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(54) **Curtain and venetian blind arrangement**

(57) A curtain and Venetian blind arrangement is constructed to include a Venetian blind formed of a headrail, a bottom rail, a set of slats, and a lift cord set adapted for joining the headrail, the bottom rail and the slats and keeping the slats arranged between the headrail and the bottom rail, and a plurality of curtains cou-

pled to the slats, each curtain having at least one peripheral side suspended from one slat; the at least one peripheral side of each curtain being mounted with at least one weight.

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Description

BACKGROUND OF THE INVENTION

1. Field of the Invention:

[0001] The present invention relates to Venetian blinds and, more specifically, to a curtain and Venetian blind arrangement, which comprises a Venetian blind, and a number of curtains mounted with weights and respectively suspended from the slats at different elevations.

2. Description of the Related Art:

[0002] In order to enhance the light blocking effect and decorate the blind, the inventor of the present invention invented various Venetian blinds with detachable curtain. However, these curtain and Venetian blind arrangements are still not satisfactory in function. When receiving the blind, the curtain tends to be jammed in between the slats and wrinkled. When the border area of the curtain curved or wrinkled, the sense of beauty of the curtain is destroyed, and the curtain cannot completely block the light.

SUMMARY OF THE INVENTION

[0003] The present invention has been accomplished to provide a curtain and Venetian blind arrangement, which eliminates the aforesaid drawbacks. It is the main object of the present invention to provide a curtain and Venetian blind arrangement, which enables the curtains to be smoothly suspended from the slats.

[0004] It is another object of the present invention to provide a curtain and Venetian blind arrangement, which prohibits the curtains from been jammed in between the slats during receiving of the Venetian blind.

[0005] It is still another object of the present invention to provide a curtain and Venetian blind arrangement, which prevents the curtains from flying in the wind.

[0006] To achieve these objects of the present invention, the curtain and Venetian blind arrangement comprises a Venetian blind formed of a headrail, a bottom rail, a set of slats, and a lift cord set adapted for joining the headrail, the bottom rail and the slats and keeping the slats arranged between the headrail and the bottom rail, and a plurality of curtains coupled to the slats, each curtain having at least one peripheral side suspended from one slat. The at least one peripheral side of each curtain is mounted with at least one weight.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007]

FIG. 1 is an exploded view of a curtain and Venetian blind arrangement constructed according to a first

embodiment of the present invention.

FIG. 2 is a curtain fabrication flow according to the present invention.

FIG. 3 is an exploded view of a part of FIG. 1.

FIG. 4 is a perspective assembly view of the first embodiment of the present invention.

FIG. 5 is a side view showing the received status of the first embodiment of the present invention.

FIG. 6 is a perspective view showing the first embodiment of the present invention attached with an ornamental curtain.

FIG. 7 is an exploded view of a curtain and Venetian blind arrangement constructed according to a second embodiment of the present invention.

FIG. 8 is an exploded view of a curtain and Venetian blind arrangement constructed according to a third embodiment of the present invention.

FIG. 9 is a perspective assembly view of a curtain and Venetian blind arrangement constructed according to a fourth embodiment of the present invention.

FIG. 10 is a perspective exploded view of a part of a curtain and Venetian blind arrangement constructed according to a fifth embodiment of the present invention.

FIG. 11 is a perspective view of a part of a curtain and Venetian blind arrangement constructed according to a sixth embodiment of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0008] Referring to FIGS. from 1 through 5, a curtain and Venetian blind arrangement **100** in accordance with a first embodiment of the present invention is shown comprised of a Venetian blind **10**, a number of curtains **20**, and a number of weights **30**.

[0009] Referring to FIGS. from 1 through 4, the Venetian blind **10** comprises a headrail **11**, a bottom rail **12**, a number of slats **13**, and a lift cord set **14**. The headrail **11** is fixedly fastened to the top side of the window. The bottom rail **12** is spaced below the headrail **11**. The slats **13** are arranged in parallel between the headrail **11** and the bottom rail **12**. The lift cord set **14** is adapted to join the headrail **11**, the bottom rail **12** and the slats **13**, for enabling the bottom rail **12** and the slats **13** to be lifted or lowered relative to the headrail **11** to the desired elevation.

[0010] Referring to FIGS. 1, 2, and 3, the number of the curtains **20** is one half of the number of the slats **13**, each comprised of a curtain body **21** made of silk, cotton, nylon, or any of a variety of natural or synthetic fabrics. The curtain body **21** comprises two through holes **22** for the passing of the lift cord set **14** (see FIG. 2A), a first peripheral side **21a**, a second peripheral side **21b** opposite to the first peripheral side **21a**, a third peripheral side **21c** connected between the first peripheral

side **21a** and the second peripheral side **12b** at one side, and a fourth peripheral side **21d** connected between the first peripheral side **21a** and the second peripheral side **12b** at one side opposite to the third peripheral side **21c**. The border areas of the first and second peripheral sides **21a;21b** are respectively folded inwards to a predetermined distance and then bilaterally stitched to the respective curtain body **21**, forming a respective pocket **23** (see FIG. 2B). The width of the pocket **23** is approximately equal to the width (transverse length) of the minor axis of the slats **13**. The border areas of the third and fourth peripheral sides **21c;21d** are respectively folded inwards to a predetermined distance and then stitched to the respective curtain body **21**, forming a respective pocket **24** (see FIG. 2C). The depth of the pocket **24** is approximately equal to the length (longitudinal length) of the slats **13**. The pocket **24** has at least one opening **25** in one end.

[0011] Referring to FIG. 3, the weights **30** are heavy rod members, having the length approximately equal to the depth of the pockets **24** of the curtains **20**, i.e., approximately equal to the longitudinal length of the slats **13**. Therefore, the weights **30** can be inserted through the openings **25** of the curtains **20** into the respective pockets **24**, maintained secured to the third and fourth sides **21c;21d** of the curtains **20**.

[0012] The installation procedure of the aforesaid first embodiment is outlined hereinafter.

[0013] Before the installation of the Venetian blind **10**, the lift cord set **14** is inserted through the through holes **20** of the curtains **20**, keeping the curtains **20** respectively covered on the odd number slats **13** (the first, third, fifth, seventh ... slats), and then the respective two ends of the odd number slats **13** are respectively inserted into the pockets **23** at the first peripheral sides **21a** and second peripheral sides **21b** of the curtains **20**, keeping the curtain bodies **21** respectively secured to the slats **13**. At this time, the weights **30** impart a downward pressure to the pockets **24** of the curtain bodies **21**. When the slats **13** maintained in horizontal, the suspension distance of the third peripheral side **21c** and fourth peripheral side **21d** of each curtain **20** is greater than the pitch between two curtains **20**. According to this embodiment, the suspension distance of the third peripheral side **21c** and fourth peripheral side **21d** of each curtain **20** is greater than the distance of three slats **13** (the suspension distance of the third peripheral side **21c** and fourth peripheral side **21d** of the curtain body **21** of the curtain **20** at the first slat **13** is over the position of the third slat **13**). Because of the weight of the weights **30**, the third and fourth peripheral sides **21c;21d** are pulled downwards in vertical, as shown in FIG. 4, to block the gaps between each two adjacent slats **13** and to stop light from passing through the gaps. Further, the weights **30** stabilize the suspension portions of the curtains **20**, preventing the suspension portions from flying in the wind. Therefore, the weights **30** stabilize the suspension of the curtain bodies **21** of the curtain **20**, enhancing the light

blocking effect of the Venetian blind **10**.

