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(54) **GARMENT STEAMER WITH DETACHABLE IRONING BOARD**

KLEIDUNGSDÄMPFER MIT ABNEHMBAREM BÜGELBRETT

DÉFROISSEUR À VAPEUR POUR VÊTEMENTS AVEC PLANCHE À REPASSER DÉTACHABLE

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Description

FIELD OF THE INVENTION

[0001] The invention relates to a garment steamer.

[0002] The invention can be used in the field of garment care.

BACKGROUND OF THE INVENTION

[0003] Conventional garment steamer offers a convenient way of removing wrinkles. However when compared to conventional ironing method, the level of wrinkle removal performance is much lower since there is nothing to support the hanged garment. Tough wrinkles cannot be pressed out like in the process of conventional ironing method which uses a horizontal ironing board to support the garment.

[0004] In recent time, many garment steamers also come with an ironing board that can be arranged in a vertical and a horizontal orientation to facilitate steaming or ironing or garments.

[0005] Many of the ironing board provided by garment steamer come with complex mechanism to enable it to be arranged in a vertical or a horizontal orientation.

[0006] Moreover, the complex mechanism of those garment steamers make them more difficult to manufacture which in turn more costly as well as less user friendly.

[0007] CN 108166230 discloses a steam ironing system having an ironing board which can be mounted at various different angles to a supporting pole assembly, by using a rotary coupling which can be locked into various rotary positions.

OBJECT AND SUMMARY OF THE INVENTION

[0008] It is an object of the invention to propose an improved garment steamer that avoids or mitigates above-mentioned problems.

[0009] The invention is defined by the independent claims. The dependent claims define advantageous embodiments.

[0010] To this end, the garment steamer according to the invention comprises:

- a pole assembly,
- a detachable ironing board adapted to be coupled to the pole assembly via a coupling mechanism enabling the ironing board to be positioned in a first angular orientation or in a second angular orientation,
- the coupling mechanism comprises a first attaching means being fixed on the ironing board, and a second attaching means being fixed on a top part of the pole assembly.

[0011] The first attaching means comprises a male assembly, the second attaching means comprises a plural-

ity of female assemblies being arranged at a certain angle relative to each other, said male assembly being adapted to cooperate with at least two female assemblies taken among said plurality of female assemblies.

[0012] Alternatively, the first attaching means comprises a female assembly, the second attaching means comprises a plurality of male assemblies being arranged at a certain angle relative to each other, said female assembly being adapted to cooperate with at least two male assemblies taken among said plurality of male assemblies.

[0013] Thus, the ironing board is detachably couplable to the pole assembly with at least two different angular orientations, each corresponding to cooperation between the single male/female assembly and a respective one of the plurality of male/female assemblies.

[0014] This solution proposes a garment steamer with ironing board which can be arranged in a vertical and horizontal orientation in a simple and user friendly manner as well as simple to manufacture and cost effective.

[0015] Detailed explanations and other aspects of the invention will be given below.

BRIEF DESCRIPTION OF THE DRAWINGS

[0016] Particular aspects of the invention will now be explained with reference to the embodiments described hereinafter and considered in connection with the accompanying drawings, in which identical parts or sub-steps are designated in the same manner :

Fig. 1A depicts a garment steamer according to the invention with an ironing board extending vertically, Fig.1B depicts a zoomed-in view of Fig.1A, Fig.2 depicts a first exploded partial view of a garment steamer according to the invention with an ironing board extending horizontally, Fig.3A depicts a second exploded partial view of a garment steamer according to the invention, with an ironing board extending horizontally, Fig.3B depicts a zoomed-in view of Fig.3A, Fig.4A-Fig.4B depict two partial views of a garment steamer according to the invention, with an ironing board extending vertically, Fig.5A-Fig.5B depict two partial views of a garment steamer according to the invention, with an ironing board extending horizontally, Fig.6A-Fig.6B depict two partial views of a garment steamer according to the invention, with an ironing board extending at an angle between vertical and horizontal, Fig.7A depict a three-dimensional view of a garment steamer according to the invention comprising a user-actuable mechanism adapted to immobilize an ironing board, Fig.7B depicts a cross-sectional view of Fig.7A, Fig.7C depicts a zoomed-in view of Fig.7A.

DETAILED DESCRIPTION OF THE INVENTION

[0017] Fig.1A depicts a garment steamer 100 according to the invention with an ironing board extending vertically. Fig.1B depicts a zoomed-in view of Fig.1A.

[0018] The garment steamer (100) comprises a pole assembly (50) and a detachable ironing board (60) adapted to be coupled to the pole assembly via a coupling mechanism (70) enabling the ironing board to be positioned in a first angular orientation or in a second angular orientation.

[0019] The coupling mechanism comprises a first attaching means (71) being fixed on the ironing board, and a second attaching means (72) being fixed on a top part of the pole assembly.

[0020] The first attaching means comprises a male assembly, the second attaching means comprises a plurality of female assemblies being arranged at a certain angle relative to each other, said male assembly being adapted to cooperate with at least two female assemblies taken among said plurality of female assemblies.

[0021] Alternatively, the first attaching means comprises a female assembly, the second attaching means comprises a plurality of male assemblies being arranged at a certain angle relative to each other, said female assembly being adapted to cooperate with at least two male assemblies taken among said plurality of male assemblies.

[0022] The second attaching means is a static part, so that the different angular orientations are achieved by mounting the ironing board to the pole assembly using cooperation between the single male/female assembly and a chosen one of the plurality of male/female assemblies. However, no adjustment of the male or female assembly is needed.

[0023] The cooperation between the chosen pair of a male assembly and a female assembly thus results in orienting the ironing board according to different angular orientations.

[0024] For example, the ironing board 60 can be arranged in a vertical and horizontal orientation in a simple and user friendly manner as well as simple to manufacture and cost effective.

[0025] The garment steamer 100 also comprises a base 10, and a steam generator 20 which is arranged in the base 10 (or arranged separate from the base for example in a steamer head).

[0026] The garment steamer 100 also comprises a steamer head 30 which is connected to the steam generator 20 by a steam hose 40.

[0027] The pole assembly 50 extends upwardly from the base 10.

[0028] In this embodiment, the pole assembly comprises two vertical poles (50A, 50B).

[0029] In a preferred embodiment, the pole assembly 50 extends upwardly from the base 10, and the poles are preferably retractable/ telescopic for height adjustment of the ironing board, and can be retracted when they are

not in use in order to make the garment steamer compact.

[0030] It is understandable that the number of the poles and the position of the poles can be varied depend on its size, the requirement of stability, and other consideration.

[0031] The male assembly of the first attaching means defines a first and a second plugs, the plurality of female assemblies of the second attaching means defines a first and a second series of hollow structures, arranged on each vertical pole, for receiving said first plug and second plugs, respectively.

[0032] For example, the first and second plugs are arranged on opposite lateral sides of the ironing board.

[0033] The first series of hollow structures is arranged at the top of the first vertical pole, the second series of hollow structures is arranged at the top of the second vertical pole.

[0034] Alternatively, the female assembly of the first attaching means defines a first and a second hollow structures, the plurality of male assemblies of the second attaching means defines a first and a second series of plugs, arranged on each vertical pole, for engaging with said first and a second hollow structures, respectively.

[0035] Preferably, the plurality of female assemblies of the second attaching means comprises two female assemblies which are arranged at 90 degrees relative to each other.

