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**Chen**

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(54) **STRUCTURE OF RECEPTION CHAIR**

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| ***A47C 7/62*** | (2006.01) |
| ***A47C 1/12*** | (2006.01) |
| ***A47C 7/42*** | (2006.01) |

(52) **U.S. Cl.**
CPC ..... ***A47C 1/12*** (2013.01); ***A47C 7/021*** (2013.01); ***A47C 7/42*** (2013.01)

(58) **Field of Classification Search**
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USPC ..... 297/440.1, 440.13, 440.14, 440.15, 297/440.16, 440.23, 440.22
See application file for complete search history.

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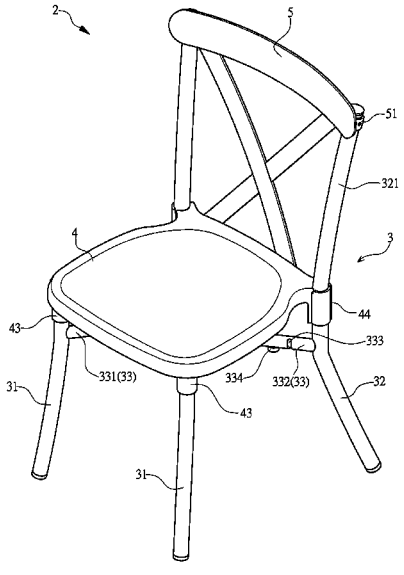
(57) **ABSTRACT**

A reception chair includes a frame assembly, a seat, and a back coupled together. The frame assembly includes front legs, rear legs, and a support coupled to the front and rear legs. The seat is provided, on a front portion of a bottom surface thereof, with collars, which are arranged to respectively correspond to the front legs of the frame assembly so that upper ends of the front legs are insertable and fit into the collars. The seat is provided, on a rear portion of the bottom surface thereof, with fixing sections, such that the fixing sections and the rear legs of the frame assembly correspond to each other, respectively. The fixing sections each include a first mounting member and a second mounting member, such that the fixing sections of the seat and the rear legs collectively form enclosing coupling connection structures therebetween.

**9 Claims, 6 Drawing Sheets**



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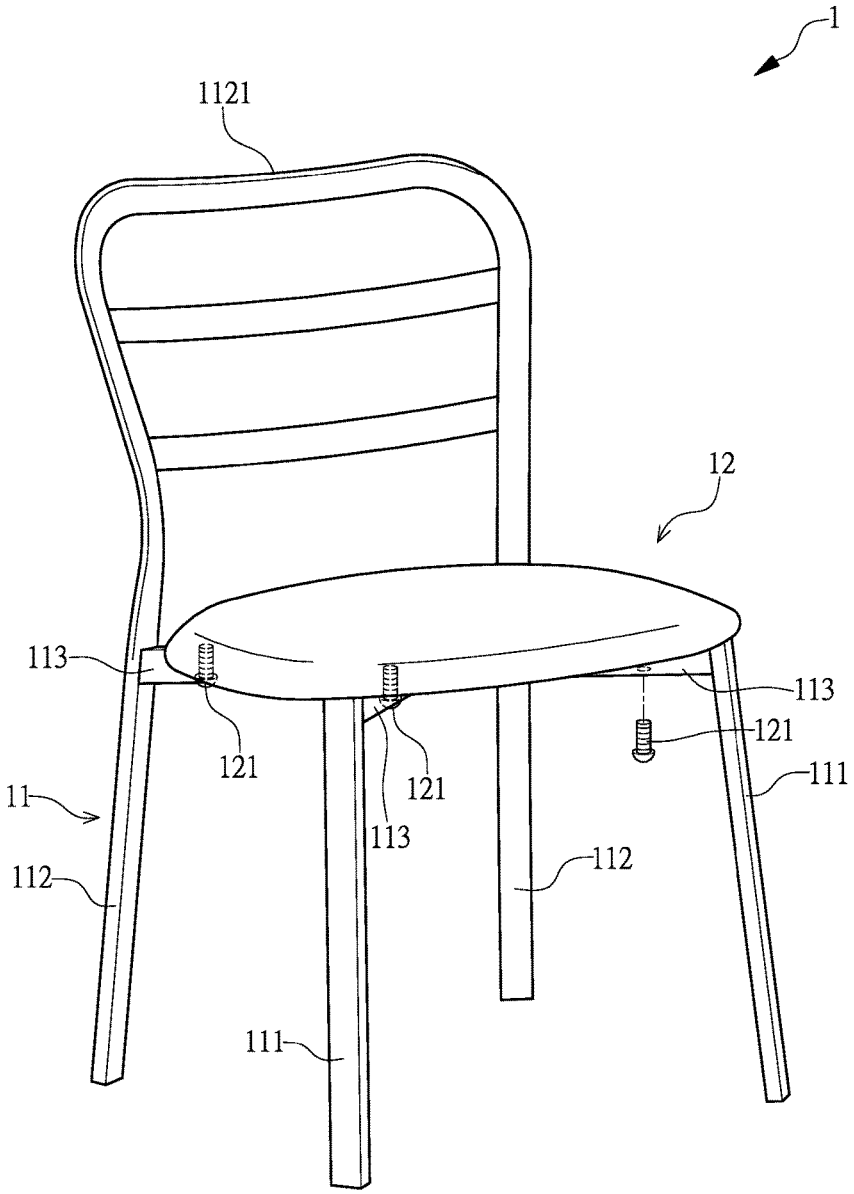



