

(19)



(11)

**EP 3 858 191 A1**

(12)

**EUROPEAN PATENT APPLICATION**

(43) Date of publication:  
**04.08.2021 Bulletin 2021/31**

(51) Int Cl.:  
**A47B 47/00** (2006.01) **A47F 3/04** (2006.01)  
**H05K 5/00** (2006.01) **A47F 3/00** (2006.01)  
**A47B 81/06** (2006.01)

(21) Application number: **21020049.9**

(22) Date of filing: **03.02.2021**

(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**  
Designated Validation States:  
**KH MA MD TN**

(71) Applicant: **Galerotti, Andrea**  
**47922 Rimini (RN) (IT)**

(72) Inventor: **Galerotti, Andrea**  
**47922 Rimini (RN) (IT)**

(74) Representative: **Zanotti, Laura**  
**Via Galilei, 6**  
**47838 Riccione (RN) (IT)**

(30) Priority: **03.02.2020 IT 202000002014**

(54) **PROTECTOR FOR A DISPLAY DEVICE**

(57) A protector for a display device, such as a screen or television set, comprises a substantially parallelepiped-shaped body (2) provided with at least one upper wall (3; 3'), a front wall (4; 4'), a back wall (5; 5') opposite

the front wall (4; 4') and two side walls (6; 7; 6', 7'), wherein at least the front wall (4; 4') has at least one portion made of transparent material.

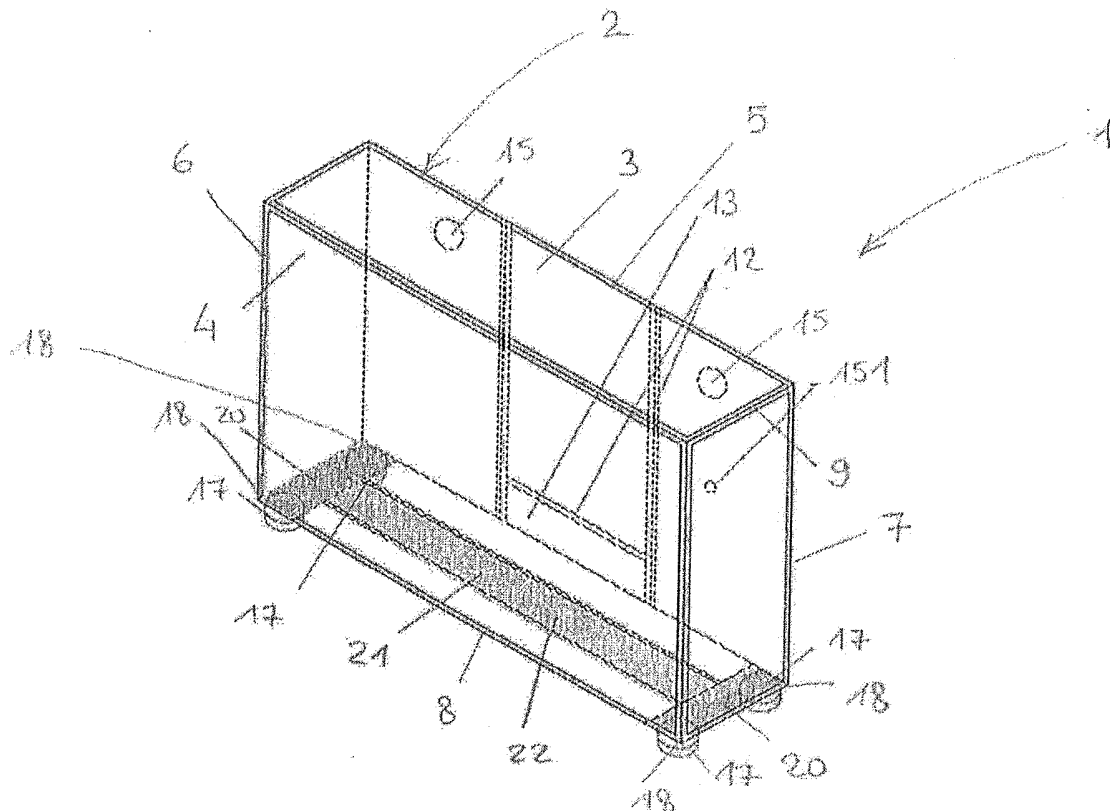


FIG. 1

**EP 3 858 191 A1**

## Description

**[0001]** The present invention relates to a protector for a display device, such as a screen or television set.

**[0002]** Television set or more generally screens (monitors) which allow the display of images are designed to be used within an environment, wherein they are usually placed on a furniture which acts as a support.

**[0003]** The latest television set which do not use the cathode ray tube and have reduced thickness, can be fixed to a wall through specific brackets.

