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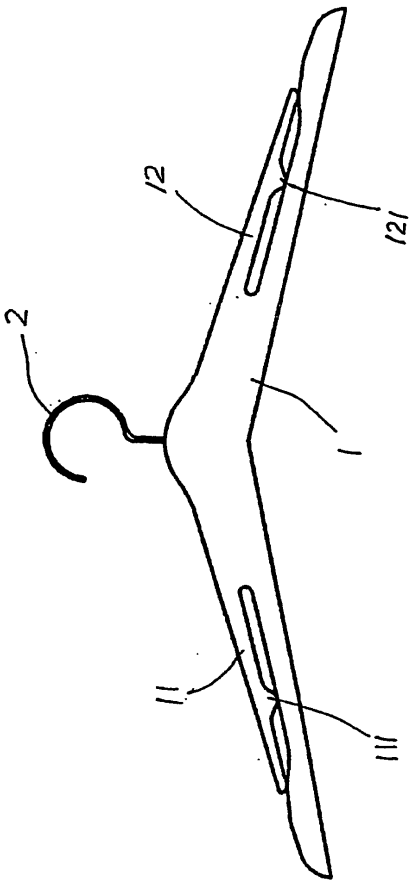
(54) **NON-SLIP HANGER**

(57) A non-slip hanger includes a hanger body (1) and a hook (2). There are two upper holders (11.12) on the top of both sides of the said main body (1) so that clothings can be inserted from the upper holder apertures.

For the double letter codes and other abbreviative symbols in this international publication, including the international retrieval report, please refer to *The Brief Explanation on Codes and Abbreviative Symbols* published in the beginning of every PCT gazette periodical.



Picture 1

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Description

Technique Field

[0001] The invention - non-slip hanger - is a kind of hanger.

Background Technique

[0002] Generally, a hanger consists of a hanger body and a hook, and the current non-slip hanger usually has barbs on the top of both sides of the hanger body, which play the non-slip role when clothings are hung on it.

Invention Contents

[0003] The inventing purpose is to provide a new kind of non-slip hanger.

[0004] The inventing purpose can be realized through the following technique scheme: A kind of new non-slip hanger includes a hanger body and a hook, and there are two upper holders on the top of both sides of the said main body so that clothings can be inserted from the upper holder apertures.

[0005] On the basis of the above scheme, apertures with sawteeth appear on the top of both sides of the hanger body, forming two upper holders.

[0006] The sawteeth are attached with sponge or other elastic layer in order to prevent the distortion of clothings.

[0007] The upper holders of the non-slip hanger invented can be mounted with winged reeds on the top of both sides of the hanger body.

[0008] The said reeds can be fixed through the following methods: There are chutes on the top of both sides of the hanger body, in which the hook parts of the hook-type reeds are inserted. The reeds clamp at both sides of the hanger body by their elasticity, thus forming the upper holders. The hanger's feature is that the clamp body can slip along the chute so as to adjust the position of clamp body.

[0009] On the basis of the above scheme, the shape of chute can be that the width of the upper notch is smaller than that of the inner notch, and the section of the chute cavity forms the structure of inverse "T", which is convenient for fixing the reeds.

[0010] There is a tenon in the hook part of hook-type reed therein, which buttons up the chute of the hanger body, showing the features of simple structure and firm fastening.

[0011] The said chutes are grooves symmetrically notched on the top of both sides of the hanger body, which make the section of the hanger body become an "H" structure.

[0012] There is a slip button on the hook part of the hook-type reed, the two bulgy edges of which are inserted into the groove of the hanger body.

[0013] The advantages of the invention include the followings:

1. The non-slip effect is excellent and the clothings hung on the hanger will not distort, especially for T-shirt without collar, skirt or skirt with gallus and so on.
2. The position of the upper holder can be adjusted at will.

Illustration of Pictures

[0014]

Picture 1 is the structure's sketch map of Implementary Example 1 of the invention.
Picture 2 is the structure's sketch map of Implementary Example 2 of the invention. The upper holders are hook-type reeds and the chutes of hanger body have a structure of inverse "T".
Picture 3 is the hook-type reed's sketch map of Implementary Example 2 of the invention.
Picture 4 is the right view of Picture 3.
Picture 5 is the structure's sketch map of the section A of hanger body in Implementary Example 2.
Picture 6 is the structure's sketch map of Implementary Example 3 of the invention. The upper holders are hook-type reeds and the chutes of hanger body have an "H" structure.
Picture 7 is the hook-type reed's sketch map of Implementary Example 3 of the invention.
Picture 8 is the section view of Picture 7.
Picture 9 is the structure's sketch map of the section A' of hanger body in Implementary Example 3.