PRIOR ART
FIG.1

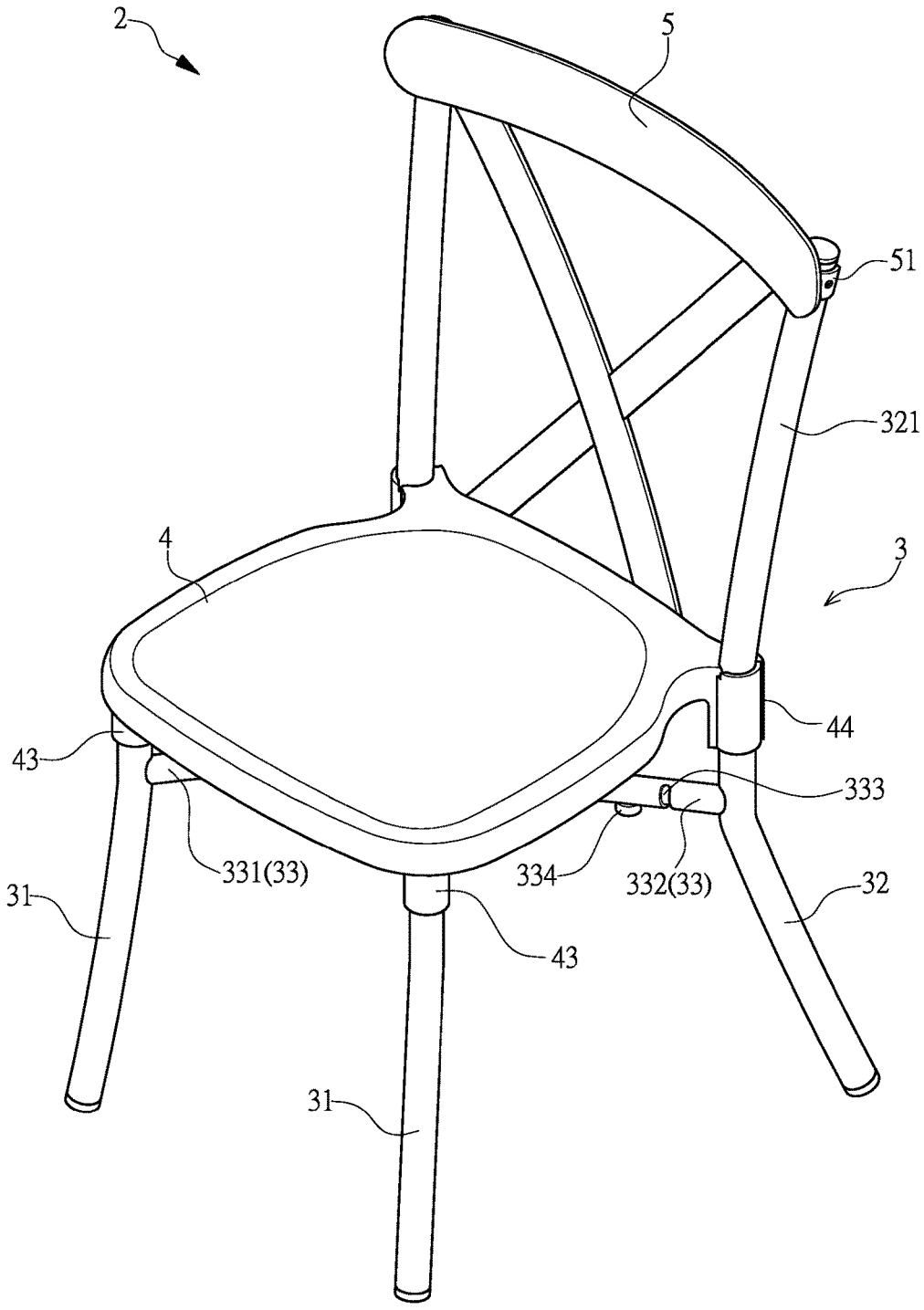
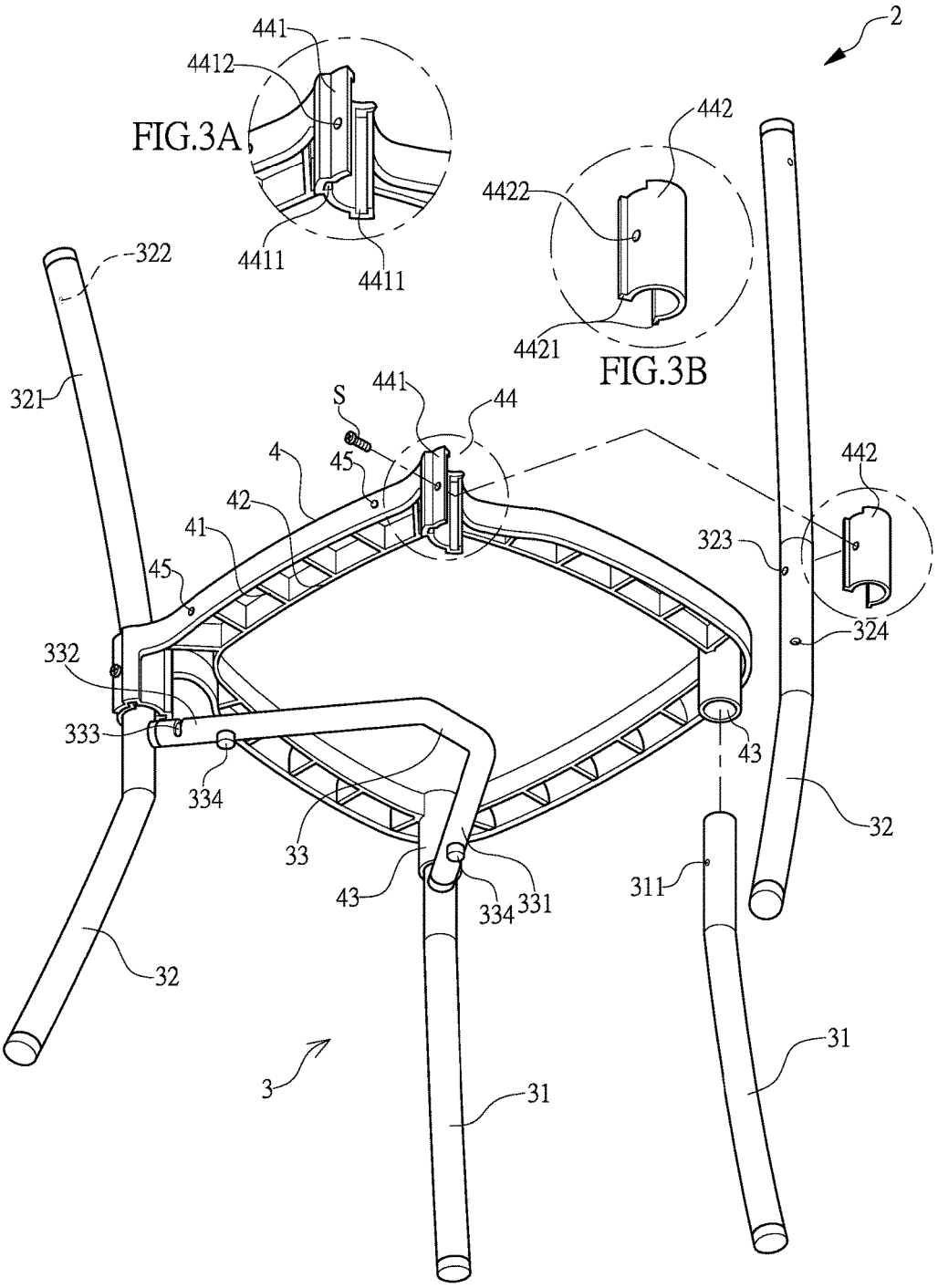



