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(54) Title: SHOWER ENCLOSURE DOOR SYSTEM

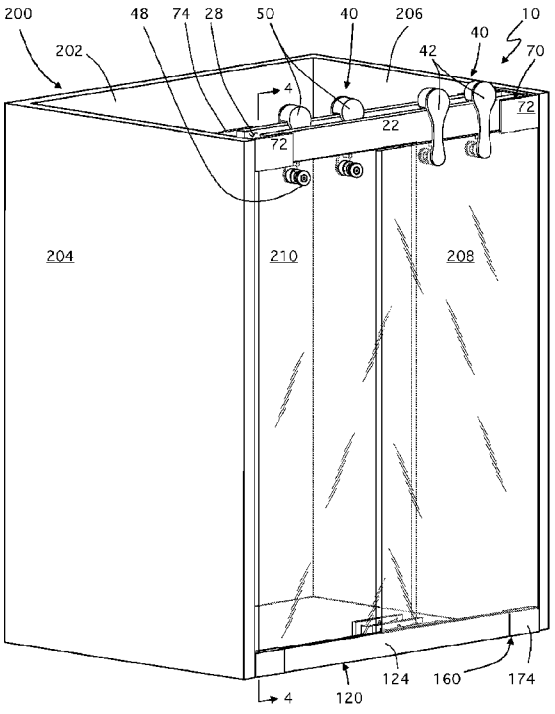


Fig. 1

(57) Abstract: A shower enclosure door system (10), having a header (20) with a channel (28) defined between first and second ends (24, 26). The header (20) further has at least first, second, third, and fourth roller assemblies (40) that travel upon the channel (28). The first and second brackets (70) receive the first and second ends (24, 26), respectively. The first and second brackets (70) mount onto lateral walls (204, 206) to define a shower enclosure (200). A base assembly (120) comprises third and fourth ends (126, 128). First and second base brackets (160) mount upon the third and fourth ends (126, 128), respectively. The base assembly (120) mounts onto a mounting surface for the shower enclosure (200). The first and second brackets (70) support a weight of shower doors (208) of the shower enclosure (200) without side jambs while the shower doors (208) bypass one another.

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I. TITLE: SHOWER ENCLOSURE DOOR SYSTEM

II. FIELD OF THE INVENTION

The present invention relates to shower door systems, and more particularly, to shower enclosure door systems with bypass shower doors.

III. DESCRIPTION OF THE RELATED ART

Applicant believes that one of the closest references corresponds to U.S. Patent Application Publication No. 20150164284 A1, published on June 18, 2015 to Gary Sprague for a Sliding Shower Door Assembly. However, it differs from the present invention because Sprague teaches a fully frameless sliding shower door assembly. The assembly dispenses with the need for vertical framing members by using a panel of sufficient strength to be fully self-supporting. The need for an upper horizontal header member is eliminated by using a unique upper guide assembly wherein the guide is fixed to the movable shower door and configured to slide about a top edge of the stationary shower door. The need for a lower horizontal rail member is eliminated by the use of a unique, self-centering roller assembly that is attachable to the door panel without the need for a rail member. The roller assembly features matching inverted and non-inverted generally U-shaped profiles on the roller and track, respectively. The shower door assembly further features inboard and outboard roller finger guards, as well as a track leveling feature, which improves ease of installation.

Applicant believes that another reference corresponds to U.S. Patent Application Publication No. 20110072613 A1, published on

March 31, 2011 to James Hays for Spring Biased Roller for a Shower Door or the Like. However, it differs from the present invention because Hays teaches a roller for slidably mounting a panel such as a shower door to a rail or to a similar structure. The roller comprises a first cylindrical portion including a rolling surface for engaging the rail and a second cylindrical portion fixedly securable to the shower door panel. The second portion is concentrically mounted to the first portion and is rotatable relative thereto. A resilient member such as a tension spring connects the first portion to the second portion and stores a potential energy when a user moves the shower door in one direction and automatically urges the shower door to move in the opposite direction when released by the user.

Applicant believes that another reference corresponds to U.S. Patent Application Publication No. 20110005140 A1, published on January 13, 2011 to Michael John Guidos et al. for Articulating Roller Arm Assembly. However, it differs from the present invention because Guidos el at. teaches an articulating roller arm assembly comprising a single integral piece cantilever beam with a span section and a throw section, with the span section oriented substantially transverse the throw section. A first distal end of the throw section and a distal end of the span section form a bend of the single integral piece cantilever beam. The articulating roller arm assembly further including a first wheel that is coupled with a first distal end of the throw section, and a second wheel that is coupled with a second distal end of the throw section.

Applicant believes that another reference corresponds to U.S. Patent No. 9062485 B2 issued to Michael John Guidos et al. on June 23, 2015 for Articulating Roller Arm Assembly. However, it differs from the present invention because Guidos et al. teaches an articulating

roller arm assembly comprising a single integral piece cantilever beam with a span section and a throw section, with the span section oriented substantially transverse the throw section. A first distal end of the throw section and a distal end of the span section form a bend of the single integral piece cantilever beam. The articulating roller arm assembly further including a first wheel that is coupled with a first distal end of the throw section, and a second wheel that is coupled with a second distal end of the throw section.

Applicant believes that another reference corresponds to U.S. Patent No. 8915019 B2 issued to Robert Schachter et al. on December 23, 2014 for Sliding Door Stopper System. However, it differs from the present invention because Schachter et al. teaches a sliding door assembly for use with a tub or shower enclosure. The assembly comprising a rod, having a first end and a second end extending along said enclosure. At least one door, having a top, bottom, first end, second end, first surface and second surface. At least one roller attached to said door at a predetermined position and slidably engaging said rod. A stopper attached to said rod, at a predetermined position. A striker attached to said door, at a predetermined position. The striker further comprising at least one striking member. The stopper further comprising at least one striking member receiver, wherein when said door is in a first position, said at least one striking member and said at least one striking member receiver are not engaged and when said door is in a second position, said at least one striking member and said at least one striking member receiver are engaged, preventing said at least one door from substantial horizontal and vertical movement along said rod.

