



(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
01.06.2016 Bulletin 2016/22

(51) Int Cl.:
E06B 9/24 (2006.01)

(21) Application number: **14195399.2**

(22) Date of filing: **28.11.2014**

(84) Designated Contracting States:
**AL AT BE BG CH CY CZ DE DK EE ES FI FR GB
GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO
PL PT RO RS SE SI SK SM TR**
Designated Extension States:
BA ME

(71) Applicant: **AM Project, Joseph Di Pasquale
architects s.r.l.**
20134 Milano (IT)

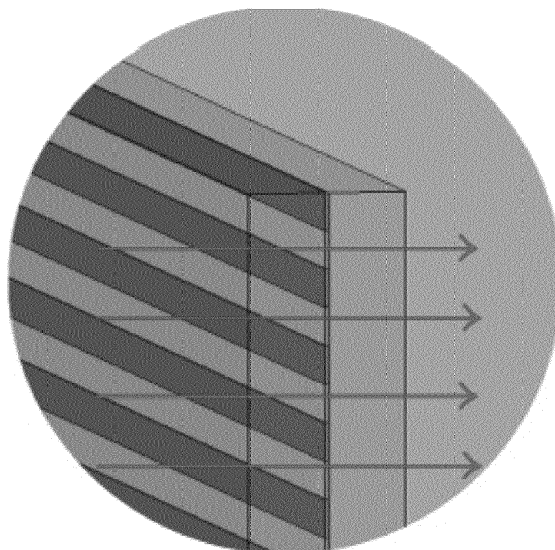
(72) Inventor: **Di Pasquale, Joseph**
20134 Milano (IT)

(54) **Window with obscuring elements applied to glass sheets that allows an instantaneous transition from translucency to opacity**

(57) The system consists of a pair of glass sheets placed in contact with each other of which one is fixed and the other capable of an also minimum vertical or horizontal excursion respect to the first, moving from a position "A" to a position "B" and vice versa. The two

sheets are suitably serigraphed according to a drawing which allows a transparency of 40% when the sheets are in position "A" and the total opacity when the sheets are in position "B".

DRAWING 1



Description

it should be equal to the shift length of the glass jewel on the fixed glass

STATE OF TECHNIQUE

[0001] Currently in the marketplace there are several solutions in order to make dull a movable wall.

[0002] The cheapest solution is to put blind slats between the two glass panes that make the movable wall: the orientation of the blind slats must be able to allow or not to see through the wall itself. Generally these slats are controlled mechanically or electromechanically with switches or mechanical or electromechanical devices controlled local or remote commands.

[0003] A second more expensive technology is LCPG (Liquid Crystals Panel Glass), that is a glass plate that contains a liquid crystal film that, if crossed by the electricity, become almost completely transparent.

3) the web of the drawing should allow the following action:

When the two sheets are in position "A" the two serigraphed drawings must coincide perfectly, and consequently the wall is 40% transparent. The minute web of the drawing does not allow to feel the serigraphy, that however is like a visual filter that increases the feeling of privacy of the wall even allowing a perfect visibility.

PROBLEMS ENCOUNTERED

[0004] Current systems aimed to obscure the glasses are expensive, they require installation and quite demanding maintenance, they are easily subject to damage or deterioration, and, in case of blind slats, they are not practical and aesthetically not very effective.

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PROPOSED SOLUTIONS

[0005] This system aims to enable a virtually instantaneous transition from translucency to opacity with a technology based solely on a mechanical principle, therefore considerably reducing the cost of installation, maintenance and management, as well as the risk of damage or deterioration and being far more aesthetically effective.

[0008] However, when the sheets are in position "B" the two serigraphs are arranged so that the opaque parts of one close down a blank portion of the other, making the wall completely transparent.

[0009] The mutual movement between the walls should still remain minimum, like 3-4 millimeters, in order to allow a simple mechanical handling and based on a lever mechanism.

[0010] In order to prevent the occurrence of "parallax" due to the thickness of the two sheets, the darkening of the two serigraphed faces of the glass sheets must be obtained putting them adjacent. I.e. both glasses will have the serigraphed sides facing each other. The result is that in the package formed by two coupled glass sheets the serigraphed faces will be inside.

[0011] The "mobile" glass may have a lesser thickness in order to make it lighter and easier to move.

[0012] The mobile glass will slide in guides united with the fixed glass and may be also inside the cavity of a double plate wall.

[0013] For this purpose it will be necessary to study a suitable aluminum profile that contains both the fixed and mobile glass allowing to the latter the required excursion.

