(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) **EP 2 154 004 A1**

(12) **EUROPEAN PATENT APPLICATION**
published in accordance with Art. 153(4) EPC

(43) Date of publication:
17.02.2010 Bulletin 2010/07

(21) Application number: **07721274.4**

(22) Date of filing: **25.05.2007**

(51) Int Cl.:
B44C 7/00 *(2006.01)* ***B44C 7/06*** *(2006.01)*
E04F 13/00 *(2006.01)*

(86) International application number:
PCT/CN2007/001701

(87) International publication number:
WO 2008/144954 (04.12.2008 Gazette 2008/49)

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR
Designated Extension States:
AL BA HR MK RS

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(54) ADHERING METHOD OF WIDE BREADTH WALL CLOTH

(57) An adhering method of a wide breadth wall cloth includes the steps of treating the wall surface, adhering a substrate wall cloth and/or a surface wall cloth. The surface wall cloth is of wide breadth, with its breadth greater than 1.2 m and less than 6.5 m. The step of adhering surface wall cloth involves cutting out a surface wall cloth with the same size to the wall to which it is to be adhered, with a hot-melt adhesive preliminarily coated on or not, and adhering the surface wall cloth to the substrate wall cloth or wall surface in the condition of being heated and pressurized. The substrate wall cloth is adhered by a traditional gluing process.

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Description

BACKGROUND OF THE INVENTION

1. Field of the Invention

[0001] The present invention relates to a method of interior decoration, in particular to an adhering method of wide breadth wall cloth.

2. Description of the Related Art

[0002] In the construction technique, the method for decorating the interior of the building commonly includes the steps of coating, adhering the wall cloth, and so on. With regard to the wall cloth adhesion, the current wall cloth is generally provided with 80-130 millimeters (mm) in breadth as there are often difficulties attendant with the adhesion, for instance, poor sticking state or the existence of bubbles would inevitably render the wall cloth hard to be smoothly adhered to the wall surface, which thence affects the outer appearance of the wall. Further, the breadth of the wall cloth is also not wide enough, which facilely incurs the problem of edging in view of the gap generated between the wall clothes and dissipating the clothes in designing variety patterns and figures among the wall clothes. The critical concern for the conventional adhesion of the wall cloth is the strong flavor of the chemical material caused by coating a new adhesive while erasing the old wall cloth from the wall and taking a new one as a substitute for attaining the renewing procedure. Thus, the typical method of adhering wall cloth still requires improvements.

SUMMARY OF THE INVENTION

[0003] Therefore, the object of the present invention is to provide an adhering method of wide breadth wall cloth, which facilitates to solve the problems of the conventional one.

[0004] The method in accordance with the present invention mainly comprises procedures of wall surface treatment and/or substrate wall cloth /or surface wall cloth adhesion. Wherein, the surface wall cloth provides with its breadth greater than 1.2 m and less than 6.5 m, preferably with the breadth scope greater than 1.5m and less than 4.5 m so as to permit the breadth correspondent with or slightly larger than the height of the wall to which the wall cloth is to be adhered.

[0005] In the embodiments of the present invention, the method of treating the wall surface is to flatten the wall surface covered by cements or other appropriate stiff decorating materials; the method of adhering a substrate wall cloth is to coat the flattened wall surface with an adhesive and stick the substrate wall cloth of a narrow breadth on the wall surface, and the other face of the wall cloth can be preliminarily whether to be coated with a hot-melt adhesive or not. The substrate wall cloth is made of knitted fabric, woven fabric or non-woven fabric, preferably of the fabric possessing a dense organization of vein and a smoothly straight surface, such as chemical fiber fabric, woven fabric, or non-woven fabric. The non-woven fabric would be well utilized weight of 120-150 gm/m^2. The method of adhering a surface wall cloth is to cut the surface wall cloth with a dimension conformity to that of the cooperating wall; the surface wall cloth can be preliminarily whether to be coated with a hot-melt adhesive or not and be adhered to the substrate wall cloth subjection to the heating and pressure. That is, the surface wall cloth can be preliminary coated with hot-melt adhesive so as to be stuck to the flattened wall surface while heating and pressurizing; the surface wall cloth can be alternatively arranged without the preliminary coating of hot-melt adhesive, the flattened wall surface replaces the surface wall cloth to be coated with the adhesive, so that the surface wall cloth is directly adhered to the flattened wall surface while heating and pressurizing. The heating temperature is at range of 80-180°C, preferably at 100-150°C, and the desirable pressurizing is to densely adhere the surface wall cloth to the substrate wall cloth. The surface wall cloth is made of knitted fabric, woven fabric, or non-woven fabric, preferably of the fabric, on which various figures or patterns are configured, providing with the dense and strong vein as well as a smooth and straight cloth surface, such as chemical fiber fabric, woven fabric, or non-woven fabric. The hot-melt adhesive can be adopted by the one with low melting point, approximately at 80-100°C, and the coating of the adhesive evenly paves throughout the surface of the wall clothes or the wall surface. It is preferably to utilize the hot-melt adhesive produced by Shanghai Farseeing Hotmelt adhesives Co., Ltd.