Applicant believes that another reference corresponds to U.S. Patent No. 7346939 B2 issued to Edward A. Perry on March 25, 2008

for Triple Slide Frameless Shower Door. However, it differs from the present invention because Perry teaches a sliding door assembly including at least three frameless panels that are slidably installed to form a door to an enclosed tub or shower area. Each frameless panel is gripped at a top by at least two roller assemblies, and the roller assemblies are slidably suspended from a header that supports the frameless panels via the roller assemblies. The sliding door assembly also includes a guide assembly that has at least three tracks, wherein each frameless panel is guided by a corresponding one of the tracks.

Applicant believes that another reference corresponds to U.S. Patent No. 6381904 B1 issued to Joseph F. Tedescucci on May 7, 2002 for Track Mounted Bath Doors with Clip Anti-Derailer. However, it differs from the present invention because Tedescucci teaches a door system for an enclosure such as a shower enclosure, including sliding doors suspended from hanging brackets, which are attached to rails mounted to an opening of the enclosure. The hanging brackets include rollers, which roll along the rails enabling the doors to slide with respect to the rails. The hanging brackets include anti-derailer clips snap fitted onto the brackets after the doors are hung from the rails to prevent the doors from being removed from the rails. The clips each have flexible catches at their top and bottom, as well as projections on a side to align their position with respect to the brackets.

Applicant believes that another reference corresponds to U.S. Patent No. 6023794 A issued to John H. Nein on February 15, 2000 for Shower Door Assembly. However, it differs from the present invention because Nein teaches a sliding door system for a shower-bathtub installed adjacent to three walls of a bathroom. The sliding door system includes an upper track that has at least two wheel

supports, at least two wheel stays positioned above the two wheel supports, and at least two lower bearing supports positioned at least five inches below the two wheel supports. The upper track is rigidly attached to the two short walls of the shower-bathtub and provides enough support so that the presence of a lower track is unnecessary.

Applicant believes that another reference corresponds to U.S. Patent No. 5852837 A issued to Thomas J. Husting on December 29, 1998 for Multiple Section Suspended Bath Doors with a Lower Stabilizer. However, it differs from the present invention because Husting teaches a door system including a sill having a ledge extending across the bottom of an opening to a bathing enclosure and having a raised lip along an exterior side of the ledge. A pair of parallel tracks are above the opening with a first door suspended from and slidable along the first track freely above the ledge. A second door and a third door are suspended from and slidable along the second track being freely suspended above the ledge. A pair of door retainers are attached to the first door and engage the other doors to prevent the doors from swinging into each other. A stop member is attached to the sill on an interior side of the ledge to retain three doors above the ledge between the stop member and the raised lip.

Applicant believes that another reference corresponds to U.S. Patent No. 5598666 A issued to Michael J. Kurth on February 4, 1997 for Anti-Derailing Mechanism for Track Mounted Bath Doors. However, it differs from the present invention because Kurth teaches a door system for a bathing enclosure, which includes a track extending above an opening of the enclosure with the track having a rail with an upper surface having a longitudinal groove. A door has first and second rollers, which ride in the rail groove, so that the door is suspended from and slidable along the track. A separate stop is

associated with each roller with each stop having a first locking bracket fixed to the door and a member is movably attached to the locking bracket. The members are adjustable between a first position at which the first roller may be removed from the groove and a second position at which the first member strikes the track before the first roller can be removed from the groove.

Applicant believes that another reference corresponds to U.S. Patent No. 4458449 A issued to Horst Breuer on July 10, 1984 for Separation for Showers, Bathtubs, or the Like. However, it differs from the present invention because Breuer teaches a separation for showers, bathtubs, or the like, including: a stationary, closed frame, made of several frame parts, for guiding at least one movable door element, and, if appropriate, for fastening a stationary door element. The at least one movable door element is suspended by rollers on the upper frame part of the frame. A seal for sealing the closed separation against discharging splashed or sprayed water. A closed lower frame part of the stationary frame, this lower frame part having a box-like cross section, an upwardly directed narrowed portion of predetermined height and width, and an inclined run-off surface adjoining one side of the narrowed portion; and a movable door element, the lower frame part of which faces the mentioned frame part of the stationary frame, and is provided with a downwardly open recess which conforms to the narrowed portion of the stationary frame part.

Applicant believes that another reference corresponds to U.S. Patent No. 4445239 A issued to Ralph E. Jacobsen on May 1, 1984 for Suspended Shower-tub Doors with Upper Stabilizing Means. However, it differs from the present invention because Jacobsen teaches an upper horizontal rail structure that is stationarily supported in an

elevated position above the upper marginal edge of the outer wall of the lower tub portion of a shower-tub area and defines three laterally spaced depending inner, outer and intermediate flange portions between which inner and outward downwardly opening channels are formed. A pair of upstanding inner and outer shower doors are provided including upper marginal edge portions slidably received in the corresponding channels and each upper marginal edge includes a pair of opposite end support rollers rollingly engaged with longitudinally extending track structure in the corresponding channel. In addition, the upper marginal edge portion of each door includes opposite end inner and outer guide roller structure journalled therefrom about upstanding axes and projecting outwardly from at least the inner and outer sides, respectively, of the door upper marginal edge portion below the support rollers thereof and above the lower marginal edges of the corresponding flange portions. The guide rollers are disposed for rolling engagement with the opposing surfaces of the corresponding flange portions and adjustably mounted from the corresponding doors for shifting laterally thereof. The lower marginal edges of the doors are disposed adjacent to the upper marginal edge of the outer wall of the associated tub portion and are free of guided engagement therewith.