In Picture 1
1 - hanger body 2 - hook 11,12 - upper holder 111,112 - bulge

In Picture 2, 3, 4, 5
1' - hanger body 2' - hook 11',12' - chute 3',4' - hook-type reed 31',41' - tenon

In Picture 6, 7, 8, 9
1" - hanger body 2" - hook 11",12",13";14" - chute 3",4" - hook-type reed 31',41' - slip button

Concrete Implementary Methods

Implementary Example 1

[0015] Please refer to Picture 1 for the structure's sketch map of Implementary Example 1 of the invention, which is a kind of non-slip hanger, including a hanger body (1) and a hook (2). There are two upper holders (11.12) on the top of both sides of the said main body (1) so that clothings can be inserted from the upper holder apertures. There are sawteeth in the upper holders (11,12), which are the bugles (111,112) in this Implementary Example. The sawteeth are attached with sponge or other elastic layer in order to prevent the distortion of clothings.

[0016] In this Implementary Example, the upper holders (11,12) and the hanger body (1) are of incorporate structure. The aperture of upper holder is set downwards, thus the clothing will not distort when being hung on the hanger.

Implemenary Example 2

[0017] The upper holders of the invention can also be mounted with winged reeds as elastic upper holders on the top of both sides of the hanger body.

[0018] For example, Picture 2 is the structure's sketch map of Implementary Example 1 of the invention, which is a kind of non-slip hanger, including a hanger body (1') and a hook (2'). There are chutes (11',12') on the top of both sides of the hanger body (1'), and the hook parts of the two hook-type reeds (3',4') are inserted into the chutes (11',12'). The reeds (3',4') clamp at both sides of the hanger body (1') by their elasticity, thus forming the upper holders.

[0019] Picture 5 is the structure's sketch map of the section A of hanger body in Implementary Example 2. The shape of chutes (11',12') is that the width of the upper notch is smaller than that of the inner notch, and the section of the chutes (11',12') forms the structure of inverse "T".

[0020] Picture 3 is the structure's sketch map of hook-type reed of the invention in Implementary Example 1, and Picture 4 is the right view of Picture 3. There are tenons (31' 41') in the hook parts of the hook-type reeds (3' 4'), which (31' 41') button up the chutes (11'12') of the hanger body (1').

Implementary Example 3

[0021] Picture 6 is the structure's sketch map of new Implementary Example 2, which includes a hanger body (1") and a hook (2"). There are chutes (11",12",13",14") on the top of both sides of the hanger body (1"). The hook parts (31 ",41 ") of hook-type reeds (3",4") are inserted in the chutes (11",12",13",14"). The reeds (3 ",4") clamp at the hanger body (1 ") by their elasticity, thus forming the upper holders.

[0022] Picture 9 is the structure's sketch map of the section A' of hanger body in new Implementary Example 2. There chutes (11",12",13",14") are mounted on the hanger body (1"), forming symmetric notches on both sides, which makes the section of the hanger body (1") become an "H" structure.

[0023] Picture 7 is the structure's sketch map of the hook-type reed in New Implementary Example 2, and Picture 8 is the section view of Picture 7. There are slip buttons (31 ",41 ") in the hook parts of the hook-type reeds (3",4"), and the two bulgy edges of the slip buttons (31",41") are inserted in the chute (11",12",13",14") of the hanger body (1").

Claims

1. A non-slip hanger includes a hanger body and a hook. Its feature is that there are two upper holders on the top of both sides of the said main body so that clothings can be inserted from the upper holder apertures.

2. The feature of the non-slip hanger described in Item 1 of the right requirement is that there is an aperture respectively on the top of both sides of the hanger body, with sawteeth in the apertures forming the upper holders.

3. The feature of the non-slip hanger described in Item 1 of the right requirement is that the upper holders are the reeds mounted on the top of both sides of the hanger body.