[0006] Herein, the surface wall cloth is not restricted as a wall cloth or an adhesive top cloth since the operating method is correspondent.

[0007] Accordingly, the present invention facilitates to readily adhere the wide breadth wall cloth to the wall without persisting the problems of the gaps or bubbles inside the joint and to maintain a good appearance. The present invention permits to directly coat the wall cloth with one or more layers or surface wall clothes as well.

[0008] All the materials in the present invention can be substantially taken from the market.

[0009] The advantages of the present invention over the known prior arts would become more apparent to those of ordinary skilled in the art by reading the following embodiments. While we have shown and described the embodiment in accordance with the present invention, it should be clear to those skilled in the art that further embodiments may be made without departing from the scope of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0010] In a first embodiment of the present invention,

the present method comprises the steps of flattening a wall surface paved with cements or other appropriate stiff decorating materials and coating the flattened wall surface with an environment-friendly adhesive for sticking a non-woven fabric on the wall, which is weighted of 120-150 gm/m^2 and provided with the narrow breadth gradient below 100mm. The non-woven fabric is preliminarily coated with a hot-melt adhesive, produced by Shanghai Farseeing Hotmelt adhesives Co., Ltd. Subsequently, a surface wall cloth with a breadth 2.8m is shaved correspondently with the dimension of a wall surface to which the wall cloth is to be adhered. The surface wall cloth herein is made of chemical fiber fabric, on which various figures or patterns are configured, possessing a dense and strong vein/structures, and a smooth and straight cloth surface. The surface wall cloth is not coated with the hot-melt adhesive. Furthermore, an electric iron or other electrically heating apparatus in the temperature range at 120 °C is adopted to smooth and flatten the surface wall cloth, and the hot-melt adhesive is thence melted while be subjected to the heating and pressurizing, so as to render the surface wall cloth to be firmly adhered to the substrate wall cloth.

[0011] In a second embodiment of the present invention, the present method comprises the steps of flattening a wall surface covered by cements or other appropriate stiff decorating materials and coating the flattened wall surface with an environment-friendly adhesive for sticking a non-woven fabric on the wall surface, weighted of 120-150 gm/m^2 and provided with the narrow breadth gradient below 50mm. The non-woven fabric is not preliminarily coated with a hot-melt adhesive. Subsequently, a surface wall cloth with a breadth 3.5m is provided correspondently with the dimension of a wall surface to which the wall cloth is to be adhered. The surface wall cloth herein is made of chemical fiber fabric, on which various figures or patterns are configured, possessing a dense and strong structure, and a smooth and straight cloth surface. The surface wall cloth is preliminarily coated with the hot-melt adhesive, produced by Shanghai Farseeing Hotmelt adhesives Co., Ltd. The coating of the hot-melt adhesive evenly spreads throughout the surface of the surface wall cloth. Furthermore, an electric iron or other electrically heating apparatus in the temperature range at 130 °C is adopted to smooth the surface wall cloth, and the hot-melt adhesive is thence melted while be subjected to the heating and pressurizing, so as to render the surface wall cloth to be firmly adhered to the substrate wall cloth.