Applicant believes that another reference corresponds to U.S. Patent No. 4245614 A issued to Mathew Hurwitz et al. on January 20, 1981 for Fireplace Screen. However, it differs from the present invention because Hurwitz teaches a glass panelled fireplace screen having sliding doors within a frame. The joints between the doors and the frame and between adjacent doors provide novel seals for effectively impeding the passage of air when the doors are in closed position. The screen includes thermostatically operated means, which

automatically opens the draft control when a fire is burning in the fireplace and which closes the draft control when the fire is out.

Applicant believes that another reference corresponds to U.S. Patent No. 4276919 A issued to Kenneth I. Walters on July 7, 1981 for Enclosure Doors. However, it differs from the present invention because Walters teaches an enclosure for a tub or shower comprising a pair of sliding doors, which can fold relative to each other along a vertical junction. Each door is supported by an offset hanger and is pivotal about its hanger. The hangers include rollers, which slide within an overhead track. The doors can be functioned to slide along the track, to pivot about the hangers and to fold together to fully expose the interior of the enclosure.

Applicant believes that another reference corresponds to U.S. Patent No. 4178718 A issued to Jordan M. Laby on December 18, 1979 for Door Assembly for a Tub and Shower Enclosure. However, it differs from the present invention because Laby teaches a pair of roller and track suspended glass doors assembled with a tub or shower enclosure without drilling or piercing the door panels. Compression clamps depending from the rollers grip the upper edge of each panel. Adhesive pads support combined handles and towel bars on obverse and reverse side of alternate panels. A central bottom guide track is snapped into and adhesively secured to the bottom frame member. The bottom frame member includes an upright outside flange with an inwardly extending rubbing bar to preclude outer panel abrasion. End guides for the inner door panel are fixed to upright side members of the frame. The upright members support the frame header, which contains the top track for the rollers and may be contoured to accept a trim panel on the outer face thereof.

Applicant believes that another reference corresponds to U.S. Patent No. 3359573 A issued to Ralph T. Casebolt on December 26, 1967 for Glass Shower Enclosure Door. However, it differs from the present invention because Casebolt teaches glass doors of the sliding type used as an intergral portion of a shower and bath tub enclosure or the like.

Applicant believes that another reference corresponds to U.S. Patent No. 2761533 A issued to H. Grossman on September 4, 1956 for Shower Door Enclosure Structure. However, it differs from the present invention because Grossman teaches a shower door enclosure structure. It provides shower-enclosure door-frame members and mounting fixtures of a form and arrangement which will permit quick and easy assembly and installation at the point of use; to provide improved shower-door frame members and mounting fixtures of this kind which suspend the doors on rollers operating in concealed tracks and retain the doors vertically during movement by concealed guideways; and to provide improved door-frame members and mounting fixtures of this kind which are simple in construction and ornamental in appearance, making possible economic manufacture and shipment in completely knockdown or disassembled form and easy assembly and mounting by the purchasers with little or no experience, using locally-obtained door panels.

Applicant believes that another reference corresponds to U.S. Reexamination No. RE24508 E issued to Harold Grossman on March 31, 1954 for Shower Door Enclosure Structure. However, it differs from the present invention because Grossman teaches shower door enclosure structures. Shower-enclosure door-frame members and mounting fixtures of a form and arrangement, which will permit quick and easy assembly and installation at the point of use; to provide

improved shower-door frame members and mounting fixtures of this kind which suspend the doors on rollers operating in concealed tracks and retain the doors vertically during movement by concealed guideways; and to provide improved door-frame members and mounting fixtures of this kind which are simple in construction and ornamental in appearance, making possible economic manufacture and shipment in completely knockdown or disassembled form and easy assembly and mounting by the purchasers with little or no experience, using locally - obtained door panels.

Applicant believes that another reference corresponds to U.S. Patent No. D729049 S issued to Stefan B. Andren on May 12, 2015 for Roller Mount. However, it differs from the present invention because Andren roller mount design is different from Applicant's.

Applicant believes that another reference corresponds to Chinese Patent No. CN 203879043 U issued to Shen Jinzhao et al. on October 15, 2014 for Novel Simple Shower House. However, it differs from the present invention because Jinzhao et al. teaches a shower house comprising a base basin, a first fixing glass door and a second fixing glass door. A first movable glass door is disposed in the first fixing glass door; a second movable glass door is disposed in the second fixing glass door; a first upper track is fastened on the upper end of the first fixing glass door; a second upper track is fastened on the upper end of the second fixing glass door. The external end of the first upper track and the external end of the second upper track are fixedly sleeved together via an upper connection member. A plurality of rollers are respectively fastened the first movable glass door and the second movable glass door. A U-shaped groove is arranged on each roller work surface. The first movable glass door and the second movable glass door are suspended on a corresponding track via the rollers. The

internal and external ends of the first upper track and the external and internal ends of the second upper track are respectively provided with a spacing block; and each spacing block is fixedly connected with the corresponding upper track.

Other patents describing the closest subject matter provide for a number of more or less complicated features that fail to solve the problem in an efficient and economical way. None of these patents suggest the novel features of the present invention.

IV. SUMMARY OF THE INVENTION

The present invention is a shower enclosure door system, and more particularly, a shower enclosure door system that does not have side jambs for supporting shower doors and their weight, but still permits the opening of both sliding shower doors making it a bypass.

More specifically, the present invention is a shower enclosure door system, comprising a header with a channel defined between first and second ends. The header further comprises at least first, second, third, and fourth roller assemblies that travel upon the channel. The first and second brackets receive the first and second ends respectively. The first and second brackets mount onto lateral walls to define a shower enclosure. A base assembly comprises third and fourth ends. First and second base brackets mount upon the third and fourth ends respectively. The base assembly mounts onto a mounting surface for the shower enclosure. The first and second brackets support a weight of shower doors of the shower enclosure without side jambs while the shower doors bypass one another.