[0014] A device similar to that which regulates the lowering and raising of acoustic guillotines of the doors may generate the displacement of the mobile glass.

[0015] In essence this is a lever with advantageous arm contained in the aluminum profile of the wall that generates the displacement.

[0016] The lever can also be electrified with an engine or with electromagnets and it can be remotely controlled with a remote device or a switch.

CONCRETE DESCRIPTION

[0006] The system consists of a pair of glass sheets placed in contact with each other of which one is fixed and the other capable of an also minimum vertical or horizontal excursion respect to the first, moving from a position "A" to a position "B" and vice versa. The two sheets are suitably serigraphed according to a drawing which allows a transparency of 40% when the sheets are in position "A" and the total opacity when the sheets are in position "B".

[0007] The web of the drawing to print on the two sheets is based on the same geometric pattern with several possible variants (lines, borders, draughtboard), but they must have some specific features:

1) the relationship between solid and void must be between 40% - 45% (empty-transparent) and 60% - 55% (fully-opaque)

2) the geometric step of the web should be equal to the mutual excursion between the two sheets that is

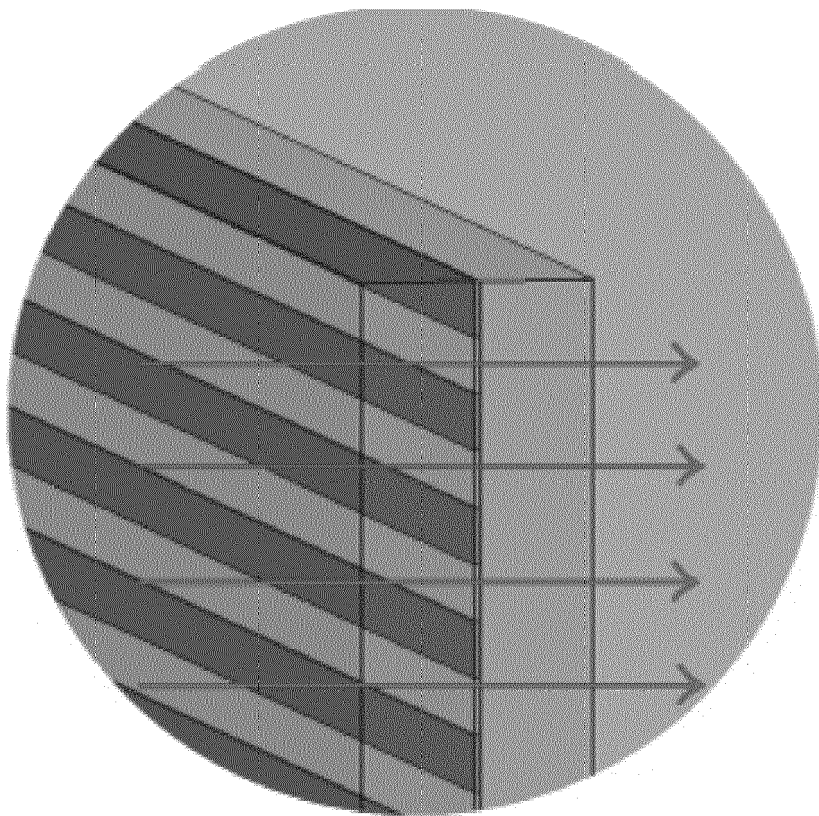
Claims

1. Serigraphs applied to windows side by side;
2. The positions of side by side serigraphed glasses determine partial and total opacity.