FIG.2


2
441
4412
4411
4411
FIG.3A
442
4422
4421
FIG.3B
322
321
S
441
44
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42
41
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442
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332
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334
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43
334
331
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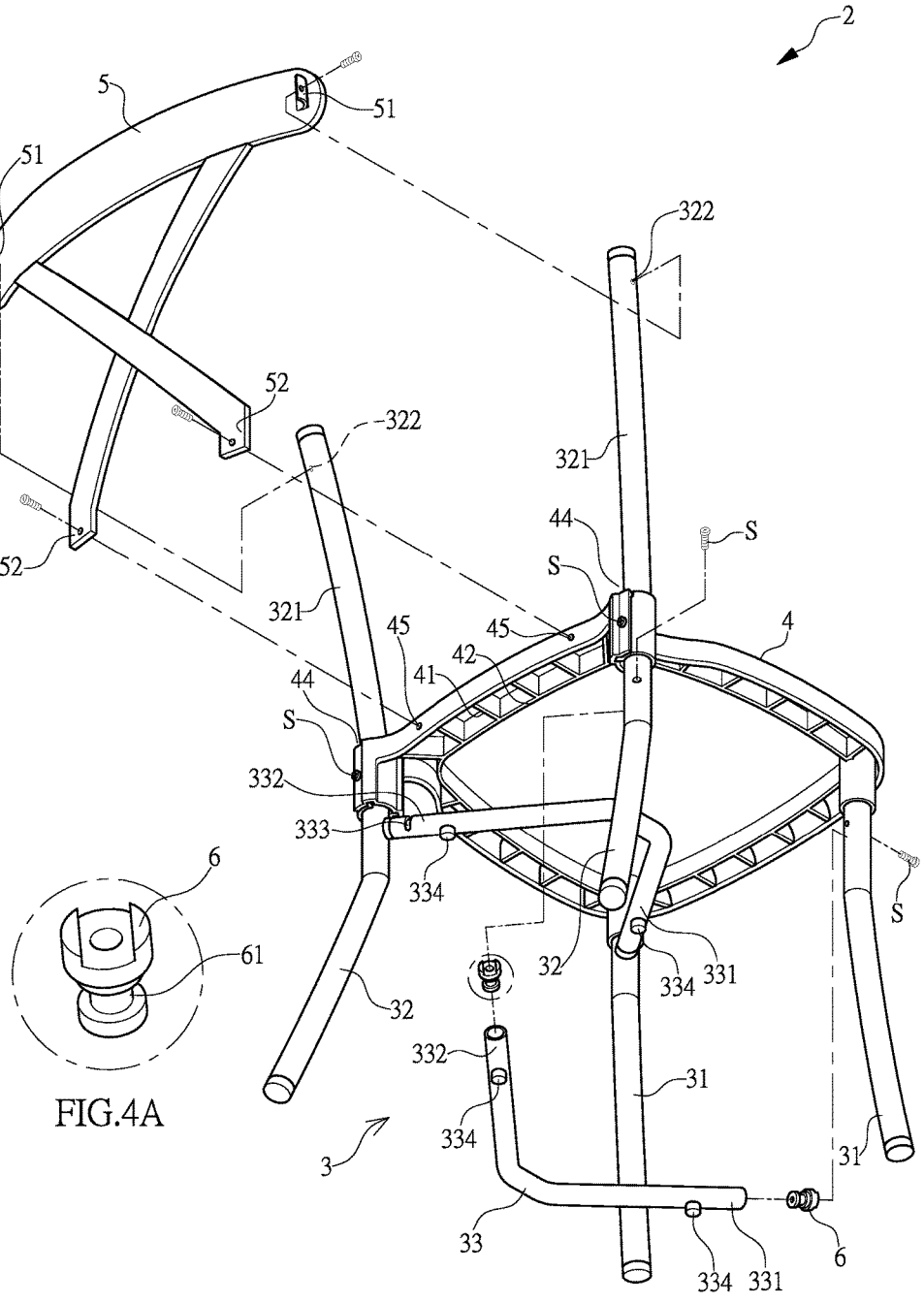
3
31