[0014] The arrangement of the weights **30** shortens the variation of pitch between the slats **13** when operating the lift cord set **14** to lift the slats **13** and the bottom rail **12**. During the variation of pitch, the weights **30** stabilize the free ends of the third and fourth peripheral sides **21c;21d**, preventing flying of the curtains **20** in the wind and jamming of the curtain bodies **21** in between the slats **13**, and therefore the curtains **20** are well arranged in a stack when received (see FIG. 5).

[0015] Referring to FIG. 6, an ornamental curtain **26** may be attached to the curtains **20** to decorate the whole assembly of the assembly of the curtain and Venetian blind arrangement **100** and to block the gap between the headrail **11** and the first slat **13**. The decorative curtain **26** may also be equipped with weights **30**.

[0016] In the aforesaid embodiment, the pull end of the lift cord set **14** of the Venetian blind **10** is exposed to the outside for operation. Alternatively, the Venetian blind **10** can be made having means to keep the lift cord set **14** from sight and out of reach of children.

[0017] As indicated above, the invention achieves the following advantages:

1. Better slat receiving status:

Because of the effect of the weights, the curtains are smoothly suspended from the slats at two sides, enabling the slats to be received smoothly without wrinkling the curtains.

2. Eliminating curving of the curtains:

The weights pull the curtains bilaterally downward, keeping the curtains stably suspended from the slats and preventing the curtains from flying in the wind or being jammed in the slats.

[0018] FIG. 7 shows a curtain and Venetian blind arrangement **200** according to a second embodiment of the present invention. Similar to the aforesaid first embodiment of the present invention, the curtain and Venetian blind arrangement **200** is comprised of a Venetian blind **10**, a number of curtains **40**, and a number of weights **30**. Unlike the aforesaid first embodiment of the present invention, the curtains **40** each have only one side (the third or fourth side) suspended from the slats **13** and one weight **30** provided in the suspended side. This arrangement diminishes the consumption of curtain material, and reduces the number of the weights **30** required. Therefore, the manufacturing cost of this arrangement is relatively reduced.

[0019] FIG. 8 shows a curtain and Venetian blind arrangement **300** according to a third embodiment of the present invention. Similar to the aforesaid first embodiment of the present invention, the curtain and Venetian blind arrangement **300** is comprised of a Venetian blind **10**, a number of curtains **50**, and a number of weights **30**. Unlike the aforesaid first embodiment of the present invention, the number of the curtains **50** is equal to the number of the slats **13**, and each slat **13** is covered with

a respective curtain **50**. The suspension length of each curtain **50** is greater than the pitch between each two slats **13** so that the curtains **50** block the gaps in between the slats **13**.

[0020] FIG. 9 shows a fourth embodiment of the present invention. According to this alternate form, the curtains **50'** have a respective peripheral side respectively suspended from the slats of the Venetian blind **10**, and the suspended peripheral side is relatively longer than that of the aforesaid first, second, and third embodiments of the present invention, i.e., each curtain **50'** covers over more than four slats (for example, 4, 5, 6, or 7 pieces of slats). Because the covering area of the curtains **50'** is relatively increased, less number of the curtains **50'** is required.

[0021] FIG. 10 shows a curtain and Venetian blind arrangement **400** according to a fifth embodiment of the present invention.. Similar to the aforesaid first embodiment of the present invention, the curtain and Venetian blind arrangement **400** is comprised of a Venetian blind (not shown), a number of curtains **60**, and a number of weights **70**. Unlike the aforesaid first embodiment of the present invention, the third and fourth peripheral sides **61c;61d** of the curtain bodies of the curtains **60** each have two pockets **64a;64b** aligned at two sides and extended along the border, and the rod-like weights **70** are respectively mounted in the pockets **64a;64b** of the curtains **60**.

[0022] Further, the curtains may be made without the aforesaid through holes for the passing of the lift cord set. In this case, the curtains can be fastened to the slats by fastening means, for example, double-side adhesive, hook and loop materials, bonding agent, etc.

[0023] FIG. 11 shows a sixth embodiment of the present invention. According to this embodiment, each curtain **80** has a number of pockets **84** disposed at different elevations for holding a respective weight.

[0024] Further, the weights may be respectively attached to the curtains and then stitch the curtains to secure the weights in position such that the openings of the curtains can be eliminated.

Claims

1. A curtain and Venetian blind arrangement comprising:

a Venetian blind having a headrail, a bottom rail, a plurality of slats, and a lift cord set adapted for joining said headrail, said bottom rail and said slats and keeping said slats arranged between said headrail and said bottom rail; and

a plurality of curtains coupled to said slats, said curtains each having at least one peripheral side suspended from one of said slats;

wherein the at least one peripheral side of each of said curtains is provided with at least one weight.

2. The curtain and Venetian blind arrangement as claimed in claim 1, wherein said curtains each has a first peripheral side and a second peripheral side opposite said first peripheral side adapted for coupling to one of said slats, a third peripheral side and a fourth peripheral sides respectively provided with a respective weight and suspended from one of said slats at two sides.
3. The curtain and Venetian blind arrangement as claimed in claim 2, wherein the first peripheral side and second peripheral side of each of said curtains each has a pocket for respectively receiving two ends of one of said slats.
4. The curtain and Venetian blind arrangement as claimed in claim 3, wherein the first peripheral side and second peripheral side of each of said curtains are respectively folded inwards and bilaterally stitched, forming the respective pocket on the middle.
5. The curtain and Venetian blind arrangement as claimed in claim 1, wherein the at least one peripheral side of each of said curtains each has a free end provided with at least one pocket for holding said at least one weight.
6. The curtain and Venetian blind arrangement as claimed in claim 5, wherein the pocket at the free end of each of the at least one peripheral side of each of said curtains has a depth approximately equal to the length of the at least one peripheral side of each of said curtains, and said weight is a heavy rod member of length equal to the pocket at the free end of each of the at least one peripheral side of each of said curtains.
7. The curtain and Venetian blind arrangement as claimed in claim 5, wherein the pocket has an opening through which said weight is inserted into the pocket.
8. The curtain and Venetian blind arrangement as claimed in claim 1, wherein the length of the at least one peripheral side suspended from one of said slats is greater than the distance between the suspended point to the slat on which a next curtain is attached.
9. The curtain and Venetian blind arrangement as claimed in claim 1, wherein said curtains each have at least one through hole for the passing of said lift cord set.