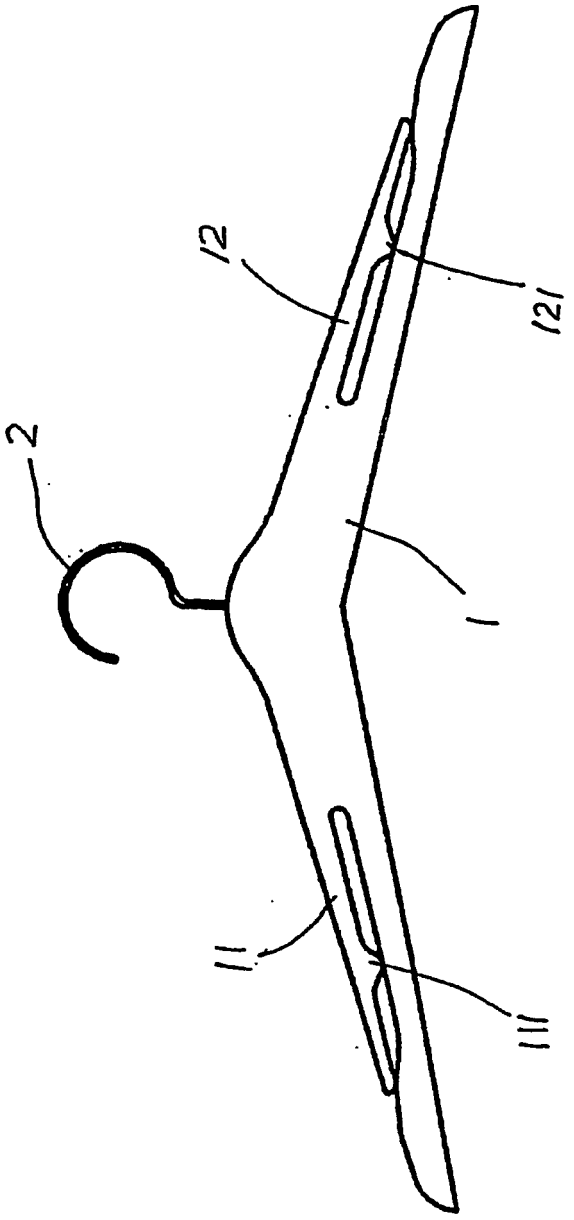
4. The feature of the non-slip hanger described in Item 3 of the right requirement is that the top of each side of the hanger body is set with a chute, in which a hook-type reed is inserted, and the reed clamps at each side of the hanger body by its elasticity thus forming the upper holder.

5. The feature of the non-slip hanger described in Item 4 of the right requirement is that the width of the upper notch is smaller than that of the inner notch, and the section of the chute cavity forms the structure of inverse "T".

6. The feature of the non-slip hanger described in Item 5 of the right requirement is that there is a tenon in the hook part of the said hook-type reed, which buttons up the chute of the hanger body.

7. The feature of the non-slip hanger described in Item 4 of the right requirement is that the said chutes are the symmetrical grooves notched on the top of both sides of the hanger body, which makes the section of the hanger body become an "H" structure.

8. The feature of the non-slip hanger described in Item 7 of the right requirement is that there is a slip button on the hook part of the hook-type reed, the two bulgy edges of which are inserted into the groove of the hanger body.



