, the panels being movable such that they can overlap

one another.