The first, second, third, and fourth roller assemblies each comprise a frame securing a roller and a bushing. A pair of bushings secures each shower door. The frame further comprises a pin. Each of the first and second brackets comprises an exterior wall, an interior wall, a bottom wall, and a sidewall. Each sidewall comprises at least one hole to receive fastening means to mount onto the lateral walls of the shower enclosure. The sidewall may also comprise an adhesive element to mount onto the laterals walls of the shower enclosure. The exterior wall and the interior wall are parallel to each other. The sidewall is perpendicular to the exterior wall, interior wall, and bottom wall. The exterior wall, interior wall, and bottom wall extend a predetermined distance from the sidewall. The base assembly comprises at least first and second holes to receive fastening means to mount onto the mounting surface for the shower enclosure. The first and second base brackets comprise a base and an exterior face. The base comprises an adhesive element to mount onto the mounting surface for the shower enclosure. The base assembly comprises a guide element assembly. The guide element assembly comprises a guide frame. The guide frame comprises at least one guide. The shower door travels between at least two of the guides.

It is therefore one of the main objects of the present invention to provide a shower enclosure door system without side jambs.

It is another object of this invention to provide a shower enclosure door system that supports shower doors and their weight.

It is another object of this invention to provide a shower enclosure door system that permits the opening of both sliding shower doors making it a bypass.

It is another object of this invention to provide a shower enclosure door system that is easily adjustable without need of any further resizing work.

It is another object of this invention to provide a shower enclosure door system that can mount onto laterals walls and a mounting surface to define a shower enclosure.

It is another object of this invention to provide a shower enclosure door system, which both doors can be slid from end to end without interfering.

It is another object of this invention to provide a shower enclosure door system, which is of a durable and reliable construction.

It is yet another object of this invention to provide such a device that is inexpensive to manufacture and maintain while retaining its effectiveness.

Further objects of the invention will be brought out in the following part of the specification, wherein detailed description is for the purpose of fully disclosing the invention without placing limitations thereon.

V. BRIEF DESCRIPTION OF THE DRAWINGS

With the above and other related objects in view, the invention consists in the details of construction and combination of parts as will be more fully understood from the following description, when read in conjunction with the accompanying drawings in which:

Figure 1 represents an isometric view of a shower enclosure door system installed onto a shower enclosure.

Figure 2 is an isometric exploded view of a header, roller assemblies, and brackets.

Figure 3A is a rear isometric exploded view of a base assembly and base brackets with shower doors partially represented.

Figure 3B is a front isometric exploded view of the base assembly and base brackets with the shower doors partially represented.

Figure 4 is a side view of the shower enclosure door system taken along the lines 4 – 4, as seen in figure 1.

VI. DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now to the drawings, the present invention is a shower enclosure door system and is generally referred to with numeral **10**. It can be observed that it basically includes header **20**, roller assemblies **40**, brackets **70**, base assembly **120**, and base brackets **160**

As seen in figure 1, present invention **10** is installed onto shower enclosure **200**. In the preferred embodiment, shower enclosure **200** comprises rear wall **202**, lateral walls **204** and **206**, and shower doors **208** and **210**.

As seen in figures 1 and 2, header **20** comprises channel **28** defined between ends **24** and **26**. Header **20** comprises exterior face

22, top edges **30** that further define channel **28**, and bottom face **32**. At least first, second, third, and fourth roller assemblies **40** travel upon channel **28**. Roller assemblies **40** each comprise frame **42** securing roller **44** and bushing **48**. A first pair of bushings **48** secure shower door **208**, and a second pair of bushings **48** secure shower door **210**. Roller assemblies **40** also comprise covers **50** having cutouts **52** shaped to allow rollers **44** to partially protrude there through to ride upon channel **28**.

First and second brackets **70** comprise exterior wall **72**, interior wall **74**, bottom wall **76**, and sidewall **82**. Sidewall **82** comprises at least one hole **78** to receive fastening means to mount onto lateral walls **204** and **206** of shower enclosure **200**. Such fastening means may be screws, bolts, nails, rivets, and the like. In addition, sidewall **82** may comprise adhesive element **80** to mount onto lateral walls **204** and **206** of shower enclosure **200**. Such an adhesive element **80** may be two-sided tape, glue, or the like.

In a preferred embodiment, exterior wall **72** and interior wall **74** are parallel to each other, and sidewall **82** is perpendicular to exterior wall **72**, interior wall **74**, and bottom wall **76**. Exterior wall **72**, interior wall **74**, and bottom wall **76** extend a predetermined distance from sidewall **82**.

First and second brackets **70** receive ends **24** and **26** respectively. First and second brackets **70** mount onto lateral walls **204** and **206** to define shower enclosure **200**. It is noted that first and second brackets **70** support a weight of shower doors **208** and **210** without side jambs, whereby first and second brackets **70** mount directly onto lateral walls **204** and **206**.

As seen in figures 3A and 3B, base assembly **120** comprises ends **126** and **128**. Base assembly **120** comprises elongated base **122** having holes **130** to receive fastening means to mount onto a mounting surface for shower enclosure **200**, and interior wall **124**. Such fastening means may be screws, bolts, nails, rivets, and the like. Holes **130** may be elongated. Base assembly **120** comprises guide element assembly **140** comprising guide frames **142**. Each guide frame **142** comprises at least one guide **144** for shower doors **208** and **210** travel between at least two guides **144**.

Base brackets **160** mount upon ends **126** and **128**, and base assembly **120** mounts onto the mounting surface for shower enclosure **200**. Such a mounting surface can be a threshold or sill as an example as seen in figure 4. Base brackets **160** comprise base **162**, interior wall **164**, interior edge **172**, and exterior face **174**, extending between ends **166** and **168**.

Base brackets **160** comprise adhesive element **170** to mount onto base assembly **120**. Such an adhesive element **170** may be two-sided tape, glue, or the like.