[0012] In a third embodiment of the present invention, the present method comprises the steps of flattening a wall surface covered by cements or other appropriate stiff decorating materials and coating the flattened wall surface with an environment-friendly adhesive for sticking a non-woven fabric on the wall, weighted of 120-150 gm/m^2 and provided with the narrow breadth gradient below 50mm. The surface of the non-woven fabric is hot-melt fiber. The non-woven fabric is not coated with a hot-melt adhesive. Subsequently, a surface wall cloth with a breadth 3.5m is cut to be correspondent with the dimension of a wall surface to which the wall cloth is to be adhered. The surface wall cloth herein is a compound of the chemical fiber fabric and the non-woven fabric, possessing a dense and strong configuration as well as a smooth and straight cloth surface and providing various figures or patterns configured on the surface thereof. The portion of the surface wall cloth abutting with the substrate wall cloth is non-woven fabric, which is constituted by the hot-melt fiber. Furthermore, an electric iron or other electrically heating apparatus in the temperature range at 110°C is adopted to smooth the surface wall cloth, and the hot-melt fiber is thence melted while be subjected to the heating and pressurizing, so as to render the surface wall cloth to be firmly adhered to the substrate wall cloth.

[0013] In a fourth embodiment of the present invention, the finished wall surface to which the surface wall cloth has been adhered is allowed to be re-coated with a surface wall cloth. The surface wall cloth is preliminarily coated with the hot-melt adhesive, produced by Shanghai Farseeing Hotmelt adhesives Co., Ltd. The following operation of this embodiment coincides with that of the first or second embodiment and herein is omitted.

[0014] In a fifth embodiment of the present invention, the present method comprises the steps of flattening a wall surface covered by cements or other appropriate stiff decorating materials and coating the flattened wall surface with a hot-melt adhesive, produced by Shanghai Farseeing Hotmelt adhesives Co., Ltd. Subsequently, a surface wall cloth with a breadth 2.8m is provided correspondently with the dimension of a wall surface to which the wall cloth is to be adhered. The surface wall cloth herein is made of chemical fiber fabric possessing a dense structure and smooth surface, on which various figures or patterns are configured. The surface wall cloth is not coated with the hot-melt adhesive. Furthermore, an electric iron or other electrically heating apparatus in the temperature range at 120°C is adopted to smooth the surface wall cloth, and the hot-melt adhesive is thence melted while be subjected to the heating and pressurizing, so as to render the surface wall cloth to be firmly adhered to the substrate wall cloth.

[0015] In a sixth embodiment of the present invention, the present method comprises the steps of flattening a wall surface covered by cements or other appropriate stiff decorating materials and cutting a surface wall cloth to provide with a breadth 3.1m correspondently with the dimension of a wall surface to which the wall cloth is to be adhered. The surface wall cloth herein is made of chemical fiber fabric on which various figures or patterns are configured. The surface wall cloth is preliminarily coated with a hot-melt adhesive no. RL-1, produced by Shanghai Farseeing Hotmelt adhesives Co., Ltd. The surface wall cloth concurrently possesses a dense and strong configuration as well as a smooth and straight cloth surface. Additionally, an electric iron or other electrically heating apparatus in the temperature range at 120

°C is adopted to smooth the surface wall cloth, and the hot-melt adhesive is thence melted while be subjected to the heating and pressurizing, so as to render the surface wall cloth to be firmly adhered to the substrate wall cloth.

[0016] In a seventh embodiment of the present invention, the present method comprises the steps of flattening a wall surface covered by cements or other appropriate stiff decorating materials and cutting a surface wall cloth to provide with a breadth 2.8m correspondently with the dimension of a wall surface to which the wall cloth is to be adhered. The surface wall cloth herein is made of chemical fiber fabric on which various figures or patterns are configured. The surface wall cloth is preliminarily coated with a hot-melt adhesive no. RL-1, produced by Shanghai Farseeing Hotmelt adhesives Co., Ltd. The surface wall cloth concurrently possesses a dense and strong structure and a smooth and straight cloth surface. Additionally, an electric iron or other electrically heating apparatus in the temperature range at 120 °C is adopted to smooth the surface wall cloth, and the hot-melt adhesive is thence melted while be subjected to the heating and pressurizing, so as to render the surface wall cloth to be firmly adhered to the flattened wall surface.

Claims

1. An adhering method of a wide breadth wall cloth, **characterized in that** said method includes procedures of treating a wall surface, and/or adhering a substrate wall cloth and/or a surface wall cloth; wherein said surface wall cloth belonging to a wide breadth wall cloth, whose breadth being greater than 1.2m and less than 6.5m.

2. The method as claimed in claim 1, wherein, the method of treating said wall surface is to flatten said wall surface paved by cements or other appropriate stiff decorating materials.