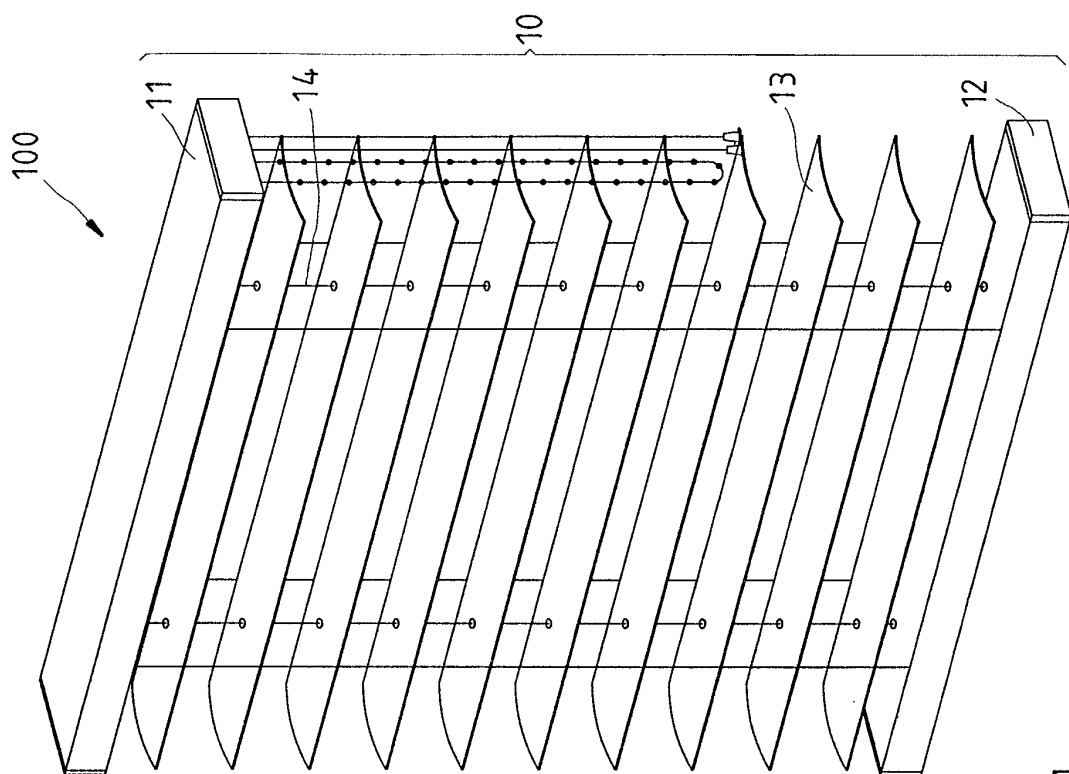
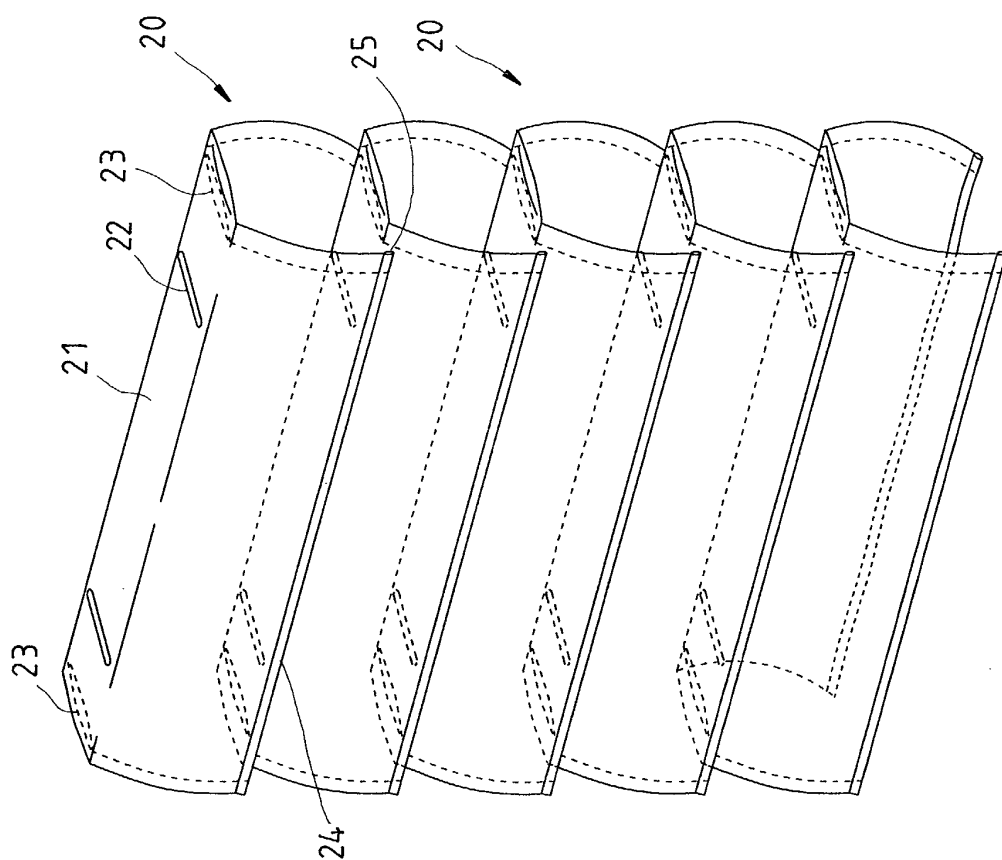