FIG.3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322
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322
321
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S
S
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42
41
44
S
332
333
334
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61
32
32
334
331
332
31
334
3
31
33
334
331
6
S

FIG.4A

FIG.4

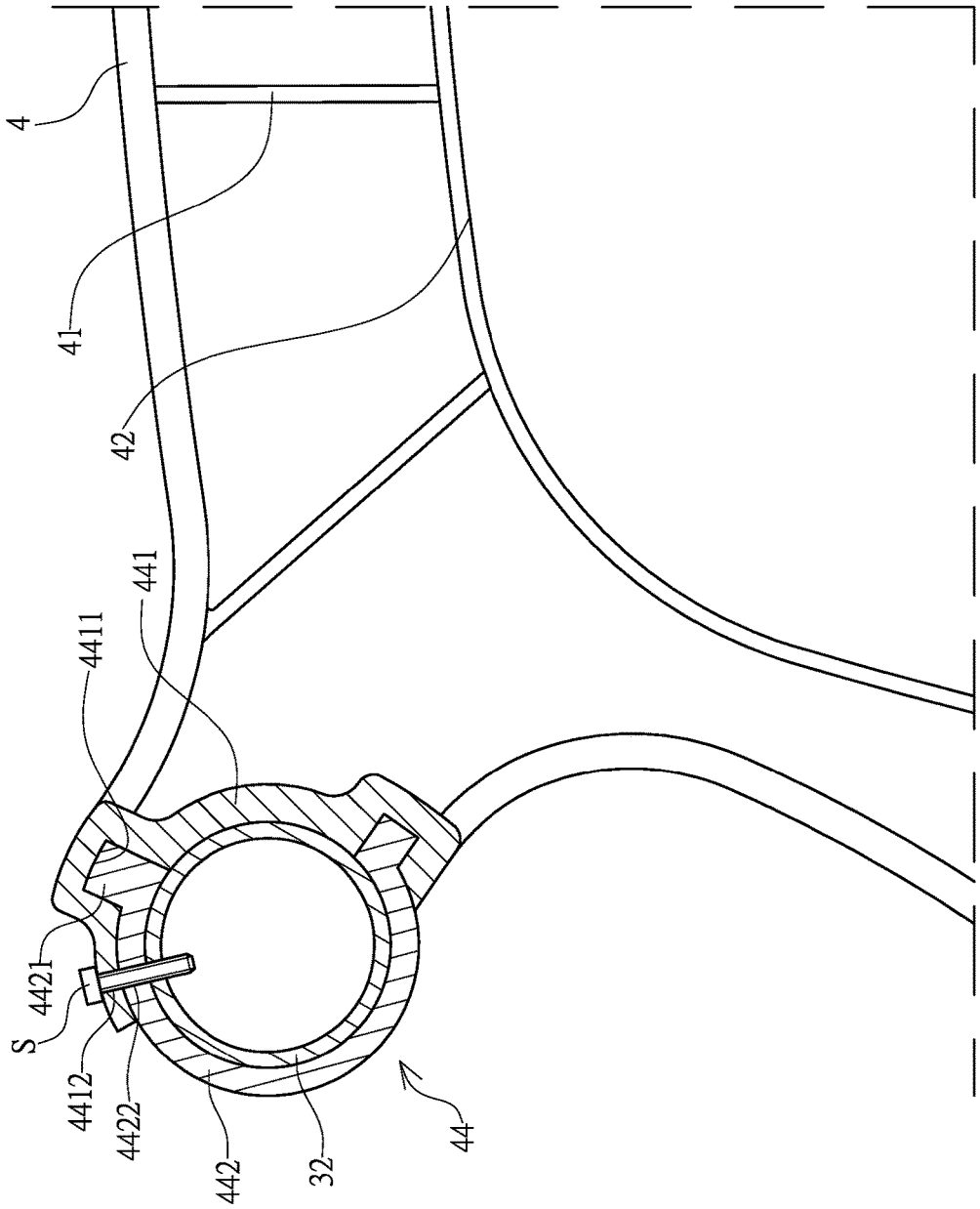
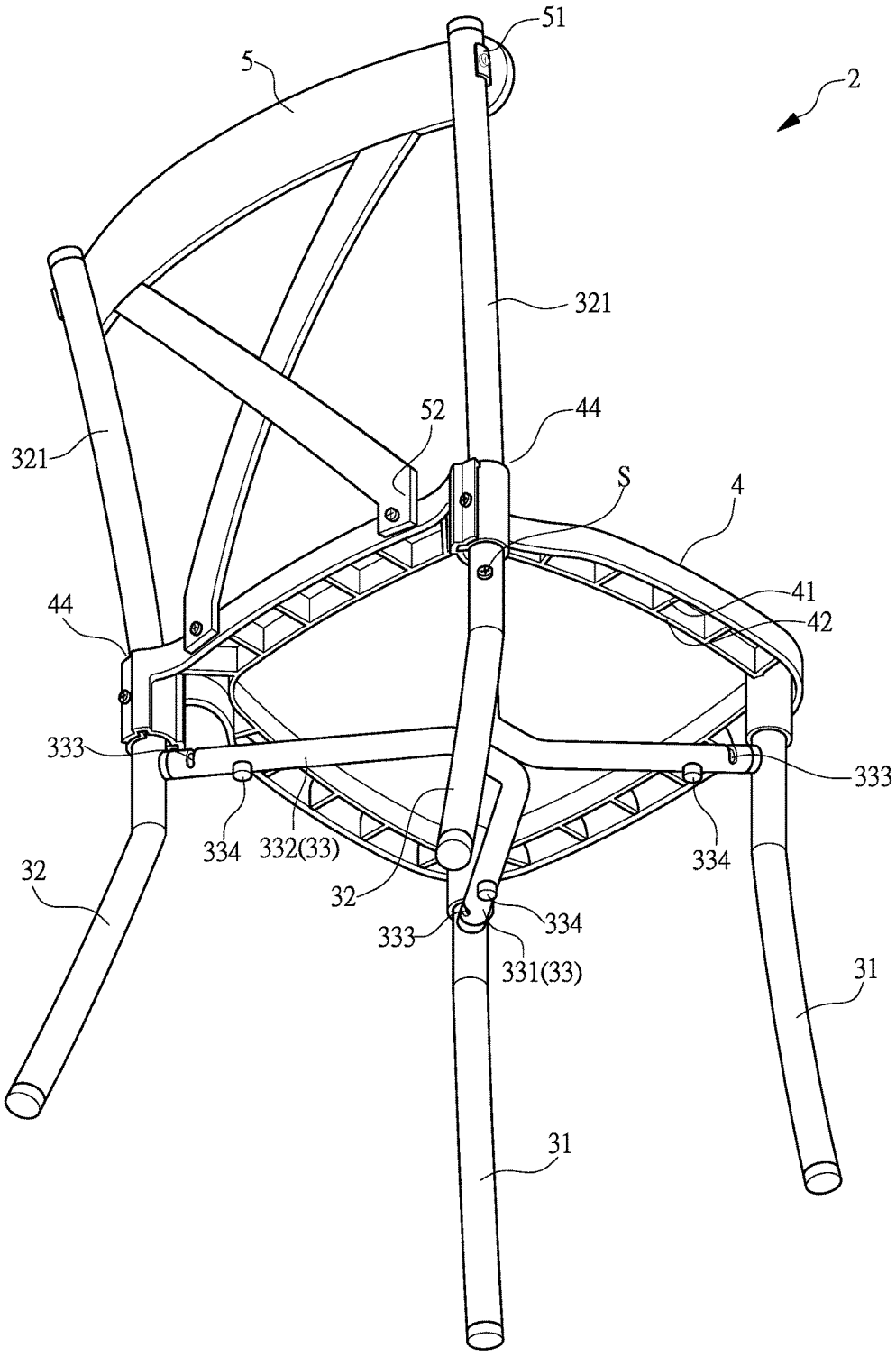