3. The method as claimed in claim 1, wherein, the method of adhering said substrate wall cloth is to coat a flattened wall surface with an adhesive and stick said substrate wall cloth of a narrow breadth on said wall surface; said wall cloth provides with the other face thereof whether to be preliminarily coated with a hot-melt adhesive or not.

4. The method as claimed in claim 3, wherein, said substrate wall cloth is made of knitted fabric, woven fabric or non-woven fabric, which possess a dense vein and a smooth cloth surface.

5. The method as claimed in claim 4, wherein, said substrate wall cloth is non-woven fabric weight of 120-150 gm/m^2.

6. The method as claimed in claim 1, wherein, the method of adhering said surface wall cloth it to cut said surface wall cloth with a dimension conformity to that of a cooperating wall to which said surface wall cloth is to be adhered; said surface wall cloth is preliminarily whether to be coated with a hot-melt adhesive or not and is adhered to said substrate wall cloth subjection to heating and pressurizing conditions.

7. The method as claimed in claim 1, wherein, The method of adhering said surface wall cloth it to cut said surface wall cloth with a dimension conformity to that of a cooperating wall to which said surface wall cloth is to be adhered; said surface wall cloth is preliminarily coated with a hot-melt adhesive and is directly adhered to a flattened wall surface subjection to heating and pressurizing conditions.

8. The method as claimed in claim 6 or 7, wherein, The temperature scope of heating is at 80-180 ° C.

9. The method as claimed in claim 6 or 7, wherein, said surface wall cloth is made of knitted fabric, woven fabric, or non-woven fabric possessing a dense vein and a smooth cloth surface and including various figures or patterns configured thereon.

10. The method as claimed in claim 3 or 6 or 7, wherein, said hot-melt adhesive is an adhesive with a low melting point, approximately at 80-100°C.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CN2007/001701

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: B44C7, E04F13

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)

WPI, EPODOC, PAJ, CPRS, CNKI

wall w paper, wall w cloth, adher+, method

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WANG, Fenghe, Concise Construction Manual of Finishing Engineering, 1st edition, May 2003, Pages 329-339, ISBN 7-80163-619-8/TU • 026	1, 2
E	CN,A,101059028 (HAN, Minghai) 24 Oct. 2007 (24.10.2007), Desc. Page 1 Line 18 – Page 2 Line 19	1-10
A	JP,A,2004-250981 (YAYOI CHEMICAL INDUSTRY CO LTD) 09 Sep. 2004 (09.09.2004), whole document	1-10
A	JP,A,2003-278359 (TORIGOE, Akihiro) 02 Oct. 2003 (02.10.2003), whole document	1-10

☒ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

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"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
19 Feb. 2008 (19.02.2008)	**13 Mar. 2008 (13.03.2008)**
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 CHEN, Xiaoliang Telephone No. (86-10)62084994

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/CN2007/001701

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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A	JP,A,6-166999 (SANKO KOGYO) 14 Jun. 1994 (14.06.1994), whole document	1-10
A	CN,A,1093043 (HAO, Chaoping) 05 Oct. 1994 (05.10.1994), whole document	1-10
A	CN,Y,2202636 (LI, Donghua et al.) 05 Jul. 1995 (05.07.1995), whole document	1-10
A	CN,U,2106737 (LIANG, Wende) 10 Jun. 1992 (10.06.1992), whole document	1-10
A	CN,Y,2591085 (GAO, Feng) 10 Dec. 2003 (10.12.2003), whole document	1-10
A	CN,A,1095119 (SILING CLOTHING MACHINERY PLAN) 16 Nov. 1994 (16.11.1994), whole document	1-10

Form PCT/ISA/210 (continuation of second sheet) (April 2007)

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/CN2007/001701

Patent Documents referred in the Report	Publication Date	Patent Family	Publication Date
JP,A,2004-250981	09.09.2004	NONE	
JP,A,2003-278359	02.10.2003	NONE	
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JP,A,6-166999	14.06.1994	NONE	
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CN,Y,2591085	10.12.2003	NONE	
CN,A,1095119	16.11.1994	NONE	
CN,A,101059028	24.10.2007	NONE	

Form PCT/ISA/210 (patent family annex) (April 2007)

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CN2007/001701

A. CLASSIFICATION OF SUBJECT MATTER

B44C7/00 (2006.01) i

B44C7/06 (2006.01) n

E04F13/00 (2006.01) n

Form PCT/ISA/210 (extra sheet) (April 2007)