FIG. 1



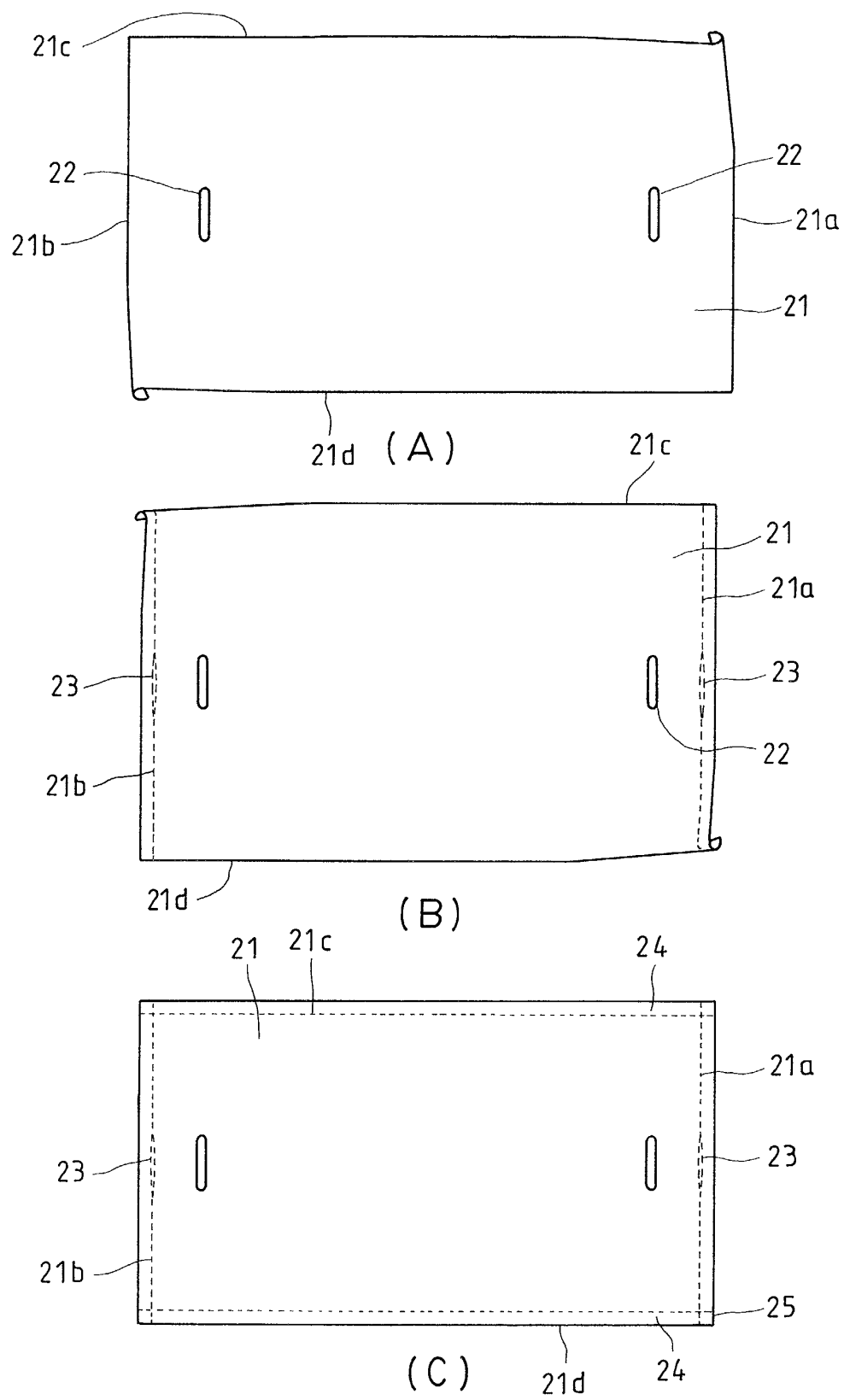


FIG. 2

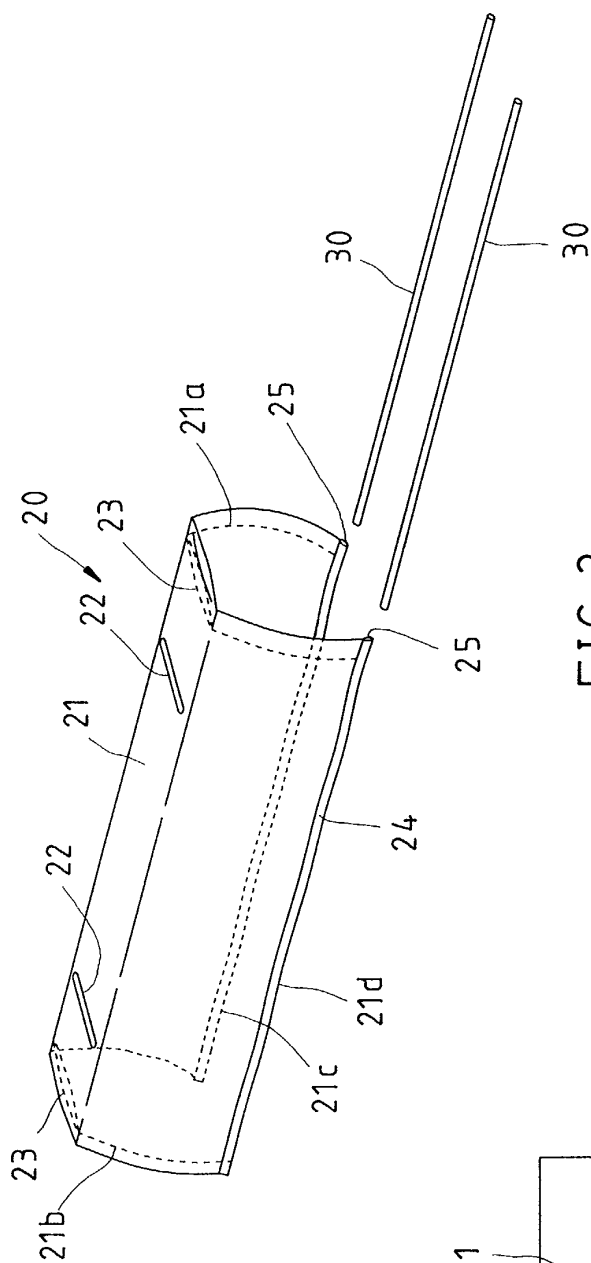


FIG. 3