As best seen in figure 4, shower doors **208** and **210** bypass one another. Frame **42** further comprises pin **46**. Pins **46** are sufficiently long and travel snugly below bottom face **32** to prevent rollers **44** from accidently lodging or coming off channel **28**.

The foregoing description conveys the best understanding of the objectives and advantages of the present invention. Different embodiments may be made of the inventive concept of this invention. It is to be understood that all matter disclosed herein is to be interpreted merely as illustrative, and not in a limiting sense.

VII. INDUSTRIAL APPLICABILITY

It is evident that an invention such as the shower enclosure door system claimed in the present application is quite desirable because it supports shower doors and their weight without side jambs. Also, the present shower enclosure door system is quite desirable because it permits the opening of both sliding shower doors making it a bypass. Additionally, the present shower enclosure door system is easily adjustable without need of any further resizing work and can mount onto laterals walls and a mounting surface to define a shower enclosure. Furthermore, the present shower enclosure door system is quite desirable because both doors can be slid from end to end without interfering. The present shower enclosure door system is of a durable and reliable construction, is inexpensive to manufacture and maintain while retaining its effectiveness.

VIII. CLAIMS

What is claimed is:

1. A shower enclosure door system, comprising:

A) a header comprising a channel defined between first and second ends, said header further comprising at least first, second, third, and fourth roller assemblies that travel upon said channel;

B) first and second brackets that receive said first and second ends respectively, said first and second brackets mount onto lateral walls to define a shower enclosure;

C) a base assembly comprising third and fourth ends; and

D) first and second base brackets that mount upon said third and fourth ends respectively, said base assembly mounts onto a mounting surface for said shower enclosure.

2. The shower enclosure door system set forth in claim **1**, further characterized in that said first and second brackets support a weight of shower doors of said shower enclosure without side jambs.

3. The shower enclosure door system set forth in claim **2**, further characterized in that said shower doors bypass one another.

4. The shower enclosure door system set forth in claim **1**, further characterized in that said first, second, third, and fourth roller assemblies each comprise a frame securing a roller and a bushing.

5. The shower enclosure door system set forth in claim **4**, further characterized in that a pair of said bushings secure a shower door.

6. The shower enclosure door system set forth in claim **4**, further characterized in that said frame further comprises a pin.

7. The shower enclosure door system set forth in claim **1**, further characterized in that each of said first and second brackets comprise an exterior wall, an interior wall, a bottom wall, and a sidewall.

8. The shower enclosure door system set forth in claim **7**, further characterized in that each said sidewall comprises at least one hole to receive fastening means to mount onto said lateral walls of said shower enclosure.

9. The shower enclosure door system set forth in claim **7**, further characterized in that each said sidewall comprises an adhesive element to mount onto said laterals walls of said shower enclosure.

10. The shower enclosure door system set forth in claim **7**, further characterized in that said exterior wall and said interior wall are parallel to each other.

11. The shower enclosure door system set forth in claim **7**, further characterized in that said sidewall is perpendicular to said exterior wall, said interior wall, and said bottom wall, and said exterior wall, said interior wall, and said bottom wall extend a predetermined distance from said sidewall.

12. The shower enclosure door system set forth in claim **1**, further characterized in that said base assembly comprises at least first and second holes to receive fastening means to mount onto said mounting surface for said shower enclosure.

13. The shower enclosure door system set forth in claim **1**, further characterized in that each of said first and second base brackets comprise a base and an exterior face.

14. The shower enclosure door system set forth in claim **13**, further characterized in that each said base comprises an adhesive element to mount onto said mounting surface for said shower enclosure.

15. The shower enclosure door system set forth in claim **1**, further characterized in that said base assembly comprises a guide element assembly.

16. The shower enclosure door system set forth in claim **15**, further characterized in that said guide element assembly comprises a guide frame.

17. The shower enclosure door system set forth in claim **16**, further characterized in that said guide frame comprises at least one guide.

18. The shower enclosure door system set forth in claim **17**, further characterized in that a shower door travels between at least two said guides.