[0036] Alternatively, the plurality of male assemblies of the second attaching means comprises two male assemblies which arranged at 90 degrees relative to each other.

[0037] This allows obtaining two angular orientations for the ironing board: horizontal and vertical.

[0038] Preferably, the plurality of female assemblies of the second attaching means comprises three female assemblies, including two female assemblies being arranged at 90 degrees relative to each other, and another female assembly being arranged in between the two female assemblies at another relative angle. Alternatively, the plurality of male assemblies of the second attaching means comprises three male assemblies, including two male assemblies being arranged at 90 degrees relative to each other, and another male assembly being arranged in between the two male assemblies at another relative angle. This allows having three angular positions for the ironing board, typically horizontal / vertical / oblique (such as 45 degrees compared to a vertical direction).

[0039] Fig.2 depicts a first exploded partial view of a garment steamer according to the invention with an ironing board 60 extending horizontally.

[0040] It is illustrated the first attaching means 71 adapted to cooperate with the second attaching means 72.

[0041] Fig.3A depicts a second exploded partial view of a garment steamer according to the invention, with an ironing board 60 extending horizontally. Fig.3B depicts a zoomed-in view of Fig.3A.

[0042] The first attaching means 71 comprises a plug

711 and the second attaching means 72 comprises a (pair of) hollow structure unit 721 having a first hollow structure 721A and a second hollow structure 721B arranged perpendicular to each other.

[0043] The pole assembly 50 comprises two poles 50A-50B.

[0044] The second attaching means 72 comprises, on each of the two poles, two hollow structures 721 arranged at the top end of each of the two poles, and the attaching means 71 comprises two plugs 711 fixed on the ironing board 60 and spaced apart symmetrically about the longitudinal axis of the ironing board 60 at a distance corresponding the two (telescopic) poles. The ironing board 60 is orientated vertically when the plugs 711 are inserted into the first hollow structure 721A and the ironing board is orientated horizontally when the plugs 711 are inserted into the second receptacle 721B.

[0045] It is noted that for sake of clarity, only one set of elements 711-721 are represented on the vertical pole 50B. The same explanations apply for the vertical pole 50A.

[0046] In another preferred embodiment (not shown), the pole assembly 50 comprises a single pole extending vertically.

[0047] With a single pole extending vertically, the male assembly of the first attaching means defines a single plug and the plurality of female assemblies of the second attaching means defines hollow structures for receiving the single plug.

[0048] The first attaching means 71 comprises a single plug 711 and the second attaching means 72 comprises two hollow structures fixed at the top end of the single pole. The single plug 711 is for example fixed in the middle of the ironing board. The ironing board 60 is orientated vertically when the plug 711 is inserted into the hollow structure 721A, and the ironing board 60 is orientated horizontally when the plug 711 is inserted into the second hollow structure 721B.

[0049] Alternatively, the female assembly of the first attaching means defines a single hollow structure and the plurality of male assemblies of the second attaching means defines plugs for engaging with the single hollow structure.

[0050] Fig.4A-Fig.4B depict two partial views of a garment steamer according to the invention, with an ironing board extending vertically.

[0051] Fig.5A-Fig.5B depict two partial views of a garment steamer according to the invention, with an ironing board extending horizontally.

[0052] Fig.6A-Fig.6B depict two partial views of a garment steamer according to the invention, with an ironing board extending at an angle between vertical and horizontal.

[0053] In those six figures, the first attaching means comprises (a pair of) plugs 711, each plug 711 being adapted to cooperate with a second attaching means comprising three hollow structures 721A-721B-721C.

[0054] The hollow structures 721A-721B form a 90 de-

grees angle between each other.

[0055] The hollow structure 721C is inclined by 45 degrees compared to a vertical direction. But different angles could be chosen similarly.

[0056] In one embodiment, the first attaching means is integrally formed with the ironing board.

[0057] For example by using plastic injection if those elements are both made of plastic.

[0058] In one embodiment, the first attaching means is made as a separate component and is fixed to the ironing board via any suitable fixing means.

[0059] For example screws, snap-fit catches, clipping mechanism, ultrasonic welding, glue,... etc can be used.

[0060] In a preferred embodiment, the first attaching means and/or the second attaching means are made from plastic material.

[0061] For example Polypropylene, Acrylonitrile butadiene styrene, Polycarbonate can be used.

[0062] Preferably, the coupling mechanism 70 further comprises a locking mechanism to immobilize the first attaching means relative to the second attaching means.

[0063] This feature prevents the ironing board from getting detached from the pole assembly when user exerts a force on the ironing board during steaming/ironing of garments.

[0064] For example, as illustrated in Fig.4A-Fig.4B, the locking mechanism comprises a snap-fit mechanism 400 arranged between the first attaching means the second attaching means when the ironing board 60 is coupled to the pole assembly.

[0065] The snap-fit mechanism comprises a protrusion extending from the first attaching means 71, cooperating with a cavity arranged in the second attaching means 72.

[0066] The snap catch mechanism cooperates with the opening to (temporarily) immobilize the first attaching means relative to the second attaching means.

[0067] Fig.7A depict a three-dimensional view of a garment steamer according to the invention comprising a user-actuable mechanism adapted to immobilize an ironing board.

[0068] Fig.7B depicts a cross-sectional view of Fig.7A.

[0069] Fig.7C depicts a zoomed-in view of Fig.7A.

[0070] The second attaching means comprises at least one user-actuable mechanism (701A, 701B) adapted to immobilize with the first attaching means 71 when the ironing board is coupled to the pole assembly. The user-actuable mechanism can be mounted at the top part of one pole, or at each of the top part of the two poles. If the pole assembly comprises two vertical poles, a first user-actuable mechanism can be arranged at an upper end of the first vertical pole, and a second user-actuable mechanism can be arranged at an upper end of the second vertical pole.

[0071] Preferably, the user-actuable mechanism comprises a handle 702A, 702B mounted on a hinge (703A, 703B). The handle comprises at least one protrusion 704A, 704B, 704C being adapted to cooperate with at least one cavity 706A, 706B, 706C being arranged in

the first attaching means such as the plug 711, as illustrated in Fig.7C.

[0072] It is noted that in Fig.7C the plug 711 is artificially represented three times (with different angular positions), for sake of explanations.

[0073] For example, the at least one cavity 706A, 706B, 706C are arranged in the plurality of female assemblies 721A, 721B, 721C, respectively.

[0074] In this specific embodiment, the protrusions 704A, 704B, 704C pass through the openings 705A, 705B, 705C which are arranged in the plurality of female assemblies 721A, 721B, 721C, respectively.

[0075] Preferably, the handle comprises a hooking mechanism 707 adapted to hook with the second attaching means.

[0076] This feature allows holding the handle in place, and prevent that the protrusions 704A, 704B, 704C will disengage by themselves from the cavities 706A, 706B, 706C when user exerts a force/movement on the ironing board during steaming/ironing of garments.

[0077] For example, the hooking can be done at the lateral sides of only one female assembly, such as the central female assembly of the second attaching means.

[0078] Alternatively (not shown), the second attaching means comprises at least one sliding latch cooperating with a cavity arranged in the first attaching means.

[0079] For example, the sliding latch can be spring-mounted or not.

[0080] Alternatively (not shown), the second attaching means comprises at least one sliding pin cooperating with a cavity arranged in the first attaching means.

[0081] For example, the pin can be a separate removable element.