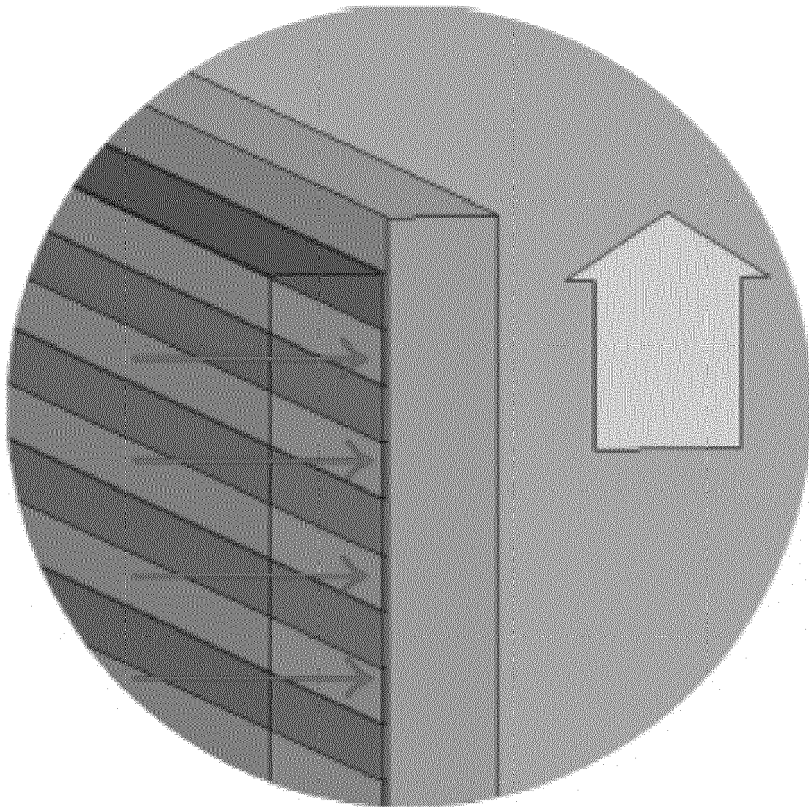
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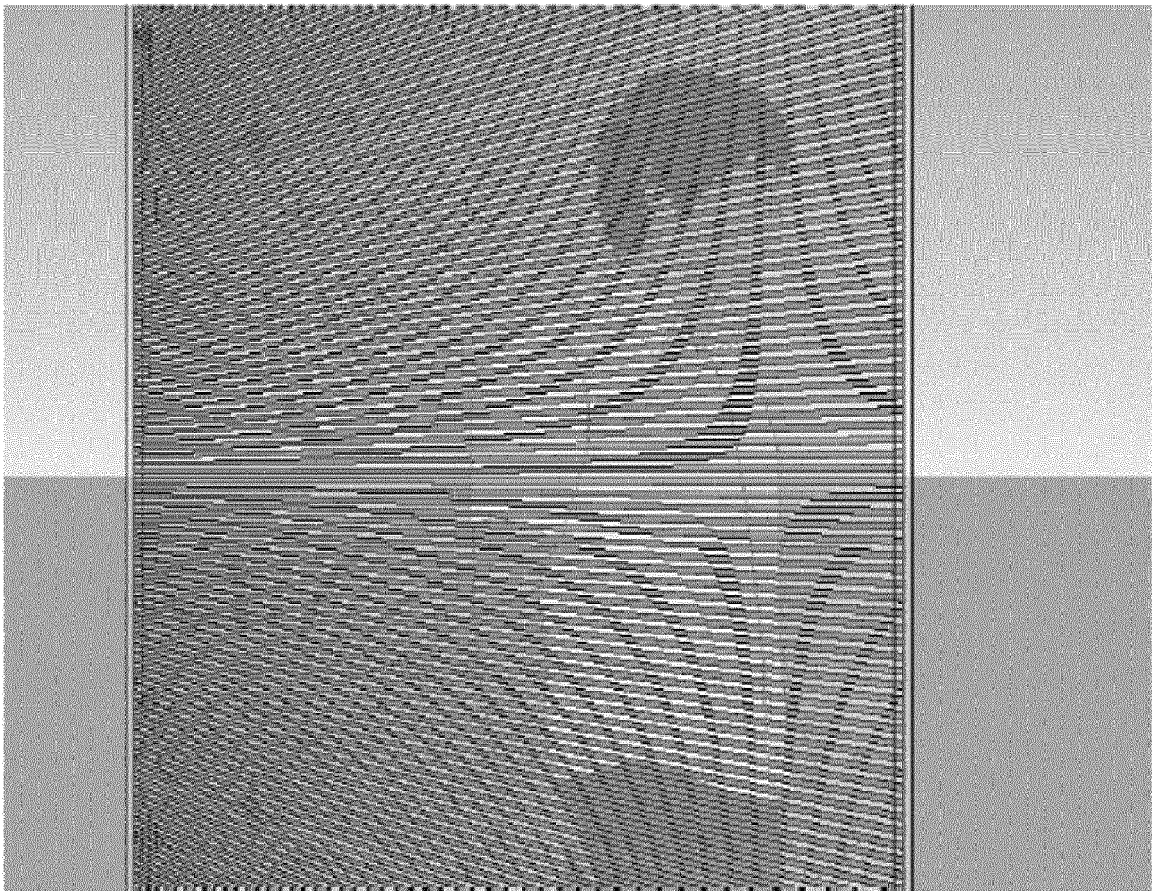
DRAWING 1