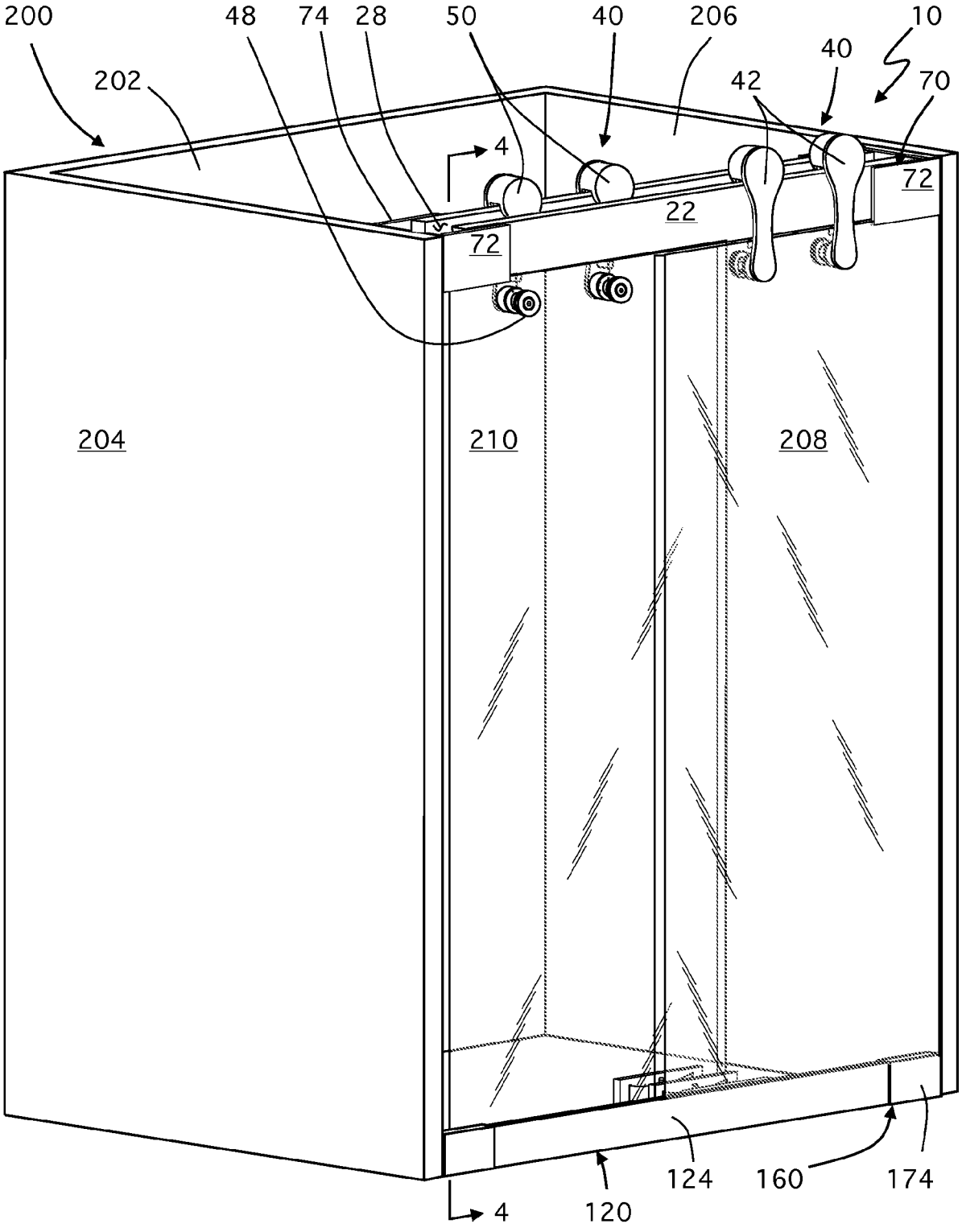

200
48
74
28
50
40
206
10
40
202
42
70
4
72
22
72
204
210
208
4
120
124
160
174

Fig. 1

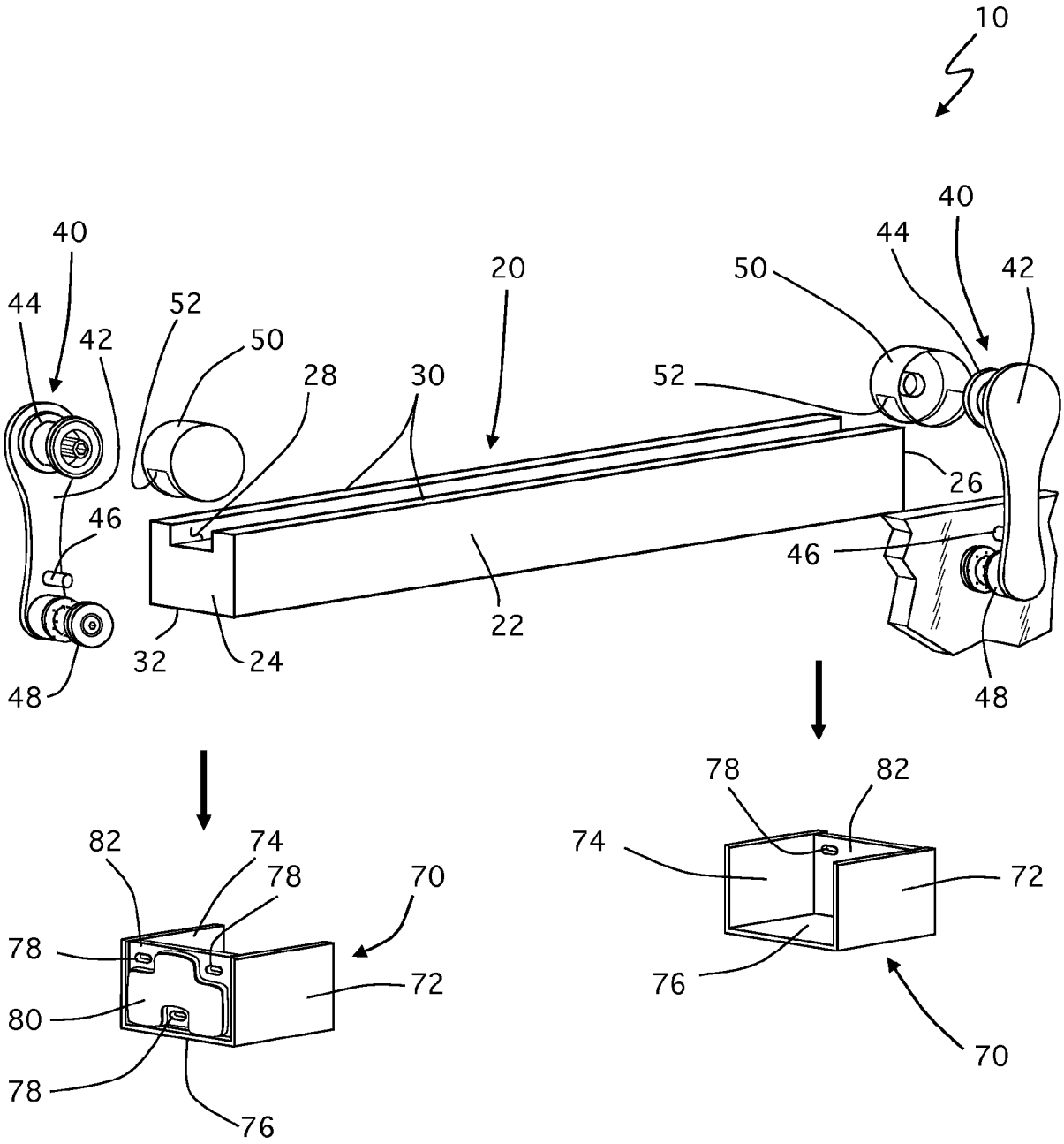

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Fig. 2

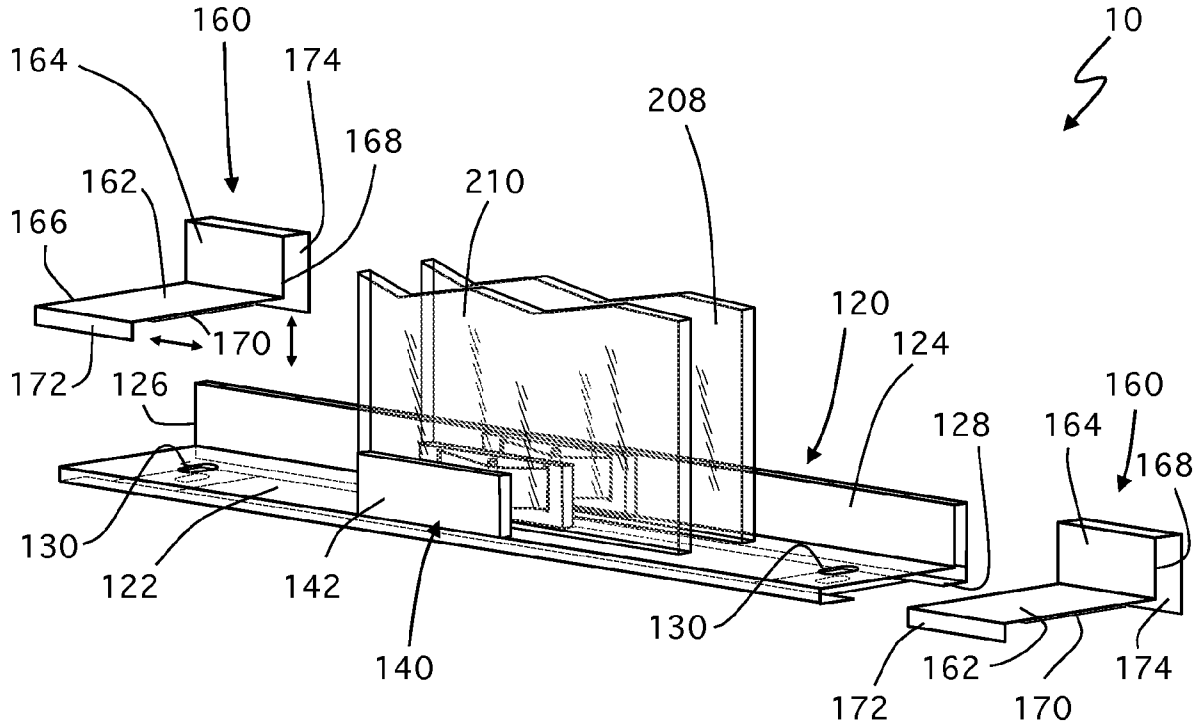

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Fig. 3A

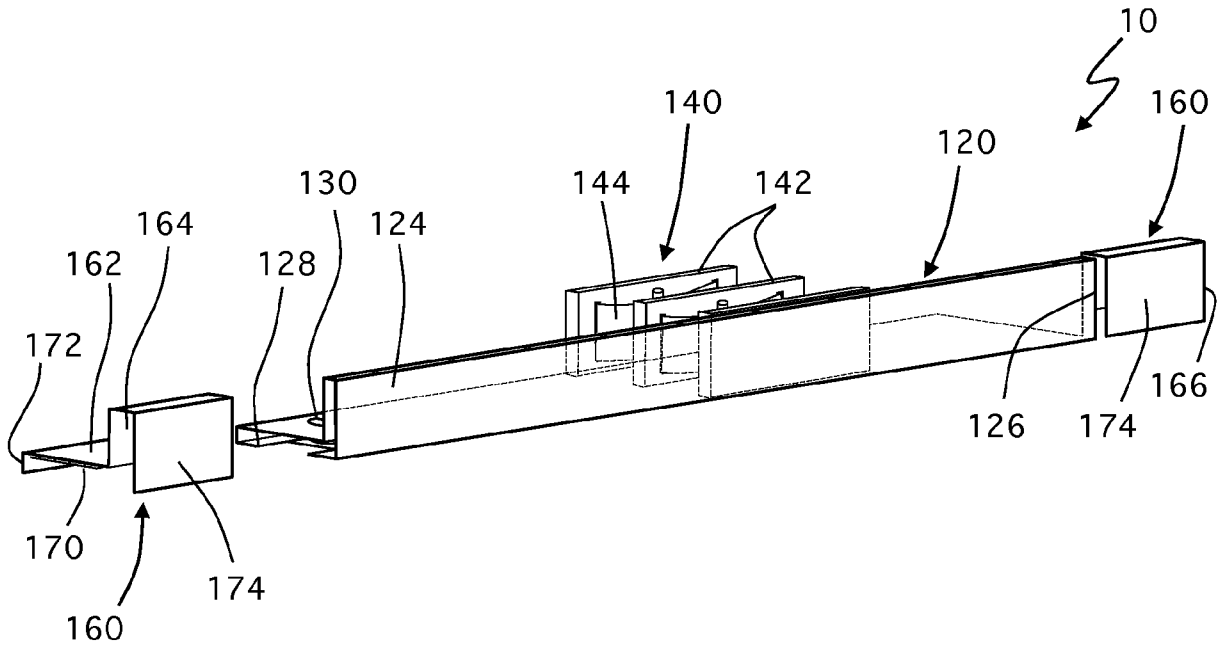

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Fig. 3B

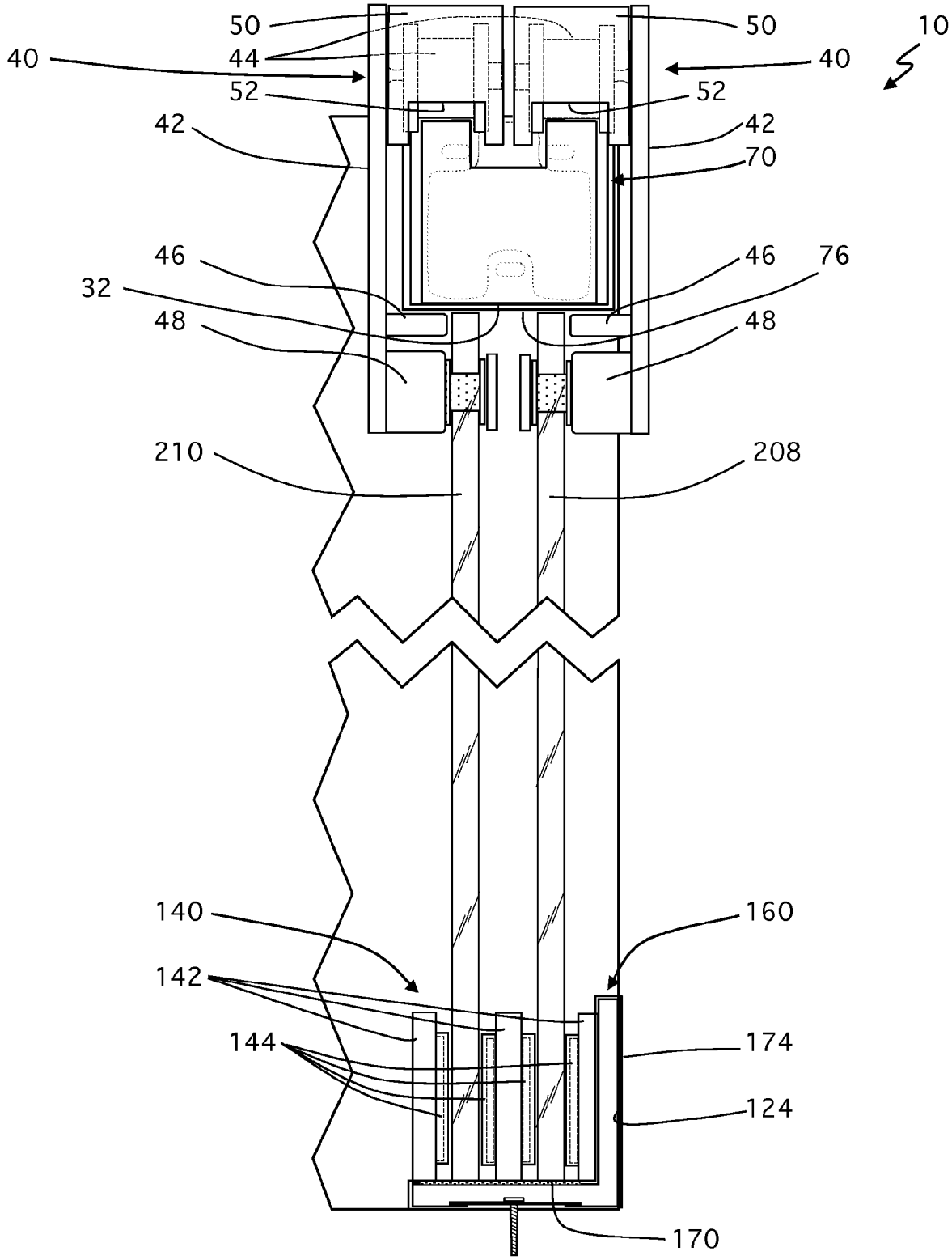

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Fig. 4

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 17/12423

A. CLASSIFICATION OF SUBJECT MATTER
IPC(8) - A47K 3/34 E05D 15/08 (2017.01)
CPC - A47K 3/34 Y10T 16/364 E05D 15/0652 E05D 15/0656
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
CPC: A47K 3/34 Y10T 16/364 E05D 15/0652 E05D 15/0656
IPC(8): A47K 3/34 E05D 15/08 (2017.01)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