[0082] With the proposed invention, it is intuitive and simple for the user to arrange the ironing board in a first orientation (e.g. vertical orientation) for steaming or to arranged the ironing board in a second orientation (e.g. horizontal orientation for ironing).

[0083] This advantageously improved user friendliness of the garment steamer. Furthermore, it also enable a low cost garment steamer with the simple construction that can be manufactured by low cost plastic injection moulding.

[0084] The above embodiments as described are only illustrative, and not intended to limit the technique approaches of the present invention. Although the present invention is described in details referring to the preferable embodiments, those skilled in the art will understand that the technique approaches of the present invention can be modified without departing from the protective scope of the claims of the present invention. In the claims, the word "comprising" does not exclude other elements or steps, and the indefinite article "a" or "an" does not exclude a plurality. Any reference signs in the claims should not be construed as limiting the scope.

Claims

1. A garment steamer (100) comprising:

- 5 - a pole assembly (50),
- a detachable ironing board (60) adapted to be coupled to the pole assembly via a coupling mechanism (70) enabling the ironing board to be positioned in a first angular orientation or in a second angular orientation,
- 10 - the coupling mechanism comprises a first attaching means (71) being fixed on the ironing board, and a second attaching means (72) being fixed on a top part of the pole assembly,

characterised in that:

- 20 - the first attaching means (71) comprises a male assembly, the second attaching means (72) comprises a plurality of female assemblies being arranged at a certain angle relative to each other, said male assembly being adapted to cooperate with at least two female assemblies taken among said plurality of female assemblies such that the ironing board is detachably couplable to the pole assembly by the cooperation between the male assembly and a respective one of the at least two female assemblies, with at least two different angular orientations, or
- 25 - the first attaching means (71) comprises a female assembly, the second attaching means (72) comprises a plurality of male assemblies being arranged at a certain angle relative to each other, said female assembly being adapted to cooperate with at least two male assemblies taken among said plurality of male assemblies such that the ironing board is detachably couplable to the pole assembly by the cooperation between the female assembly and a respective one of the at least two male assemblies, with at least two different angular orientations.

2. Garment steamer as claimed in claim 1, wherein the pole assembly comprises two vertical poles (50A, 50B), and:

- 45 - the male assembly of the first attaching means defines a first and a second plugs, the plurality of female assemblies of the second attaching means defines a first and a second series of hollow structures, arranged on each vertical pole, for receiving said first plug and second plugs, respectively, or
- 50 - the female assembly of the first attaching means defines a first and a second hollow structures, the plurality of male assemblies of the second attaching means defines a first and a second series of plugs, arranged on each vertical

- pole, for engaging with said first and a second hollow structures, respectively.
3. Garment steamer as claimed in claim 1, wherein the pole assembly comprises a single vertical pole, and:
 - the male assembly of the first attaching means defines a single plug and the plurality of female assemblies of the second attaching means defines hollow structures for receiving the single plug, or
 - the female assembly of the first attaching means defines a single hollow structure and the plurality of male assemblies of the second attaching means defines plugs for engaging with the single hollow structure.
 4. Garment steamer as claimed in claim 1, wherein:
 - the plurality of female assemblies of the second attaching means comprises two female assemblies which are arranged at 90 degrees relative to each other, or
 - the plurality of male assemblies of the second attaching means comprises two male assemblies which arranged at 90 degrees relative to each other.
 5. Garment steamer as claimed in claim 1, wherein:
 - the plurality of female assemblies of the second attaching means comprises three female assemblies, including two female assemblies being arranged at 90 degrees relative to each other, and another female assembly being arranged in between the two female assemblies at another relative angle, or
 - the plurality of male assemblies of the second attaching means comprises three male assemblies, including two male assemblies being arranged at 90 degrees relative to each other, and another male assembly being arranged in between the two male assemblies at another relative angle.
 6. Garment steamer as claimed in any one of claims 1 to 5, wherein the first attaching means is integrally formed with the ironing board.
 7. Garment steamer as claimed in any one of claims 1 to 5, wherein the first attaching means is made as a separate component and is fixed to the ironing board via any suitable fixing means.
 8. Garment steamer as claimed in any one of claims 1 to 7, wherein first attaching means and/or the second attaching means are made from plastic material.
 9. Garment steamer as claimed in any one of claims 1 to 8, wherein the coupling mechanism further comprises a locking mechanism to immobilize the first attaching means relative to the second attaching means.
 10. Garment steamer as claimed in claim 9, wherein the locking mechanism comprises a snap-fit mechanism (400) arranged between the first attaching means the second attaching means when the ironing board is coupled to the pole assembly.
 11. Garment steamer as claimed in any one of claims 1 to 10, wherein the second attaching means comprises at least one user-actuable mechanism (701A, 701B) adapted to immobilize with the first attaching means when the ironing board is coupled to the pole assembly.
 12. Garment steamer as claimed in claim 11, wherein the user-actuable mechanism comprises a handle (702A, 702B) mounted on a hinge (703A, 703B), the handle comprising at least one protrusion (704A, 704B, 704C) being adapted to cooperate with at least one cavity (706A, 706B, 706C) being arranged in the first attaching means.
 13. Garment steamer as claimed in claim 12, wherein the handle comprises a hooking mechanism (707) adapted to hook to the second attaching means.
 14. Garment steamer as claimed in any one of claims 1 to 10, wherein the second attaching means comprises at least one sliding latch cooperating with a cavity arranged in the first attaching means.
 15. Garment steamer as claimed in any one of claims 1 to 10, wherein the second attaching means comprises at least one sliding pin cooperating with a cavity arranged in the first attaching means.

Patentansprüche

1. Ein Kleidungsstück-Dampfer (100), bestehend aus:
 - eine Stangenbaugruppe (50),
 - ein abnehmbares Bügelbrett (60), das mit der Stangenbaugruppe über einen Kopplungsmechanismus (70) gekoppelt werden kann, wodurch das Bügelbrett in einer ersten Winkelausrichtung oder in einer zweiten Winkelausrichtung positioniert werden kann,
 - der Kupplungsmechanismus ein erstes Befestigungsmittel (71) umfasst, das am Bügeltisch befestigt ist, und ein zweites Befestigungsmittel (72), das an einem oberen Teil der Stangenanordnung befestigt ist,

dadurch gekennzeichnet:

- das das erste Befestigungsmittel (71) eine männliche Baugruppe umfasst, das zweite Befestigungsmittel (72) eine Vielzahl von weiblichen Baugruppen umfasst, die in einem bestimmten Winkel zueinander angeordnet sind, wobei die männliche Baugruppe so beschaffen ist, dass sie mit mindestens zwei weiblichen Baugruppen aus der Vielzahl der weiblichen Baugruppen zusammenwirken kann, so dass das Bügelbrett durch das Zusammenwirken zwischen der männlichen Baugruppe und einer jeweiligen der mindestens zwei weiblichen Baugruppen mit mindestens zwei unterschiedlichen Winkelausrichtungen lösbar mit der Stangenbaugruppe verbunden werden kann, oder
 - das das erste Befestigungsmittel (71) eine weibliche Baugruppe umfasst, das zweite Befestigungsmittel (72) eine Vielzahl von männlichen Baugruppen umfasst, die in einem bestimmten Winkel zueinander angeordnet sind, wobei die weibliche Baugruppe geeignet ist, mit mindestens zwei männlichen Baugruppen zusammenzuwirken, die aus der Vielzahl der männlichen Baugruppen ausgewählt werden, so dass das Bügelbrett durch das Zusammenwirken zwischen der weiblichen Baugruppe und einer jeweiligen der mindestens zwei männlichen Baugruppen mit mindestens zwei verschiedenen Winkelausrichtungen abnehmbar an die Stangenbaugruppe gekoppelt werden kann.
2. Kleidungs-dampfer nach Anspruch 1, wobei die Stangenanordnung zwei vertikale Stangen (50A, 50B) umfasst, und:
- die männliche Baugruppe des ersten Befestigungsmittels einen ersten und einen zweiten Stecker definiert, die Vielzahl der weiblichen Baugruppen des zweiten Befestigungsmittels eine erste und eine zweite Reihe von hohlen Strukturen definiert, die an jedem vertikalen Stangen angeordnet sind, um den ersten Stecker bzw. den zweiten Stecker aufzunehmen, oder
 - die weibliche Baugruppe des ersten Befestigungsmittels eine erste und eine zweite hohle Struktur definiert, die mehreren männlichen Baugruppen des zweiten Befestigungsmittels eine erste und eine zweite Reihe von Steckern definieren, die an jedem vertikalen Stangen angeordnet sind, um mit der ersten bzw. zweiten hohlen Struktur in Eingriff zu kommen.
3. Kleidungs-dampfer nach Anspruch 1, wobei die Stangenanordnung eine einzelne vertikale Stange um-

fasst, und:

- die männliche Baugruppe des ersten Befestigungsmittels einen einzelnen Stecker definiert und die Vielzahl der weiblichen Baugruppen des zweiten Befestigungsmittels hohle Strukturen zur Aufnahme des einzelnen Steckers definiert, oder
 - dass die weibliche Baugruppe des ersten Befestigungsmittels eine einzelne hohle Struktur definiert und die Vielzahl der männlichen Baugruppen des zweiten Befestigungsmittels Stecker zum Eingriff in die einzelne hohle Struktur definiert.
4. Bekleidungs-dampfer nach Anspruch 1, wobei:
- die Mehrzahl der Buchsen des zweiten Befestigungsmittels zwei Buchsen umfasst, die in einem Winkel von 90 Grad zueinander angeordnet sind, oder
 - dass die Mehrzahl der männlichen Baugruppen des zweiten Befestigungsmittels zwei männliche Baugruppen umfasst, die in einem Winkel von 90 Grad zueinander angeordnet sind.
5. Bekleidungs-dampfer nach Anspruch 1, wobei:
- die Vielzahl der weibliche Baugruppen der zweiten Befestigungseinrichtung drei weiblichen Baugruppen umfasst, einschließlich zweier weiblichen Baugruppen, die in einem Winkel von 90 Grad zueinander angeordnet sind, und einer weiteren weiblichen Baugruppen, die in einem anderen relativen Winkel zwischen den beiden weiblichen Baugruppen angeordnet ist, oder
 - dass die Mehrzahl der männlichen Baugruppen des zweiten Befestigungsmittels drei männliche Baugruppen umfasst, darunter zwei männliche Baugruppen, die in einem Winkel von 90 Grad zueinander angeordnet sind, und eine weitere männliche Baugruppe, die in einem anderen relativen Winkel zwischen den beiden männlichen Baugruppen angeordnet ist.
6. Kleidungs-dampfer nach einem der Ansprüche 1 bis 5, wobei das erste Befestigungsmittel einstückig mit dem Bügeltisch ausgebildet ist.
7. Bekleidungs-dampfer nach einem der Ansprüche 1 bis 5, wobei das erste Befestigungsmittel als separates Bauteil ausgeführt ist und über ein beliebiges geeignetes Befestigungsmittel an dem Bügeltisch befestigt ist.
8. Bekleidungs-dampfer nach einem der Ansprüche 1

bis 7, wobei das erste Befestigungsmittel und/oder das zweite Befestigungsmittel aus Kunststoffmaterial besteht.

9. Bekleidungsdamper nach einem der Ansprüche 1 bis 8, wobei der Kupplungsmechanismus ferner einen Verriegelungsmechanismus umfasst, um das erste Befestigungsmittel relativ zu dem zweiten Befestigungsmittel zu fixieren. 5
10. Bekleidungsdamper nach Anspruch 9, wobei der Verriegelungsmechanismus einen Schnappmechanismus (400) umfasst, der zwischen dem ersten Befestigungsmittel und dem zweiten Befestigungsmittel angeordnet ist, wenn der Bügeltisch mit der Stangenanordnung verbunden ist. 10
11. Bekleidungsdamper nach einem der Ansprüche 1 bis 10, wobei das zweite Befestigungsmittel mindestens einen vom Benutzer betätigbaren Mechanismus (701A, 701B) umfasst, der so beschaffen ist, dass er zusammen mit dem ersten Befestigungsmittel unbeweglich ist, wenn der Bügeltisch mit der Stangenanordnung verbunden ist. 20
12. Bekleidungsdamper nach Anspruch 11, wobei der vom Benutzer betätigbare Mechanismus einen Griff (702A, 702B) umfasst, der an einem Scharnier (703A, 703B) angebracht ist, wobei der Griff mindestens einen Vorsprung (704A, 704B, 704C) umfasst, der so angepasst ist, dass er mit mindestens einem Hohlraum (706A, 706B, 706C) zusammenwirkt, der in dem ersten Befestigungsmittel angeordnet ist. 25
13. Bekleidungsdamper nach Anspruch 12, wobei der Griff einen Einhakmechanismus (707) umfasst, der zum Einhängen in das zweite Befestigungsmittel geeignet ist. 30
14. Bekleidungsdamper nach einem der Ansprüche 1 bis 10, wobei das zweite Befestigungsmittel mindestens eine Schiebeklinke umfasst, die mit einem in dem ersten Befestigungsmittel angeordneten Hohlraum zusammenwirkt. 35
15. Bekleidungsdamper nach einem der Ansprüche 1 bis 10, wobei das zweite Befestigungsmittel mindestens einen Gleitstift umfasst, der mit einem in der ersten Befestigungsvorrichtung angeordneten Hohlraum zusammenwirkt. 40

Revendications

1. Défroisseur (100) comprenant: 45
 - un ensemble poteau (50),
 - une planche à repasser amovible (60) adaptée

pour être couplée à l'ensemble poteau via un mécanisme de couplage (70) permettant à la planche à repasser d'être positionnée dans une première orientation angulaire ou dans une seconde orientation angulaire,

- le mécanisme de couplage comprend un premier moyen de fixation (71) fixé sur la planche à repasser, et un deuxième moyen de fixation (72) fixé sur une partie supérieure de l'ensemble poteau,

caractérisé en ce que:

- le premier moyen de fixation (71) comprend un assemblage mâle, le deuxième moyen de fixation (72) comprend une pluralité d'assemblages femelles étant disposés selon un certain angle les uns par rapport aux autres, ledit assemblage mâle étant adapté pour coopérer avec au moins deux assemblages femelles pris parmi ladite pluralité d'ensembles femelles de telle sorte que la planche à repasser puisse être couplée de manière amovible à l'ensemble de poteaux par la coopération entre l'ensemble mâle et l'un respectif des au moins deux ensembles femelles, avec au moins deux orientations angulaires différentes, ou
- le premier moyen de fixation (71) comprend un ensemble femelle, le deuxième moyen de fixation (72) comprend une pluralité d'ensembles mâles étant disposés selon un certain angle les uns par rapport aux autres, ledit ensemble femelle étant adapté pour coopérer avec au moins deux ensembles mâles pris parmi ladite pluralité d'ensembles mâles de telle sorte que la planche à repasser puisse être couplée de manière amovible à l'ensemble poteau par la coopération entre l'ensemble femelle et l'un respectif des au moins deux ensembles mâles, avec au moins deux orientations angulaires différentes.