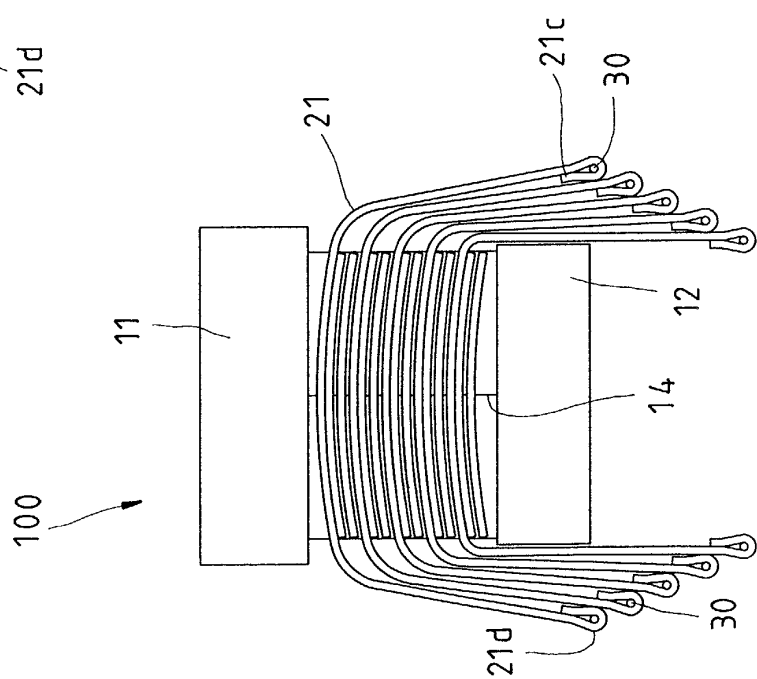


FIG. 5

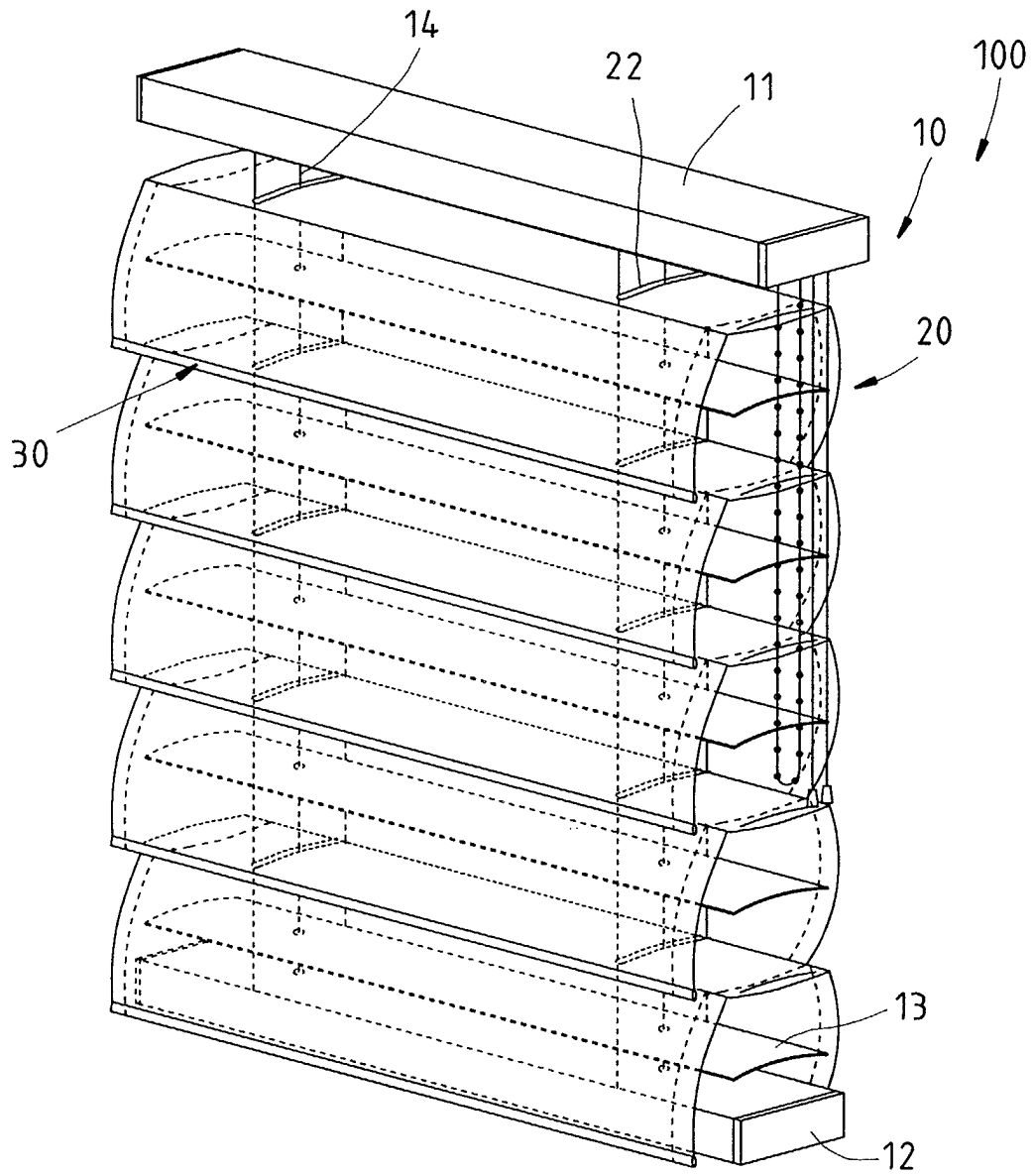


FIG. 4