CPC: A47K 3/30 E05D 15/063 E06B 3/4681; IPC(8): A47K 3/30 (2017.01); USPC: 4/607 4/610 16/91 49/410 49/411; keyword limited, terms below

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
PatBase; Google (Web, Patent, Scholar); terms used: shower bath header top upper rail track channel roller wheel bushing pin peg adhesive glue mounting attachment bracket guide lower bottom sill threshold hole opening aperture base fastener screw threaded bypass door glass panel pane wing jambless no without jamb

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X -- Y	"SHOWER/TUB DOOR INSTALLATION INSTRUCTIONS" (DREAMLINE) June 2015 (06.2015) [manual] accessed 02.03.17 at <https://web.archive.org/web/20151221130846/http://www.bathauthority.com/pdf_files/manuals/CHARISMA_manual.pdf>	1-8, 10-13, 15-18 ---------- 9, 14
Y	US 2004/0178310 A1 (MARION) 16 September 2004 (16.09.2004), entire document, especially FIG. 4; para [0044]	9
Y	US 4,178,718 A (LABY) 18 December 1979 (18.12.1979), entire document, especially FIG. 2, 7; col. 4, ln. 16-31	14
A	US 2014/0259364 A1 (AYKENS et al.) 18 September 2014 (18.09.2014), entire document	1-18
A	US 2011/0072613 A1 (HAYS) 31 March 2011 (31.03.2011), entire document	1-18

☐ Further documents are listed in the continuation of Box C. ☐

* Special categories of cited documents:
"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier application or patent but published on or after the international filing date
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
"O" document referring to an oral disclosure, use, exhibition or other means
"P" document published prior to the international filing date but later than the priority date claimed
"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
2 March 2017	03 APR 2017

Name and mailing address of the ISA/US	Authorized officer:
Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-8300	Lee W. Young PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/210 (second sheet) (January 2015)