2. Défroisseur selon la revendication 1, dans lequel l'ensemble de poteaux comprend deux poteaux verticaux (50A, 50B), et: 50

- l'ensemble mâle du premier moyen de fixation définit un premier et un deuxième bouchon, la pluralité d'assemblages femelles du deuxième moyen de fixation définit une première et une deuxième série de structures creuses, disposées sur chaque poteau vertical, pour recevoir ledit premier moyen de fixation et deuxièmes fiches, respectivement, ou
- l'ensemble femelle du premier moyen de fixation définit une première et une deuxième structures creuses, la pluralité d'assemblages mâles du deuxième moyen de fixation définit une première et une deuxième série de bouchons, dis-

posés sur chaque poteau vertical, pour s'engager avec ledit premier et une deuxième structure creuse, respectivement.

3. Défroisseur selon la revendication 1, dans lequel l'ensemble de poteaux comprend un seul poteau vertical, et:

- l'ensemble mâle du premier moyen de fixation définit un seul bouchon et la pluralité d'assemblages femelles du deuxième moyen de fixation définit des structures creuses pour recevoir le seul bouchon, ou
- l'ensemble femelle du premier moyen de fixation définit une unique structure creuse et la pluralité d'assemblages mâles du deuxième moyen de fixation définit des bouchons destinés à s'engager avec l'unique structure creuse.

4. Défroisseur selon la revendication 1, dans lequel:

- la pluralité d'assemblages femelles des seconds moyens de fixation comprend deux assemblages femelles disposés à 90 degrés l'un par rapport à l'autre, ou
- la pluralité d'assemblages mâles des seconds moyens de fixation comprend deux assemblages mâles disposés à 90 degrés l'un par rapport à l'autre.

5. Défroisseur selon la revendication 1, dans lequel:

- la pluralité d'ensembles femelles des seconds moyens de fixation comprend trois ensembles femelles, dont deux ensembles femelles disposés à 90 degrés l'un par rapport à l'autre, et un autre ensemble femelle étant disposé entre les deux ensembles femelles selon un autre angle relatif, ou
- la pluralité d'ensembles mâles du deuxième moyen de fixation comprend trois ensembles mâles, dont deux ensembles mâles disposés à 90 degrés l'un par rapport à l'autre, et un autre ensemble mâle étant disposé entre les deux ensembles mâles selon un autre angle relatif.

6. Défroisseur selon l'une quelconque des revendications 1 à 5, dans lequel le premier moyen de fixation est formé d'un seul tenant avec la planche à repasser.

7. Défroisseur selon l'une quelconque des revendications 1 à 5, dans lequel le premier moyen de fixation est réalisé sous la forme d'un composant séparé et est fixé à la planche à repasser via tout moyen de fixation approprié.

8. Défroisseur selon l'une quelconque des revendica-

tions 1 à 7, dans lequel les premiers moyens de fixation et/ou les seconds moyens de fixation sont réalisés en matière plastique.

9. Défroisseur selon l'une quelconque des revendications 1 à 8, dans lequel le mécanisme de couplage comprend en outre un mécanisme de verrouillage pour immobiliser le premier moyen de fixation par rapport au deuxième moyen de fixation.

10. Défroisseur selon la revendication 9, dans lequel le mécanisme de verrouillage comprend un mécanisme d'encliquetage (400) disposé entre les premiers moyens de fixation et les seconds moyens de fixation lorsque la planche à repasser est couplée à l'ensemble de poteaux.

11. Défroisseur selon l'une quelconque des revendications 1 à 10, dans lequel les seconds moyens de fixation comprennent au moins un mécanisme actionnable par l'utilisateur (701A, 701B) adapté pour s'immobiliser avec les premiers moyens de fixation lorsque la planche à repasser est couplée à l'ensemble de poteaux.

12. Défroisseur selon la revendication 11, dans lequel le mécanisme actionnable par l'utilisateur comprend une poignée (702A, 702B) montée sur une charnière (703A, 703B), la poignée comprenant au moins une saillie (704A, 704B, 704C) étant adaptée pour coopérer avec au moins une cavité (706A, 706B, 706C) étant aménagée dans les premiers moyens de fixation.

13. Défroisseur selon la revendication 12, dans lequel la poignée comprend un mécanisme d'accrochage (707) adapté pour s'accrocher au deuxième moyen de fixation.

14. Défroisseur selon l'une quelconque des revendications 1 à 10, dans lequel les seconds moyens de fixation comprennent au moins un loquet coulissant coopérant avec une cavité aménagée dans les premiers moyens de fixation.

15. Défroisseur selon l'une quelconque des revendications 1 à 10, dans lequel les seconds moyens de fixation comprennent au moins une goupille coulissante coopérant avec une cavité aménagée dans les premiers moyens de fixation.