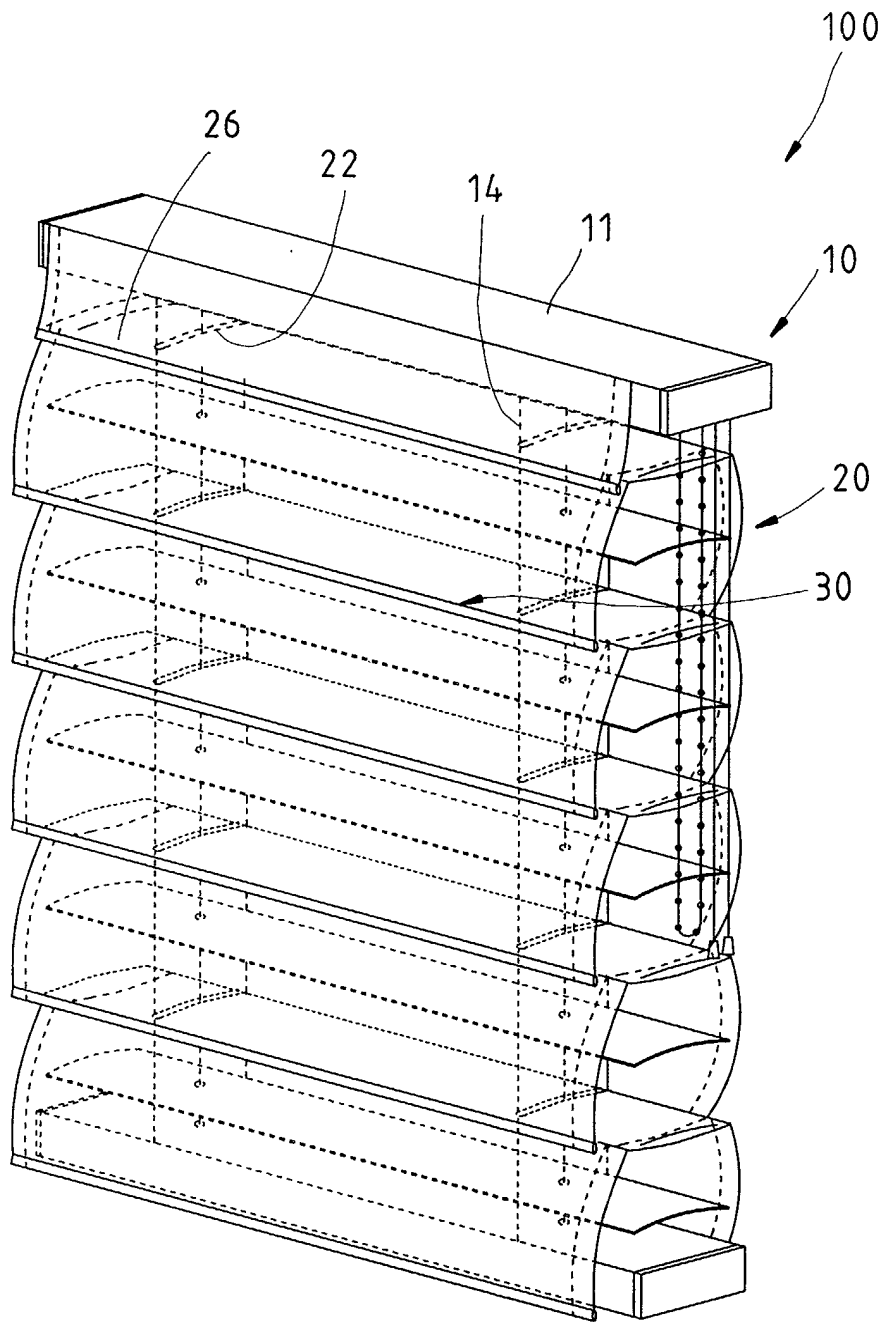


FIG. 6

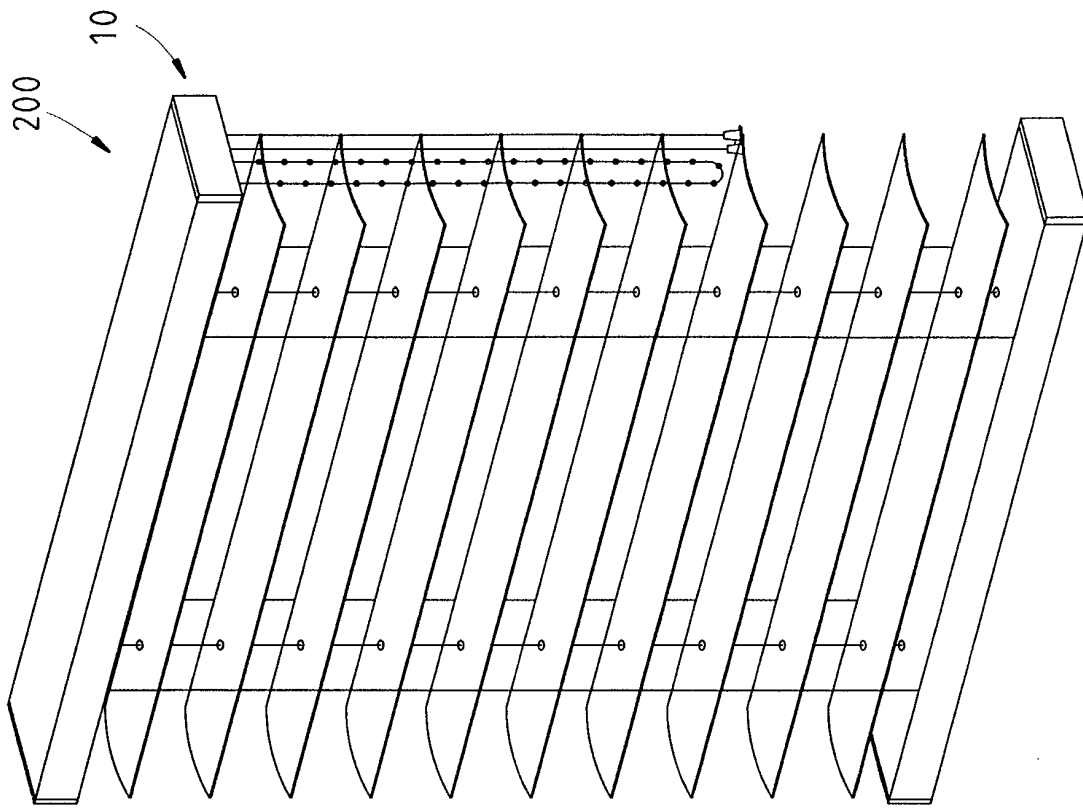
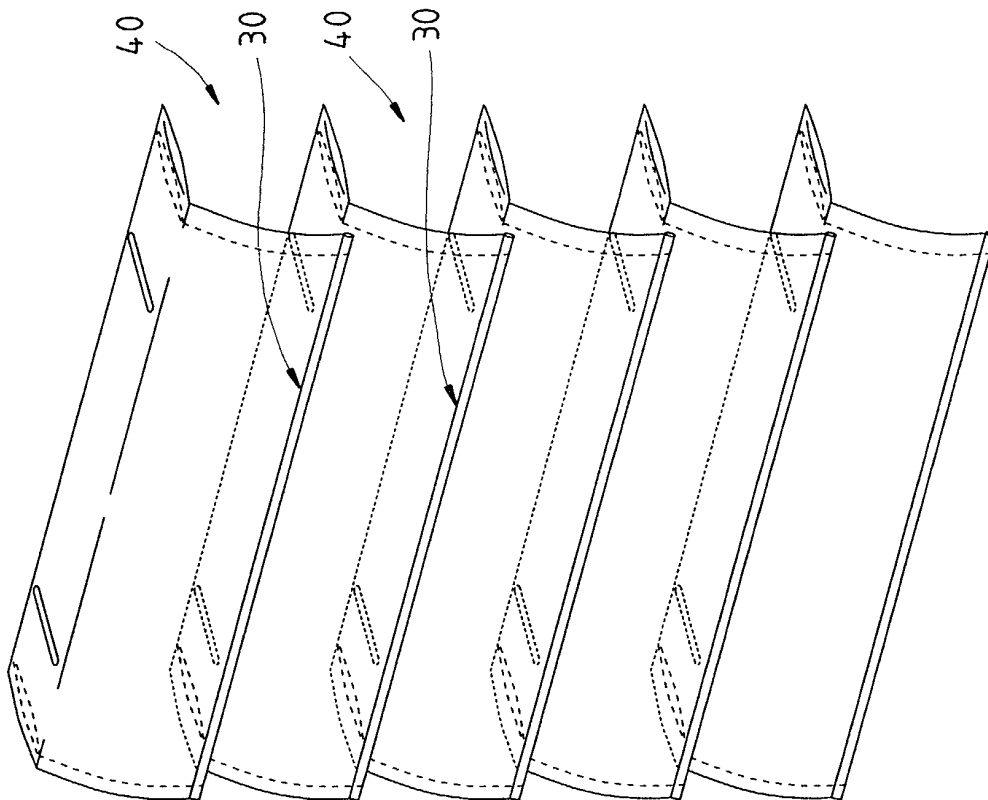