FIG.5


51
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2
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44
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332(33)
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331(33)
31
31

FIG.6

# STRUCTURE OF RECEPTION CHAIR

## (a) TECHNICAL FIELD OF THE INVENTION

The present invention relates generally to a structure of a reception chair, and more particularly to a structure of a reception chair that increases supporting power of a frame assembly to improve overall stiffness and strength of the reception chair so as to enhance utilization effectiveness of the reception chair.

## (b) DESCRIPTION OF THE PRIOR ART

Visitor's chairs or receptions are often placed outdoors as sitting chairs for guests taking part in an outdoor festival banquet.

As shown in FIG. **1**, a conventional reception chair **1** comprises a frame section **11** and a seat section **12**. The frame section **11** comprises a pair of left and right front legs **111**, a pair of left and right rear legs **112**, and a support **113** coupled between the front legs **111** and the rear legs **112**. The rear legs **112** are each extended upward to form a back **1121**. The seat section **12** is mounted to the support **113** by fastening elements **121**. More precisely speaking, the seat section **12** is mounted to a top surface of the support **113**, so that the seat section **12** allows for seating by a user, while the back **1121** provides supporting to the back of the user.

The conventional reception chair **1** achieves the purpose of allowing a user to sit thereon with the above-described structural arrangement. However, in the convention reception chair **1**, the seat section **12** is mounted to the support **113** by means of fastening elements **121** and the seat section **12** and the frame section **11** are fixed only by the fastening elements **121**. This may result in poor security and poor stability of the seat section **12**. Further, in the conventional reception chair **1**, the front legs **111** and the rear legs **112** are coupled to each other through only the support **113**. In other words, the seat section **12** does not provide supporting to the front legs **111** and coupling between the rear legs **112** and the seat section **12**. This definitely leads to weakness of the overall structural strength of the reception chair **1** and may cause total collapse in a worse condition.