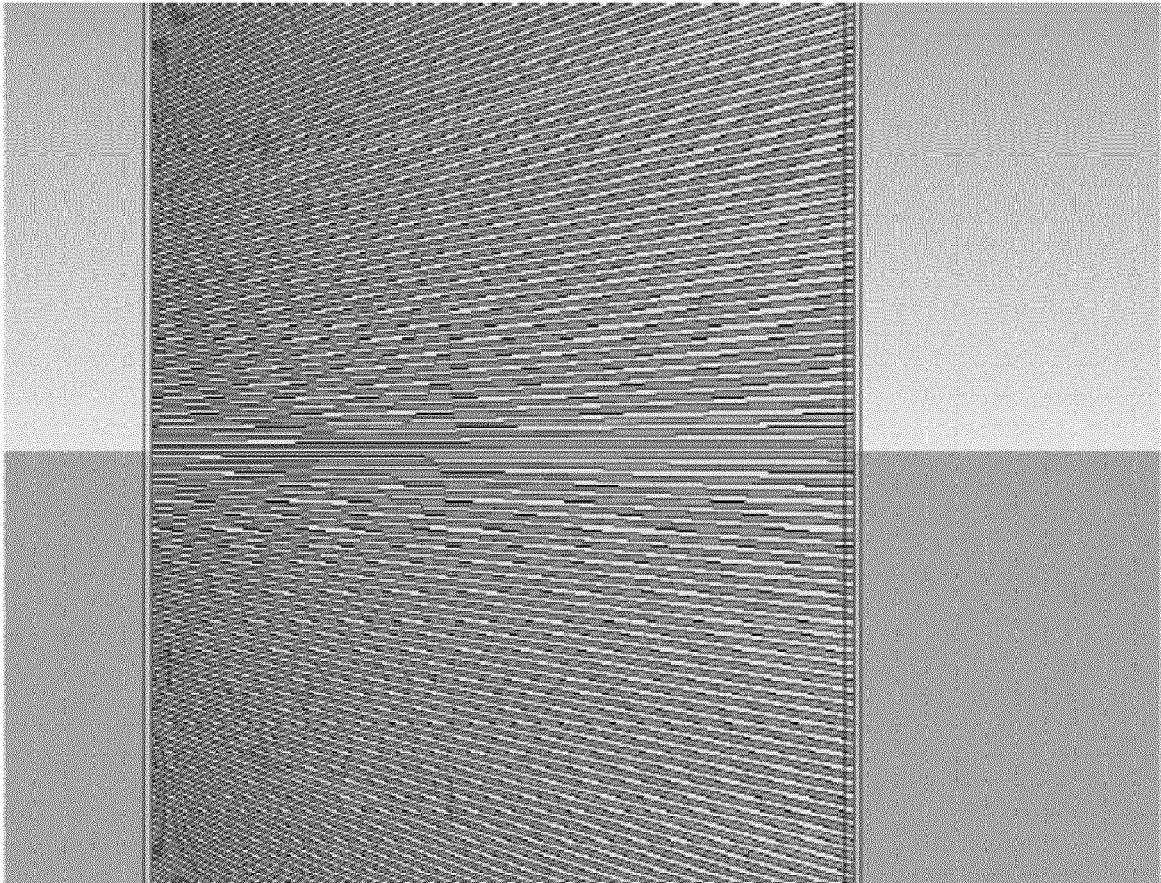
DRAWING 2



DRAWING 3



DRAWING 4





EUROPEAN SEARCH REPORT

Application Number
EP 14 19 5399

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	DE 90 14 975 U1 (MESSERSCHMITT-BÖLKOW-BLOHM GMBH [DE]) 24 January 1991 (1991-01-24) * figures 1-4 * * pages 3,5,6,7 *	1,2	INV. E06B9/24
X	GB 2 480 303 A (INTASTOP LTD [GB]) 16 November 2011 (2011-11-16) * figures 1,2,3A,3B * * page 3, line 15 - line 24 * * page 4, line 10 - page 5, line 17 *	1,2	
X	US 2 205 523 A (GALEY HENRY J) 25 June 1940 (1940-06-25) * the whole document *	1,2	
			TECHNICAL FIELDS SEARCHED (IPC)
			E06B
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 29 September 2015	Examiner Tänzler, Ansgar
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.**

EP 14 19 5399

5 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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29-09-2015

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GB 2480303	A	16-11-2011	NONE
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