FIG. 7



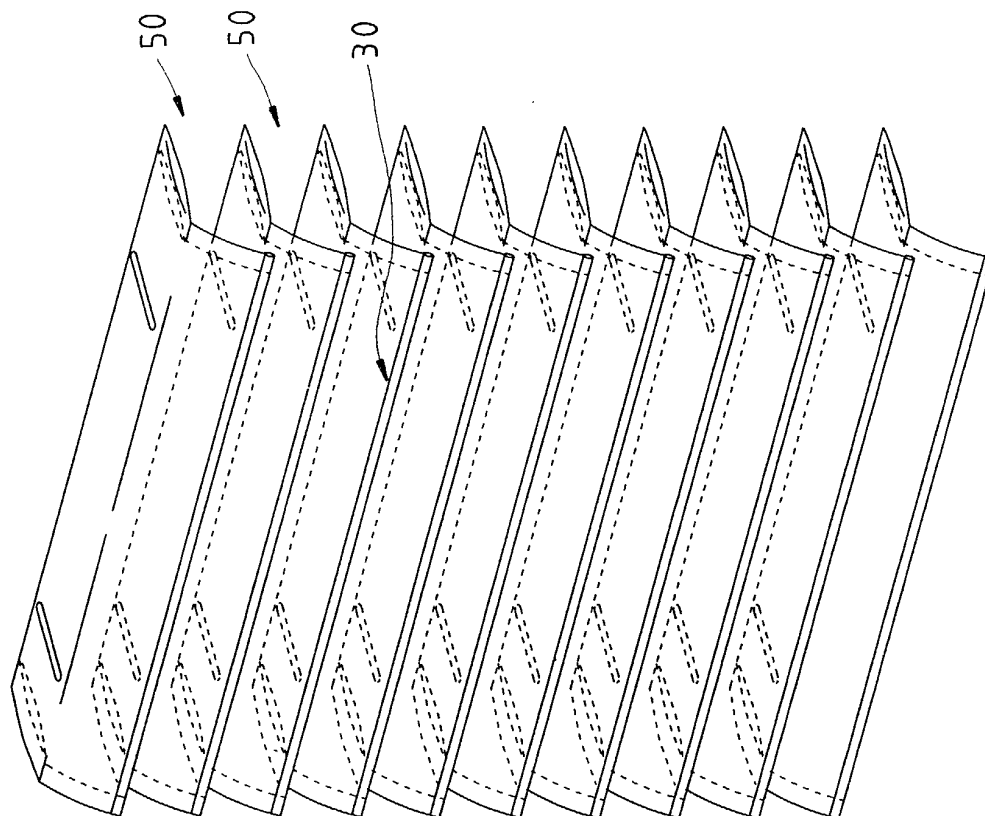
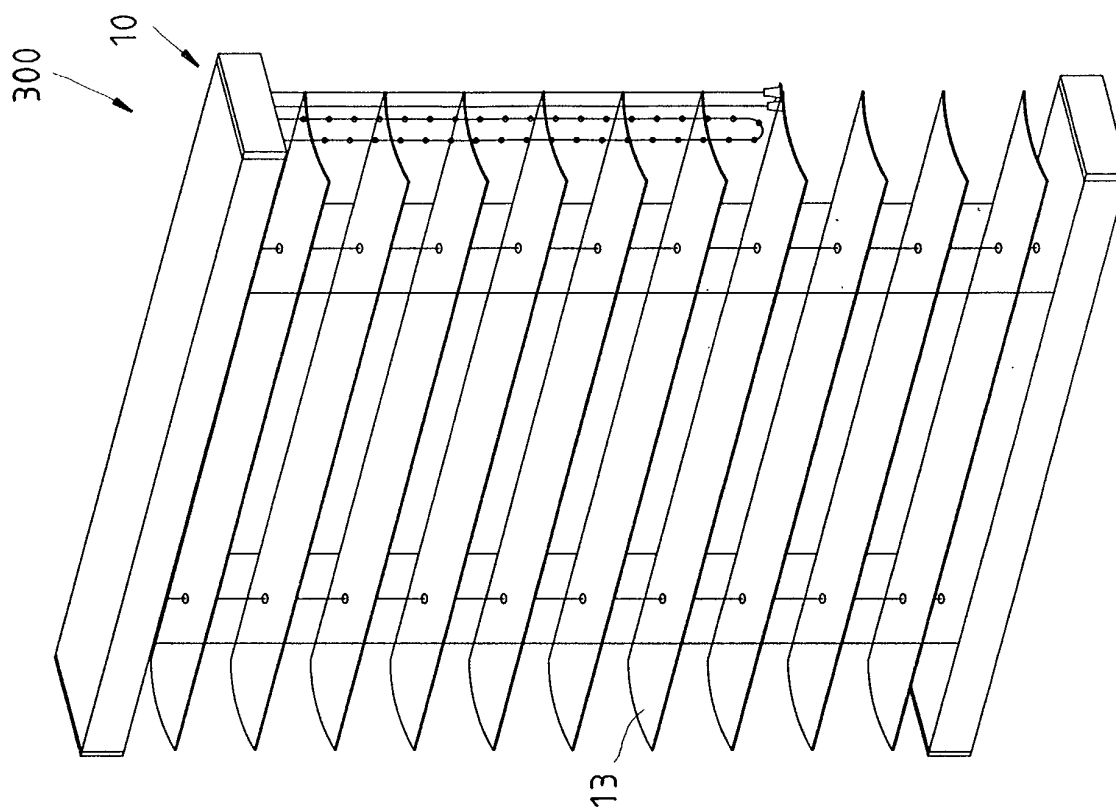