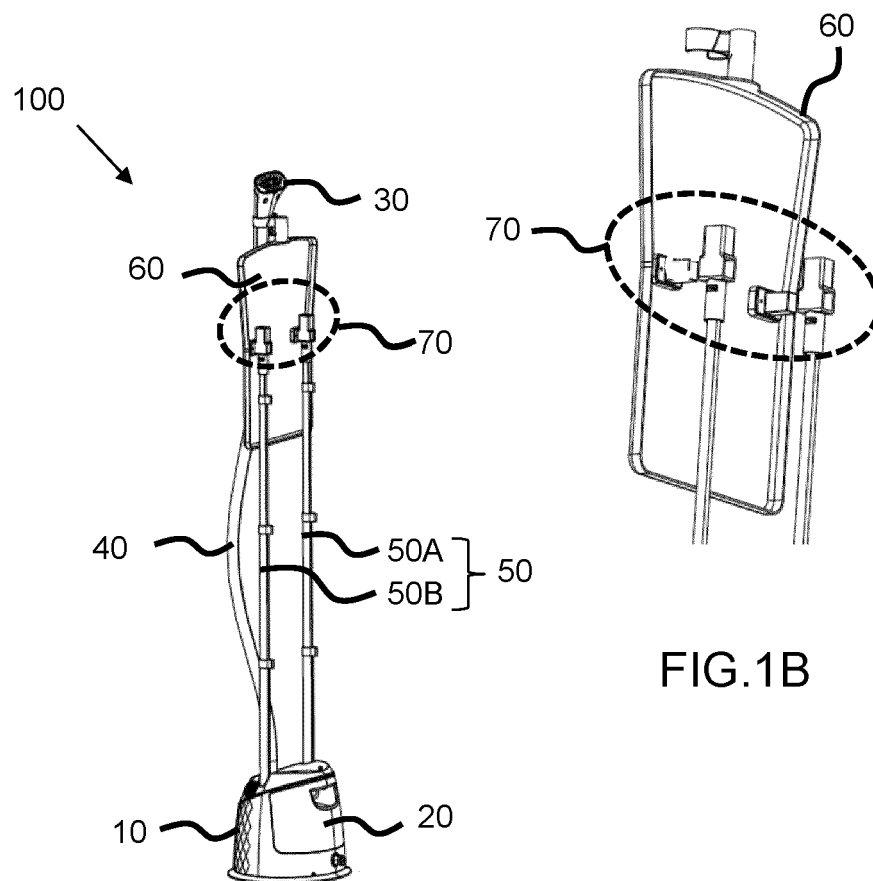


FIG.1A

FIG.1B

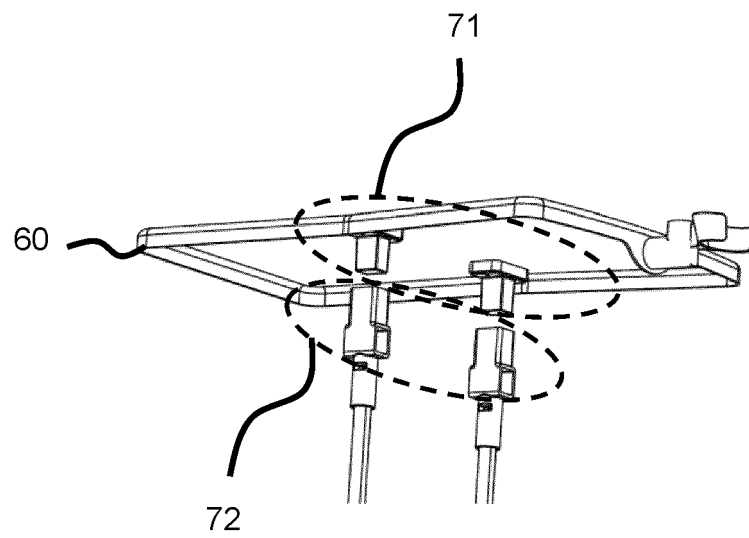


FIG.2

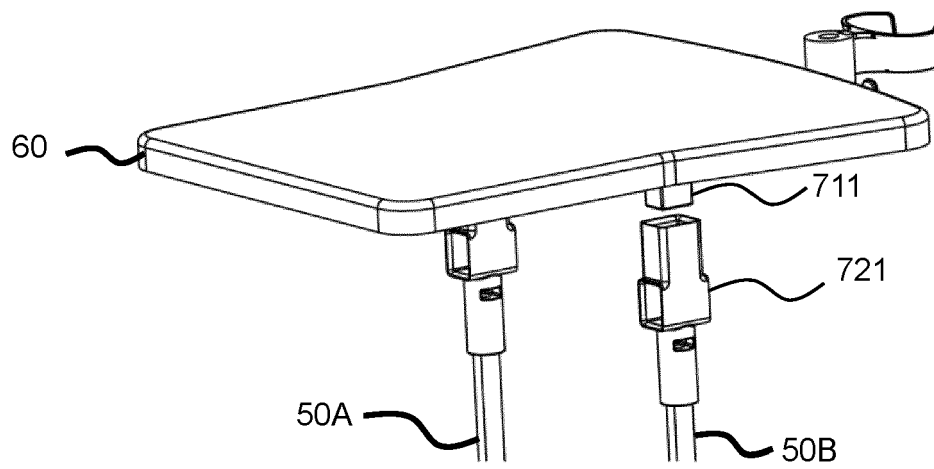


FIG.3A

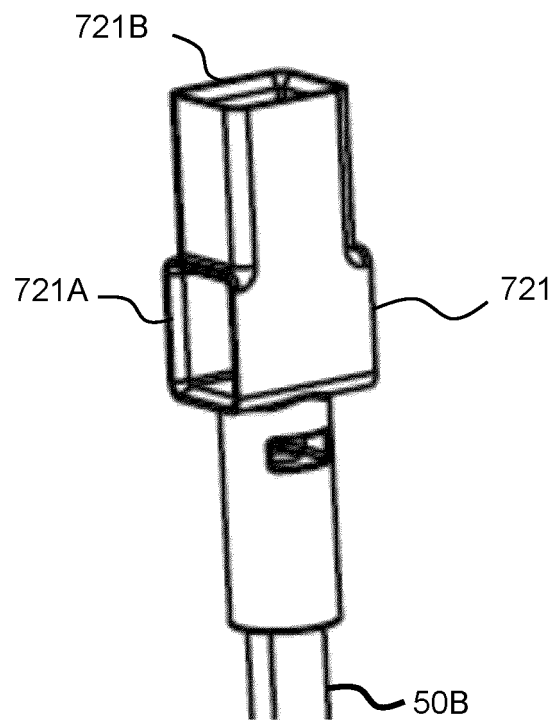