Thus, it is a challenge of the reception chair manufacturers to provide a structure of a reception chair that helps ensure overall structural stiffness of the reception chair.

## SUMMARY OF THE INVENTION

The primary objective of the present invention is to provide a structure of a reception chair, which overcomes the deficiency of a conventional reception chair in respect of insufficiency of overall structural strength.

For such a purpose, the technical solution of the present invention, as provided in the appended claim **1**, is to provide a structure of a reception chair, wherein the reception chair comprises a frame assembly, a seat coupled to the frame assembly and a back coupled to the frame assembly and the seat; wherein the frame assembly comprises a pair of left and right front legs, a pair of left and right rear legs, and a support coupled to the front legs and the rear legs; and the seat is provided, on a front portion of a bottom surface thereof, with a pair of left and right collars, and the pair of left and right collars are arranged to respectively correspond to the front legs of the frame assembly so that upper ends of the front legs are insertable and fit into the collars, and the seat is provided, on a rear portion of the bottom surface thereof, with a pair of left and right fixing sections, such that the fixing sections and the rear legs of the frame assembly correspond to each other, respectively, and the fixing sections each comprise a first mounting member and a second mounting member, such that the fixing sections of the seat and the rear legs collectively form enclosing coupling connection structures therebetween.



The effectiveness that the present invention may achieve with the technical solution provided in the appended claim **1** is that the seat and the frame assembly are coupled to each other such that the seat and the support of the frame assembly are kept from each other by a distance so that the seat may serve as an additional bracing or supporting member, whereby the seat forms and serves as an additional supporting member of the frame assembly for supporting and holding the front legs and the rear legs of the support so as to improve structural stiffness of the frame assembly and thus improve overall structural strength of the reception chair to thereby enhance utilization of the reception chair.

The foregoing objectives and summary provide only a brief introduction to the present invention. To fully appreciate these and other objects of the present invention as well as the invention itself, all of which will become apparent to those skilled in the art, the following detailed description of the invention and the claims should be read in conjunction with the accompanying drawings. Throughout the specification and drawings identical reference numerals refer to identical or similar parts.

Many other advantages and features of the present invention will become manifest to those versed in the art upon making reference to the detailed description and the accompanying sheets of drawings in which a preferred structural embodiment incorporating the principles of the present invention is shown by way of illustrative example.

## BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a schematic view showing a conventional reception chair.

FIG. **2** is a perspective view showing a reception chair according to the present invention.

FIG. **3** is an exploded view showing a portion of the reception chair according to the present invention.

FIGS. **3**A and **3**B are enlarged views showing circled portions of FIG. **3**.

FIG. **4** is an exploded view showing the reception chair according to the present invention, a seat back being included.

FIG. **4**A is an enlarged view showing a circled portion of FIG. **4**.

FIG. **5** is a cross-sectional view showing coupling connection between a seat and a rear leg of a frame assembly of the reception chair according to the present invention.

FIG. **6** is a perspective view, taken from a different angle, showing the reception chair according to the present invention.

## DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

The following descriptions are exemplary embodiments only, and are not intended to limit the scope, applicability or configuration of the invention in any way. Rather, the following description provides a convenient illustration for implementing exemplary embodiments of the invention. Various changes to the described embodiments may be made

in the function and arrangement of the elements described without departing from the scope of the invention as set forth in the appended claims.

Firstly, referring to FIGS. **2**, **3**, **3**A, **3**B, **4** and **4**A, the present invention provides a structure of a reception chair. The reception chair **2** comprises a frame assembly **3**, a seat **4** coupled to the frame assembly **3** and a back **5** coupled to the frame assembly **3** and the seat **4**.

As shown in FIGS. **2**, **3**, and **4**, the frame assembly **3** comprises a pair of left and right front legs **31**, a pair of left and right rear legs **32** and a support **33** coupled to the front legs **31** and the rear legs **32**. The front legs **31** are arranged in pair and comprise a left one and a right one. The front legs **31** each comprise a front support mounting hole **311** formed therein. The rear legs **32** each comprise an extension section **321** that is extended in an upward direction and the extension section **321** comprises a back fixing hole **322** formed therein. The rear legs **32** are each provided with a seat fixing hole **323** formed therein at a located below the extension section **321** and a rear support mounting hole **324** below the seat fixing hole **323** such that the rear support mounting hole **324** and the front support mounting hole **311** correspond to each other. The support **33** is made, through for example, screwing, welding, or being integrally formed as a unitary structure, in the form of a frame having extensions toward four corners respectively, and the support **33** comprises front leg coupling sections **331** and rear leg coupling sections **332**. The front leg coupling sections **331** and the rear leg coupling sections **332** are each provided, in a manner of being embedded therein, a mounting fastener **6**, wherein the mounting fastener **6** comprises a recessed annulus section **61**. The support **33** comprises a positioning recess **333** formed by recessing each of the front leg coupling sections **331** and the rear leg coupling sections **332** such that the positioning recess **333** is engageable with the recessed annulus section **61** of the mounting fastener **6** corresponding thereto, through being fit therein, and as such, the mounting fasteners can be securely and respectively held in and fixed to the front leg coupling sections **331** and the rear leg coupling sections **332** of the support **33**. Further, the support **33** is provided with separation blocks **334**, which are elastic, mounted to the front leg coupling sections **331** and the rear leg coupling sections **332** and the arrangement of the separation blocks **334** protect the reception chair **2** from impact and wear, when multiple chairs are stacked together.