Picture 1

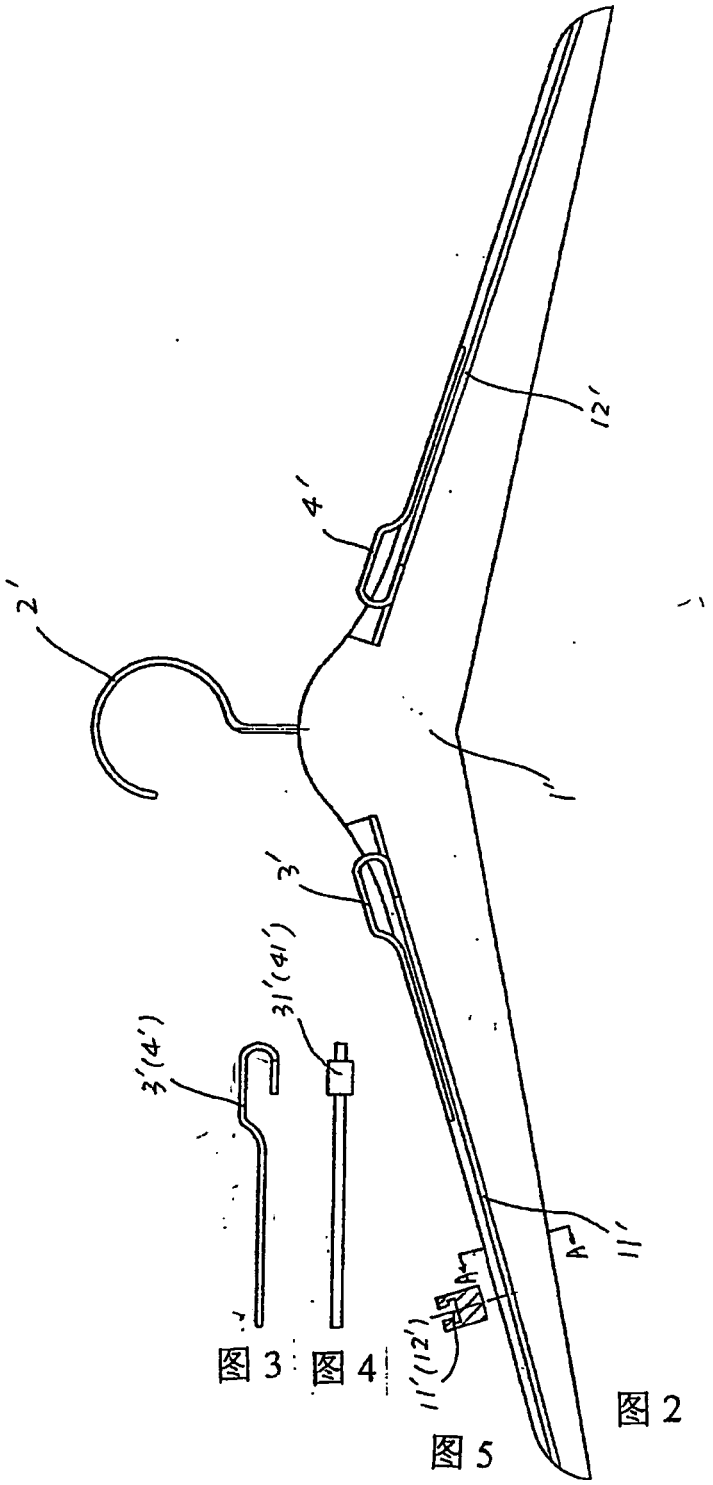


图 3 图 4 图 5 图 2

Picture 3 Picture 4 Picture 5 Picture 2

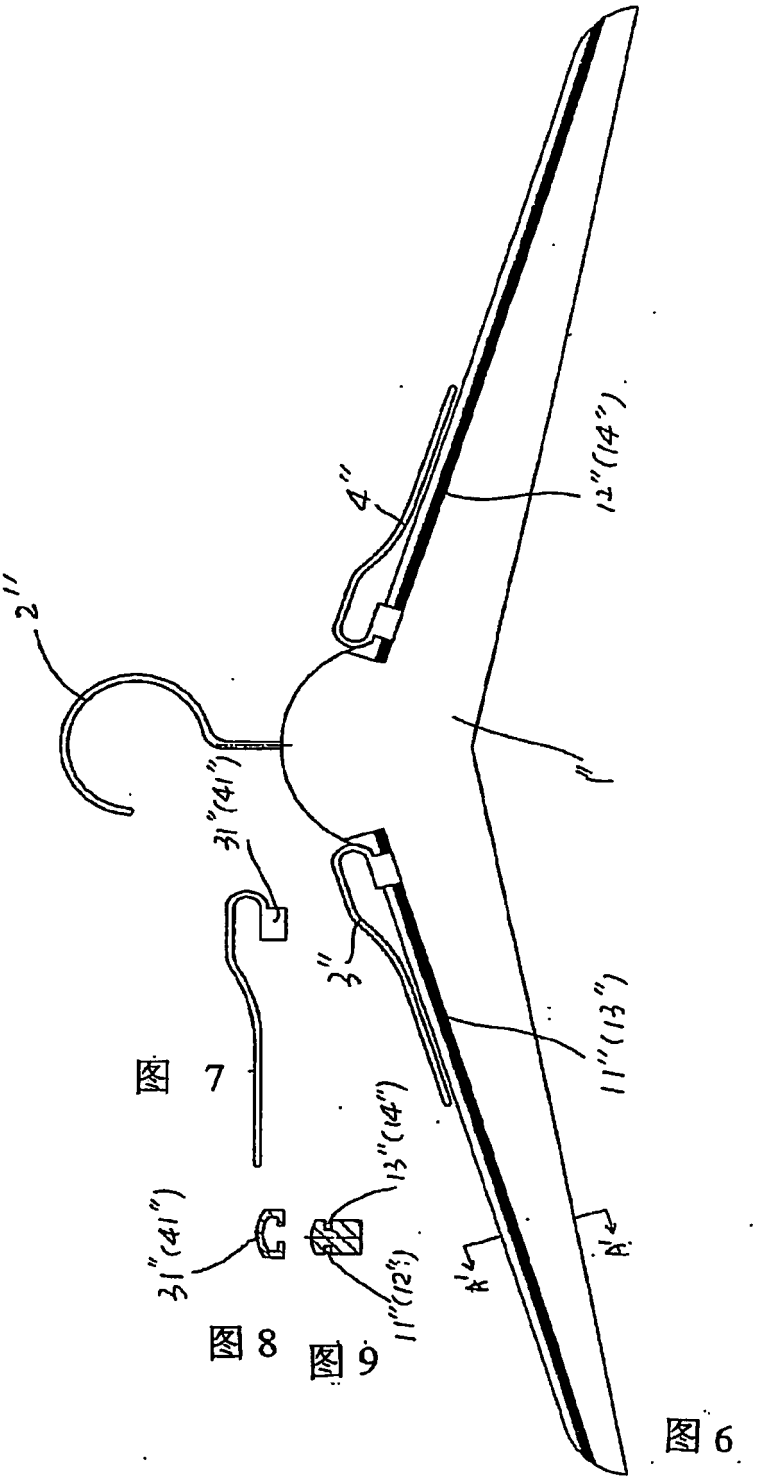


图 7

图 8

图 9

图 6

Picture 7

Picture 8 Picture 9 Picture 6

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CN2006/003190

A. CLASSIFICATION OF SUBJECT MATTER

See extra sheet

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)

IPC:A47G25+, A47F7/24, A47F7/19, A47F7/22, D06F57+

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

CNPAT, WPI, EPODOC, PAJ: hanger rack tooth teeth cusp dentation spring slot groove trough

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US6070772A (CYGENE INC) 06 Jun. 2000 (06. 06. 2000) line49-59, cloumn 3 and Fig 1	1, 2
Y		3
Y	CN2188106Y (ZHANG, Dexian) 25 Jan. 1995 (25. 01. 1995) line 15, page 1-line 3, page2 and Figs1, 2	3
PX	CN2836675Y (ZHOU, Jianliang) 15 Nov. 2006 (15. 11. 2006) line 5-15, page2 and Fig1	1, 2
X	CN2737266Y (ZHANG, Jianxing) 02 Nov. 2005 (02. 11. 2005) line 11-20, page2 and Fig1	1, 2
X	JP5-317144A (SAKIYOO KK) 03 Dec. 1993 (03. 12. 1993) paragraph 0006-paragraph 0008 and Fig1	1, 2
A	CN2569679Y (JIAN, Zhuyu) 03 Sep. 2003 (03. 09. 2003) the whole document	1-8
A	CN2487310Y (CHEN, Xianxiong) 24 Apr. 2002 (24. 04. 2002) the whole document	1-8
A	US6338426B1 (OKIYAMA H) 15 Jan. 2002 (15. 01. 2002) the whole document	1-8