FIG.3B

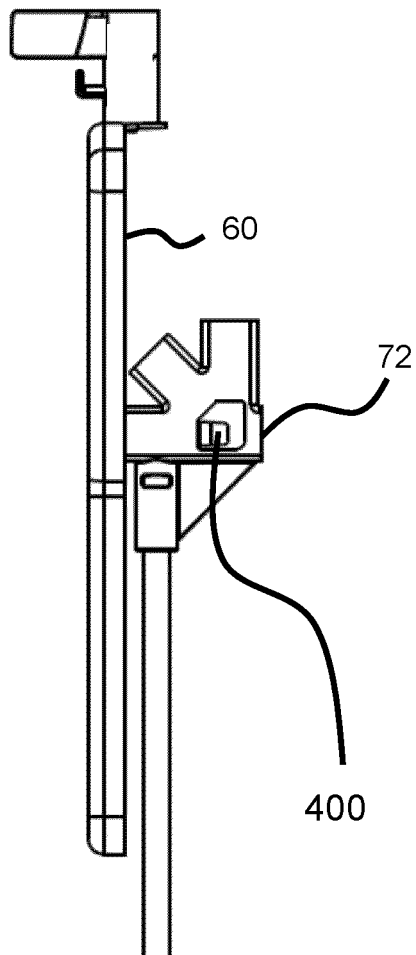


FIG. 4A

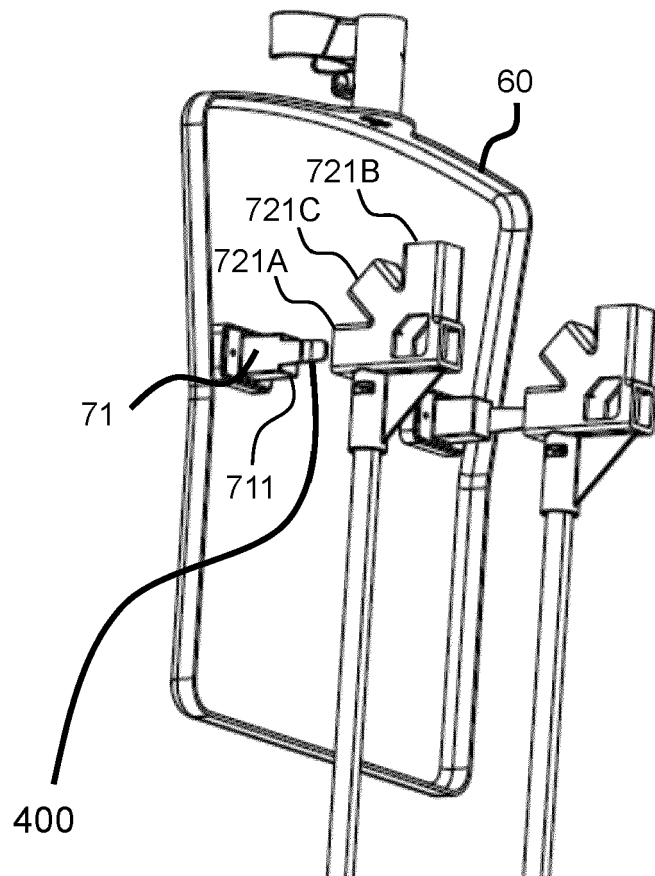
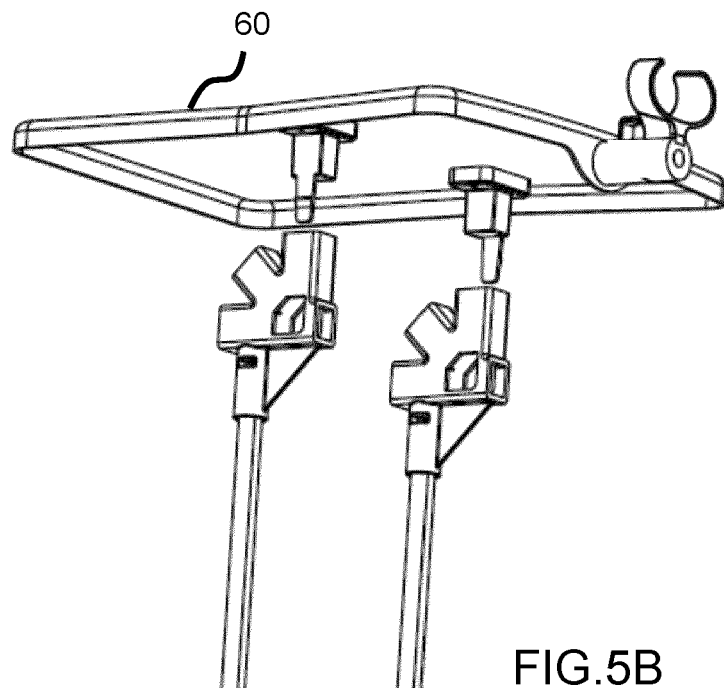
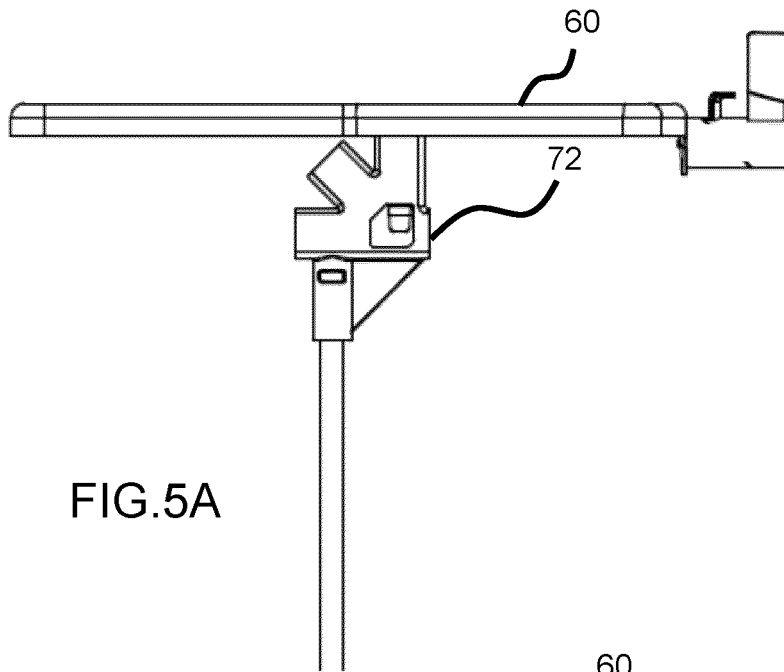