As shown in FIGS. **2**, **3**, **4**, and **5**, the seat **4** is provided on a circumferential edge portion of a bottom surface thereof with a plurality of reinforcement ribs **41**, which collectively form a reinforcement annulus section **42**. The seat **4** is provided, on a front portion of the bottom surface thereof, with a pair of left and right collars **43**, and the pair of left and right collars **43** are arranged to respectively correspond to the front legs **31** of the frame assembly **3** so that upper ends of the front legs **31** are insertable and fit into the collars **43**. The seat **4** is provided, on a rear portion of the bottom surface thereof, with a pair of left and right fixing sections **44**, such that the fixing sections **44** and the rear legs **32** of the frame assembly **3** correspond to each other, respectively. The fixing sections **44** each comprise a first mounting member **441** and a second mounting member **442**, wherein the first mounting member **441** is in the form of a semi-cylinder that is formed by integrally extending from a rear end of the seat **4** and the first mounting member **441** comprises two fitting slots **4411** formed therein and the first mounting member **441** comprises a through hole **4412** formed therethrough; and the second mounting member **442** is a separate member in the form of a semi-cylinder that is separate from the seat **4**. The first mounting member **441** and the second mounting member **442** are mateable with each other to form cylindrical a mounting assembly. The second mounting member **442** comprises a pair of insertion ribs **4421** formed thereon to respectively correspond to the fitting slots **4411** of the first mounting member **441** and the second mounting member **442** is provided with a through aperture **4422** corresponding to the through hole **4412** of the first mounting member **441**. The seat **4** is provided with a pair of left and right back fixing holes **45** formed in a rear side thereof at locations adjacent to the fixing sections **44**, respectively.

As shown in FIGS. **4** and **6**, the back **5** comprises a horizontal strip and a crossing assembly of strips, which are all elastic. The back **5** is provided, on an upper portion of a rear surface thereof, with upper fixing holes **51**, such that the upper fixing hole **51** are respectively fixable to the back fixing holes **322** of the rear legs **32** of the frame assembly **3**. A lower portion of the back **5** is fixable to the back fixing holes **45** of the seat **4**.

As shown in FIGS. **2**, **3**, **4**, **5**, and **6**, to embody the reception chair **2** according to the present invention, firstly, the mounting fasteners **6** are respectively inserted into and thus embedded and positioned in the front leg coupling sections **331** and the rear leg coupling sections **332** of the support **33**. Threading fastener S are respectively screwed through the front support mounting holes **311** of the front legs **31** and the rear support mounting holes **324** of the rear legs **32** into the mounting fasteners **6** so as to establish coupling connection between the support **33** and the front and rear legs **31**, **32** and thus complete the assembling of the frame assembly **3**. After the assembly of the frame assembly **3**, the seat **4** is fit to the upper ends of the front legs **31** of the frame assembly **3** with the collars **43** thereof, such that the first mounting members **441** of the fixing sections **44** on the rear end of the seat **4** are positioned on the rear legs **32** of the frame assembly **3**. Then, the insertion ribs **4421** of the second mounting members **442** are respectively fit into and thus received in the fitting slots **4411** of the first mounting members **441** so that the first mounting members **441** and the second mounting members **442** respectively form the fixing sections **44** enclosing the rear legs **31** of the frame assembly **3**, respectively. Under this condition, threading fasteners S are respectively inserted through the through holes **4412** of the first mounting members **441** and the through apertures **4421** of the second mounting members **442** to allow the threading fasteners S to screw into the seat fixing hole **323** of the rear legs **31** of the frame assembly **3**. As such, the front portion of the seat **4** is mounted to and supported by the front legs **31** of the frame assembly **3**, while the rear portion of the seat **4** is mounted to and supported by the rear legs **32** of the frame assembly **3**, with the rear portion of the seat **4** forming an enclosing coupling connection structure with respect to the rear legs **32** of the frame assembly **3**, so as to provide a secured connection arrangement between the seat **4** and the frame assembly **3**. Further, after the connection of the seat **4** and the frame assembly **3**, the seat **4** is set at a distance from the support **33** of the frame assembly **3** so that the seat **4** itself serves as a supporting or bracing member, which helps further improve structural stiffness of the frame assembly **3** and thus improve the overall structural strength of the reception chair **2**. After the connection of the seat **4** and the frame assembly **3**, the upper fixing holes **51** of the back **5** are fixed to the back fixing holes **322** of the frame assembly **3** and lower fixing sections **52** of the back **5** are respectively attached to and fixed to the back fixing holes **45** of the seat

4 to complete the assembling of the reception chair **2** according to the present invention.