FIG. 8

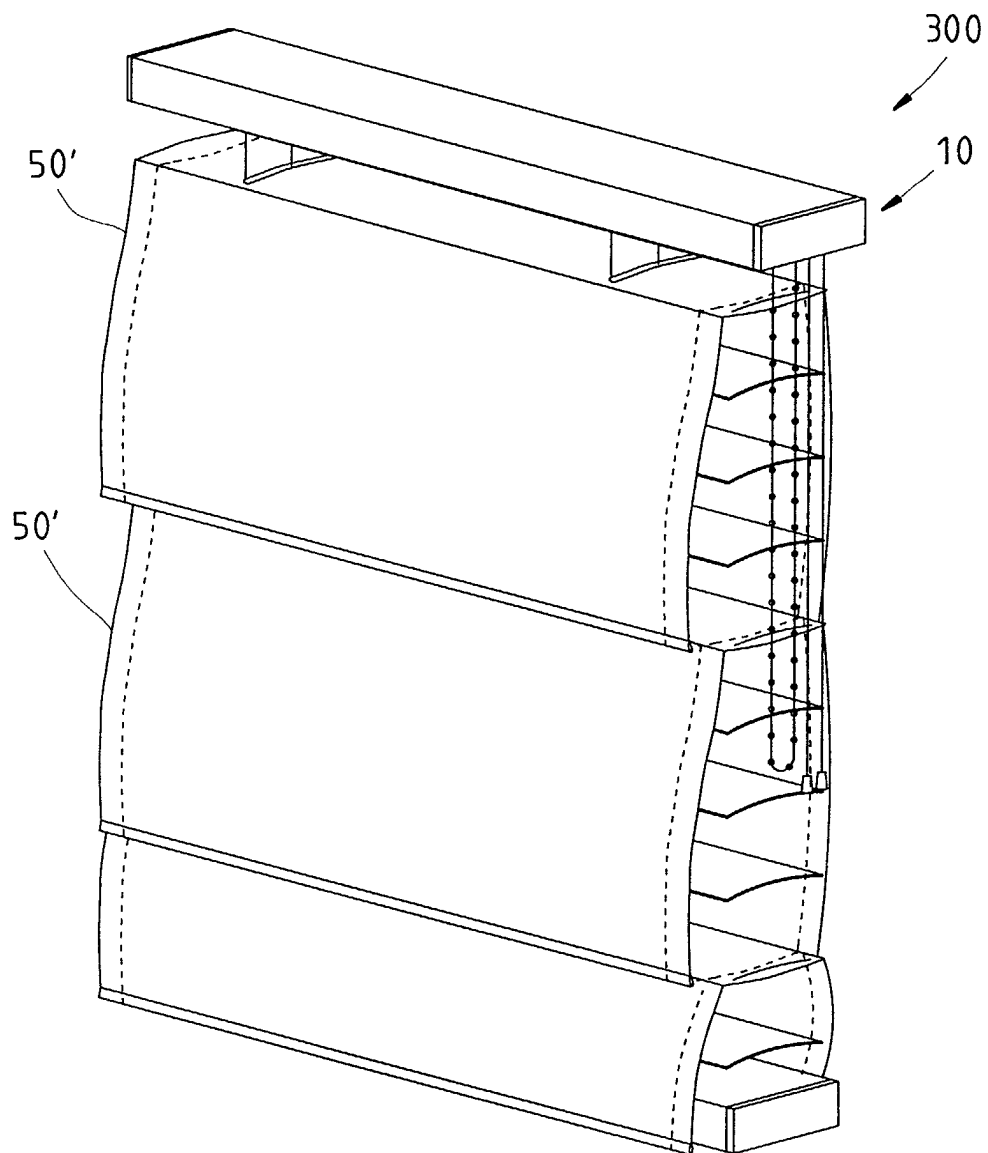


FIG. 9

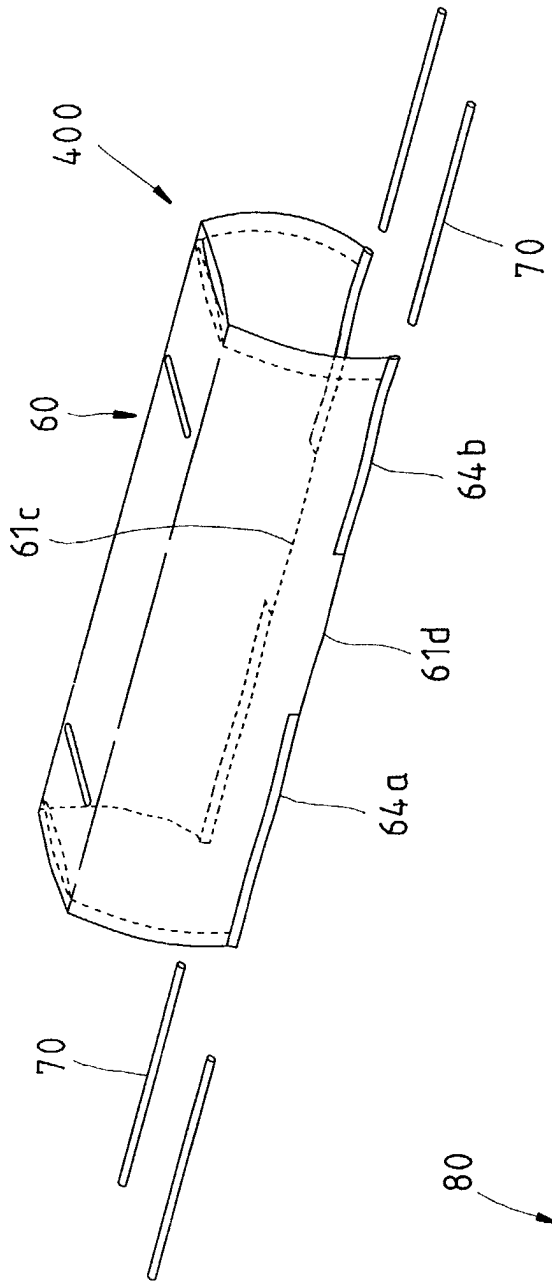


FIG.10

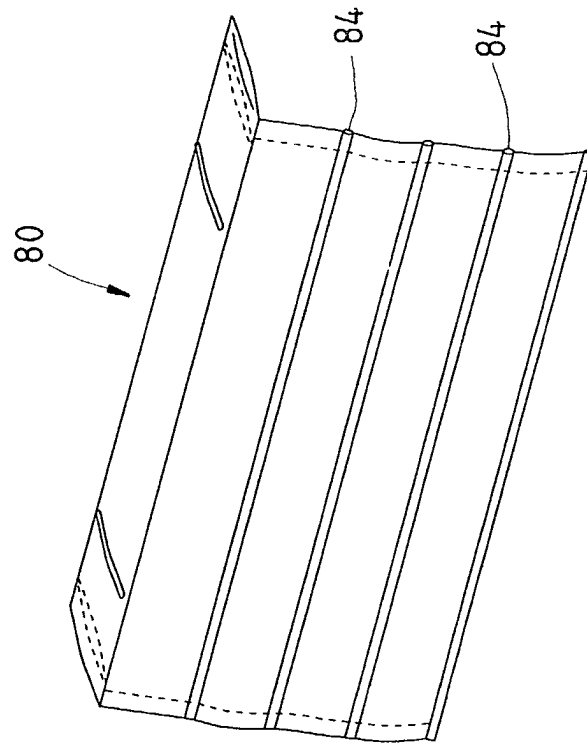


FIG.11



European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 02 25 4284

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
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A	DE 35 25 515 A (MOSER HELMUT) 29 January 1987 (1987-01-29) * the whole document *		
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A	US 5 409 050 A (HONG AMY) 25 April 1995 (1995-04-25) * figures 15,16 *		
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			E06B
The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 6 November 2002	Examiner Knerr, G
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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06-11-2002

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