FIG. 4B



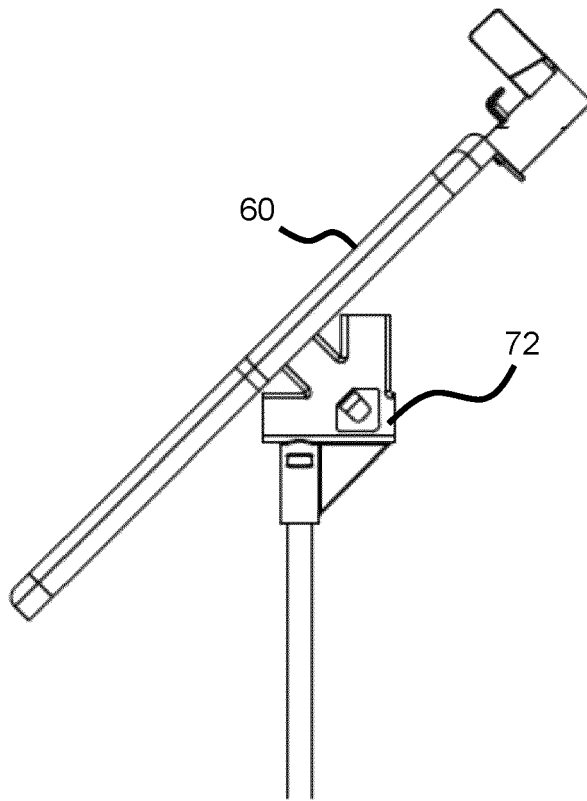


FIG. 6A

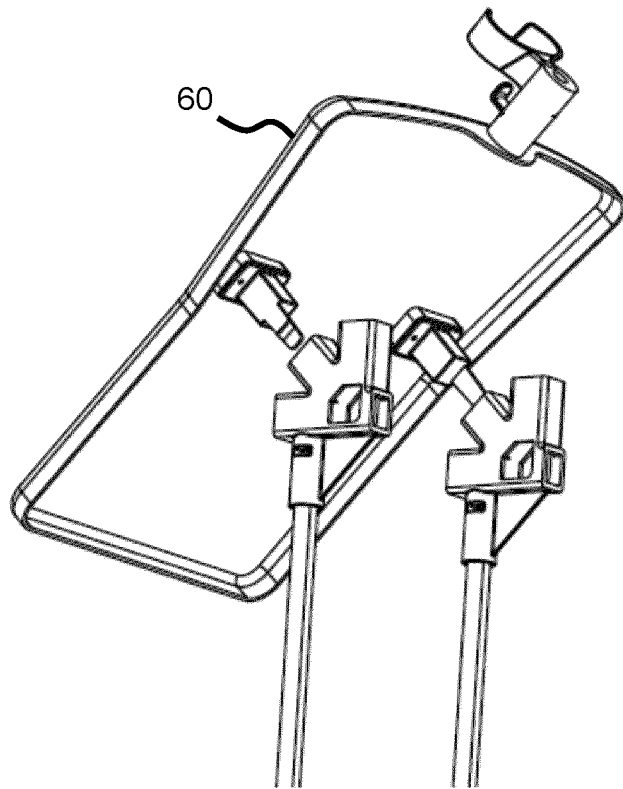


FIG. 6B

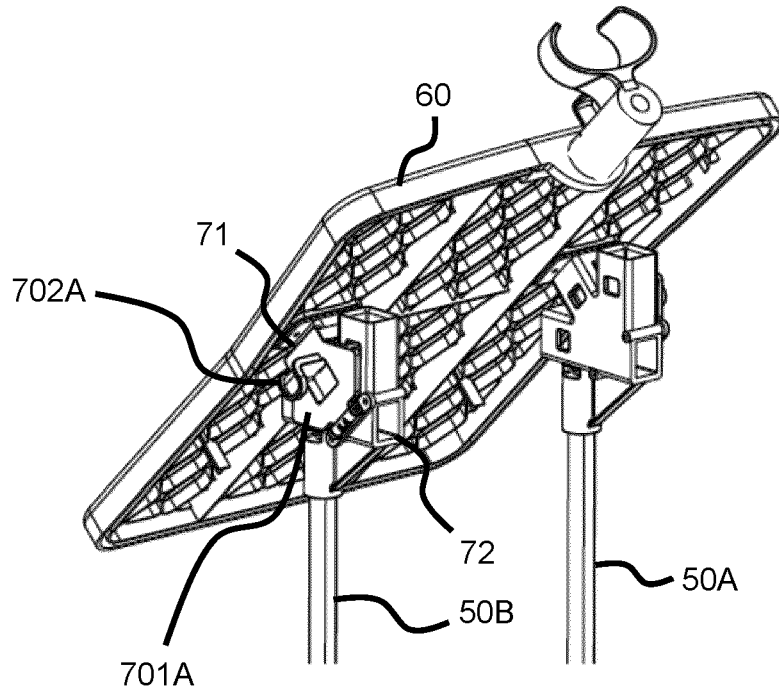


FIG. 7A

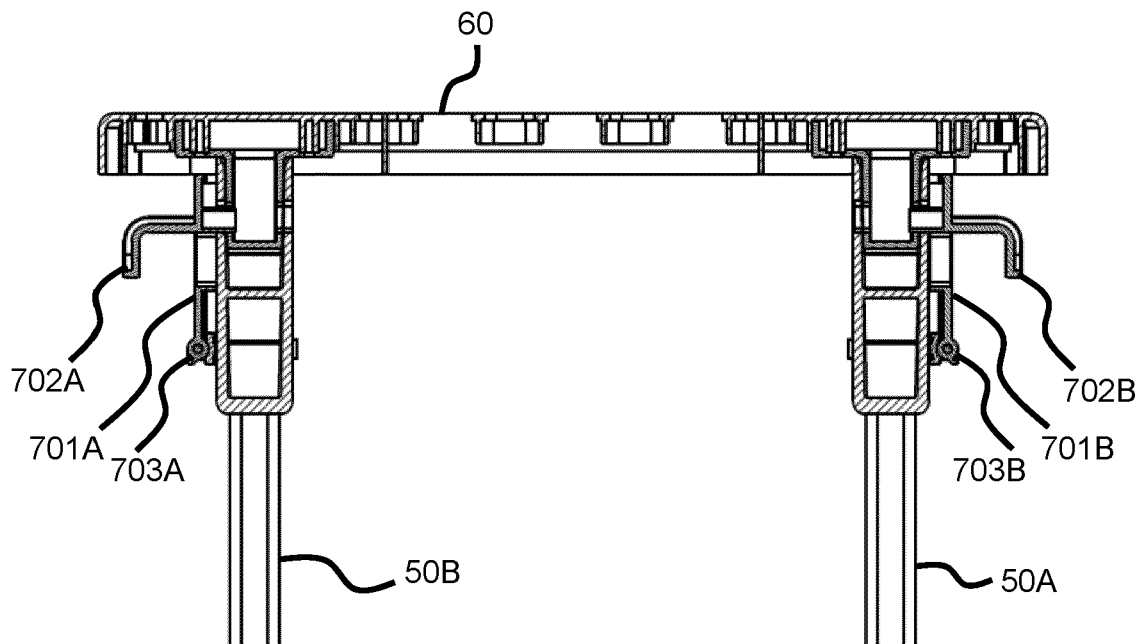


FIG. 7B

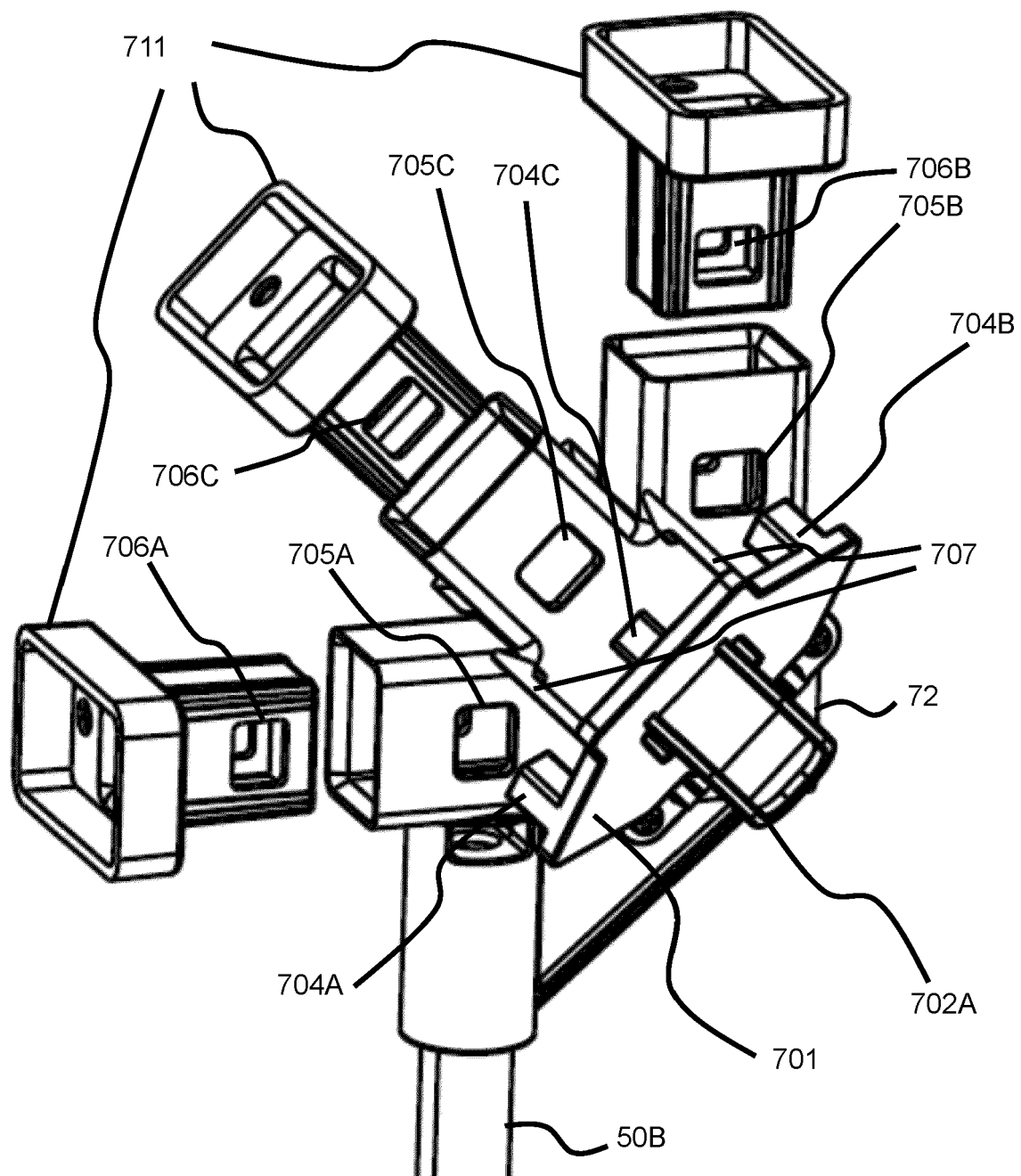


FIG.7C

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

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