The effectiveness of the present invention is that the seat **4** is provided with the collars **43** on a front portion thereof and the fixing sections **44** on a rear portion thereof such that the collars **43** are fit over and coupled to upper ends of the front legs **31** of the frame assembly **3**, while the fixing sections **44** on the rear side of the seat **4** enclose the rear legs **31** of the frame assembly **3** with threading fastener S securely fixing the fixing sections **4** of the seat **4** to the rear legs **31** of the frame assembly **3**. In this way, the front portion of the seat **4** is supported by the front legs **31** of the frame assembly **3**, while the rear portion of the seat **4** is securely fixed to the rear legs **32** of the frame assembly **3** such that the rear portion of the seat **4** forms an enclosing coupling connection arrangement with respect to each of the rear legs **32** of the frame assembly **3**. As such, the seat **4** and the frame assembly **3** collectively form secured and stable coupling therebetween. Further, the seat **4** and the frame assembly **3** are coupled to each other such that the seat **4** and the support **33** of the frame assembly **3** are kept from each other by a distance so that the seat **4** may serve as an additional bracing or supporting member. Specifically speaking, the seat **4** forms and serves as an additional supporting member of the frame assembly **3** for supporting and holding the front legs **31** and the rear legs **32** of the support **3** so as to improve structural stiffness of the frame assembly **3** and thus improve overall structural strength of the reception chair **2** to thereby enhance utilization of the reception chair **2**.

It will be understood that each of the elements described above, or two or more together may also find a useful application in other types of methods differing from the type described above.

While certain novel features of this invention have been shown and described and are pointed out in the annexed claim, it is not intended to be limited to the details above, since it will be understood that various omissions, modifications, substitutions and changes in the forms and details of the device illustrated and in its operation can be made by those skilled in the art without departing in any way from the claims of the present invention.

I claim:

**1**. A structure of a reception chair, the reception chair comprising a frame assembly, a seat coupled to the frame assembly and a back coupled to the frame assembly and the seat; wherein the frame assembly comprises a pair of left and right front legs, a pair of left and right rear legs, and a support coupled to the front legs and the rear legs; and the seat is provided, on a front portion of a bottom surface thereof, with a pair of left and right collars, and the pair of left and right collars are arranged to respectively correspond to the front legs of the frame assembly so that upper ends of the front legs are insertable and fit into the collars, and the seat is provided, on a rear portion of the bottom surface thereof, with a pair of left and right fixing sections, such that the fixing sections and the rear legs of the frame assembly correspond to each other, respectively, and the fixing sections each comprise a first mounting member and a second mounting member, such that the fixing sections of the seat and the rear legs collectively form enclosing coupling connection structures therebetween.

**2**. The structure of the reception chair according to claim **1**, wherein the front legs are arranged in pair and comprise a left front leg and a right front leg, the front legs each comprising a front support mounting hole formed therein, the rear legs each comprising an extension section that is extended in an upward direction, the extension section comprising a back fixing hole formed therein, the rear legs being each provided with a seat fixing hole formed therein at a located below the extension section and a rear support mounting hole below the seat fixing hole such that the rear support mounting hole and the front support mounting hole correspond to each other; and the support comprises front leg coupling sections and rear leg coupling sections and the front leg coupling sections and the rear leg coupling sections are each provided, in a manner of being embedded therein, a mounting fastener.

**3**. The structure of the reception chair according to claim **2**, wherein the mounting fasteners each comprises a recessed annulus section, and the support comprises a positioning recess formed by recessing each of the front leg coupling sections and the rear leg coupling sections such that the positioning recess is engageable with the recessed annulus section of the mounting fastener corresponding thereto, through being fit therein.

**4**. The structure of the reception chair according to claim **2**, wherein the support is provided with separation blocks, which are elastic, mounted to the front leg coupling sections and the rear leg coupling sections.

**5**. The structure of the reception chair according to claim **1**, wherein the seat is provided on a circumferential edge portion of a bottom surface thereof with a plurality of reinforcement ribs, which collectively form a reinforcement annulus section; the seat is provided, on a front portion of a bottom surface thereof, with a pair of left and right collars, and the pair of left and right collars are arranged to respectively correspond to the front legs of the frame assembly; the seat is provided, on a rear portion of the bottom surface thereof, with a pair of left and right fixing sections, such that the fixing sections and the rear legs of the frame assembly correspond to each other, respectively; and the seat is provided with a pair of left and right back fixing holes formed in a rear side thereof at locations adjacent to the fixing sections **44**, respectively.

**6**. The structure of the reception chair according to claim **4**, wherein the fixing sections each comprise a first mounting member and a second mounting member, wherein the first mounting member is in the form of a semi-cylinder that is formed by integrally extending from a rear end of the seat and the first mounting member comprises two fitting slots formed therein and the first mounting member comprises a through hole formed therethrough; and the second mounting member is a separate member in the form of a semi-cylinder that is separate from the seat, the first mounting member and the second mounting member being mateable with each other to form cylindrical a mounting assembly, the second mounting member comprising a pair of insertion ribs formed thereon to respectively correspond to the fitting slots of the first mounting member, the second mounting member being provided with a through aperture corresponding to the through hole of the first mounting member.

**7**. The structure of the reception chair according to claim **1**, wherein the back is provided, on an upper portion of a rear surface thereof, with upper fixing holes, such that the upper fixing hole are respectively fixable to the back fixing holes of the rear legs of the frame assembly; and a lower portion of the back is fixable to the back fixing holes of the seat.

**8**. The structure of the reception chair according to claim **7**, wherein the back comprises a horizontal strip and a crossing assembly of strips, which are elastic.

**9**. The structure of the reception chair according to claim **1**, wherein the seat and the frame assembly are coupleable to each other such that the seat and the support of the frame

assembly are spaced from each other by a predetermined distance so that the seat functions additionally as a supporting member, wherein the seat supports and holds the front legs and the rear legs of the frame assembly.

* * * * *