**[0004]** However it may happen that the user wants to place the television set outdoors, in particular during the summer period.

**[0005]** Placing a screen or television set outdoors has several disadvantages.

**[0006]** Firstly, the place in which it is positioned must be dry, since humidity may compromise the electric circuits of the device.

**[0007]** Therefore, in the event of rain, the television set must be moved and carried inside, and can be carried back outdoors after a certain time.

**[0008]** Anyway the television set must be carried back inside during the night, to ensure that humidity does not compromise the circuits.

**[0009]** The use of the television set outdoors is therefore not easy.

**[0010]** The object of the present invention is to remove the mentioned disadvantages allowing a comfortable use of the television set or of the screen outdoors, avoiding the constant repositioning inside and outside.

**[0011]** The invention achieves the object by means of a protector for a display device having the features defined in claim 1.

**[0012]** The parallelepiped-shaped body constitutes a closed covering for the television set or screen, it surrounds it completely and can be placed on the same base used for the same television set. The transparent part allows the vision of the screen without having to remove the protector. Therefore the device can be left outdoors, inserted in the protector, even in case of bad weather and over extended periods of time, making in any case always possible to view the screen.

**[0013]** Further advantages and features of the present invention will be more evident in the following detailed description, made with reference to the attached drawings, which represent a non-limiting example of execution thereof, wherein:

- figure 1 illustrates the protector for a display device in a first embodiment;
- figure 2 illustrates the protector of figure 1 before the closure;
- figure 3 illustrates a variation of the protector of figure 1;
- figure 4 illustrates a detail of the protector of figure 3;
- figure 5 illustrates the protector for a display device in a second embodiment.

**[0014]** In figure 1, at 1 is indicated a protector for a display device. The display device (not shown) can be any television set or monitor which can be connected to a device for the transmission of images.

**[0015]** According to the invention, the protector 1 comprises a substantially parallelepiped-shaped body 2 provided with at least one upper wall 3, a front wall 4, a back wall 5 opposite the front wall 4 and two side walls 6, 7, wherein at least the front wall 4 has at least one portion made of transparent material.

**[0016]** Preferably, the front wall 4 is made of glass. In a preferred embodiment, all the walls of the protector are made of glass. The glass is weather resistant and moreover is easy to clean. The glass of the front wall 4 is preferably an anti-reflective glass.

**[0017]** In a first embodiment, shown in figures 1 and 2, the protector has a lower wall 8 for the closure. Advantageously at least one of the walls, in particular the back wall 5, is removable (figure 2).

**[0018]** As shown in the figures, at least two contiguous walls are connected one to the other by means of proper glue. In a preferred embodiment, the edge is further protected by a profile 9 preferably made of metal, for example stainless steel. In this way, it is possible to achieve a high weather resistance.

**[0019]** In the embodiment shown in figures 1 and 2, the front wall 4, the side walls 6,7 and the lower wall 8 are connected one to the other by means of proper glass glue. The connection between the glass walls is done using proper glass glue in such a way as to create a watertight box. The metallic profiles 9 are instead attached to the glass walls by means of proper silicone.

**[0020]** In an embodiment not shown, the profile has a longitudinal groove in which the edge of the wall is inserted, in particular the back wall.

**[0021]** As shown in figure 2, the back edges of the upper wall 3 and of the lower wall 8 and of the side walls 6, 7, opposite the front wall 4, are provided with a shaped profile 10, preferably made of stainless steel, comprising a gasket, on which the edges of the back wall 5 are arranged at the moment of the closure. The edges of the back wall 5 have advantageously U profiles 11 made of stainless steel.

**[0022]** The back wall 5 is provided inside with profiles 12, preferably made of stainless steel. The profiles 12, in particular tubular profiles, allow to fasten a bracket of the television set to the wall, so that the device doesn't need to be placed on a surface and the protector 1 can be substantially closed completely.

**[0023]** Advantageously the back wall 5 comprises an openable door 13 to have access for example to a decoder. The openable door 13 is preferably fastened to a corresponding tubular profile 12 made of stainless steel.

**[0024]** In this way, the television set or screen can be installed on one side 14 of the back wall 5 intended to remain inside the parallelepiped 2 which constitutes the protector 1, by fastening the brackets to the profiles 12 made of steel. The back wall 5 is then connected to the

other walls, for example, by means of screws, so as to form a closed structure consisting of protector 1 having inside the television set.

[0025] Advantageously the back wall 5 is provided with at least one ventilation opening 15 provided with a micro-perforated grid 16. The back wall 5 is preferably provided with one opening 151 for the passage of cables, in particular equipped with circular hollow section, made of stainless steel, bent downwards.