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"&"document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
12 Feb.2007(12.02.2007)	15 MAR 2007 (15·03·2007)
Name and mailing address of the ISA/CN The State Intellectual Property Office, the P.R.China 6 Xitucheng Rd., Jimen Bridge, Haidian District, Beijing, China 100088 Facsimile No. 86-10-62019451	Authorized officer LIU,Huimin Telephone No. (86-10)62085788

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INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
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Patent Documents referred in the Report	Publication Date	Patent Family	Publication Date
US6070772A	06 Jun. 2000 (06. 06. 2000)	none	
CN2188106Y	25 Jan. 1995 (25. 01. 1995)	none	
CN2836675Y	15 Nov. 2006 (15. 11. 2006)	none	
CN2737266Y	02 Nov. 2005 (02. 11. 2005)	none	
JP5-317144A	03 Dec. 1993 (03. 12. 1993)	JP2757094B2	25 May.1998(25.05.1998)
CN2569679Y	03 Sep. 2003 (03. 09. 2003)	none	
CN2487310Y	24 Apr. 2002 (24. 04. 2002)	none	
US6338426B1	15 Jan. 2002 (15. 01. 2002)	none	

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INTERNATIONAL SEARCH REPORT

International application No.
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A47G25/30 (2006.01) i
A47G25/26 (2006.01) i
A47F7/24 (2006.01) i
D06F57/00 (2006.01) i

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