[0026] In the embodiment of figure 1, the protector 1 preferably has support elements 17 at the lower edges. In particular, four feet made of stainless steel are provided, preferably height-adjustable, arranged at the four lower edges 18. The feet are preferably made of stainless steel. Advantageously, on the outer side 19 of the lower wall 8, plates 20 are arranged for the attachment of the feet 17, in particular welded to the metallic profiles. The plates 20 are preferably made of stainless steel.

[0027] In the embodiment shown in figure 3, the feet 17 made of stainless steel can be shifted outwards, parallel to the short side, for example by means of a telescopic bracket, also made of stainless steel, to allow the enlargement of the support base to prevent overturning in case of very strong wind.

[0028] Figure 4 shows the details of a preferred embodiment of the support element 17. The support element 17 is provided with a pin 171, in particular a threaded pin, which is inserted in a bush 172. The pin 171 and the bush 172 are preferably made of stainless steel. The bush 172 is connected to the telescopic bracket. The telescopic bracket comprises at least two sliding plates 173, 174 within a press-formed element 175. The plates 173, 174 and the press-formed element 175 are preferably made of stainless steel. The press-formed element 175 in particular is welded to the plate 20.

[0029] In an embodiment not shown, the support elements 17 consist of wheels.

[0030] In the embodiment shown in figures 1, 2 and 3, the lower wall 8 includes at least one opening 21 for ventilation and for the transmission of sound waves. Preferably, the opening 21 is provided with a micro-perforated grid 22, in particular made of stainless steel.

[0031] In an embodiment not shown the lower wall 8 includes one opening for ventilation and for the passage of cables and two openings that, in the use, will be arranged near the speakers. The openings are preferably provided with a micro-perforated grid, in particular made of stainless steel.

[0032] Figure 5 shows a second embodiment of protector 1'. The protector 1' is particularly suitable for areas sheltered from the wind.

[0033] In this second embodiment the protector 1 has at least one opening 8' at the lower wall, through which passes the screen or television set, which can be provided with its own base.

[0034] In the embodiment shown in figure 5, the opening 8' has substantially the size of the entire lower wall, replacing the bottom wall of the parallelepiped. This so-

lution simplifies the creation of the protector.

[0035] The front wall 4', the back wall 5' and the side walls 6', 7' are connected one to the other preferably by means of proper glass glue. The connection between the glass walls is done using proper glass glue in such a way as to create a watertight box. The edge is further protected by a profile 9', preferably made of metal, like for example stainless steel. The metallic profiles 9' are attached to the glass walls by means of proper silicone.

[0036] The lower edges of the front wall 4' and of the side walls 6', 7' are advantageously provided with corresponding U profiles 11'.

[0037] Advantageously, the back wall 5' is provided with at least one ventilation opening 15' provided with a micro-perforated grid 16'.

[0038] In the embodiment of figure 5, the protector 1' preferably has support elements 17' at the lower edges. In particular, four feet are provided, preferably height-adjustable, arranged at the four lower edges 18'. The feet are preferably made of stainless steel. Advantageously, plates 20' made of steel are provided, arranged at the lower edges 18' of the protector to attach the feet. The plates 20' are preferably welded to the U profiles 11'.

## Claims

1. Protector for a display device, such as a screen or television set, comprising a substantially parallelepiped-shaped body (2) provided with at least one upper wall (3; 3'), a front wall (4; 4'), a back wall (5; 5') opposite the front wall (4; 4') and two side walls (6, 7; 6', 7'), wherein at least the front wall (4; 4') has at least one portion made of transparent material.
2. Protector according to claim 1, **characterised in that** it comprises a lower wall (8) opposite the upper wall (3; 3') so as to form an essentially closed structure.
3. Protector according to claim 1 or 2, **characterised in that** it comprises at least one opening (8') at the lower wall (8), the opening (8') being suitable for the display device to pass.
4. Protector according to claim 2 or 3, **characterised in that** at least the back wall (5) is removable.
5. Protector according to any one of the preceding claims, **characterised in that** the back wall (5) has one side fitted with at least one profile (12) connectable to the screen or television set.
6. Protector according to any of the preceding claims, **characterised in that** the walls are made of a transparent material, preferably glass.
7. Protector according to any of the preceding claims,

**characterised in that** at least two contiguous walls are connected to one other by one profile (9; 9'), preferably made of metal.

8. Protector according to any of the preceding claims, **characterised in that** at least one wall (5, 8; 5') is provided with at least one ventilation opening (15, 21; 15'). 5
9. Protector according to any of the preceding claims, **characterised in that** it comprises support elements (17; 17'), which are preferably height-adjustable. 10
10. Protector according to claim 9, **characterised in that** it comprises attachment plates (20; 20') for the support elements (17; 17'), in particular arranged at the lower edges of the parallelepiped (2). 15

20

25

30

35

40

45

50

55

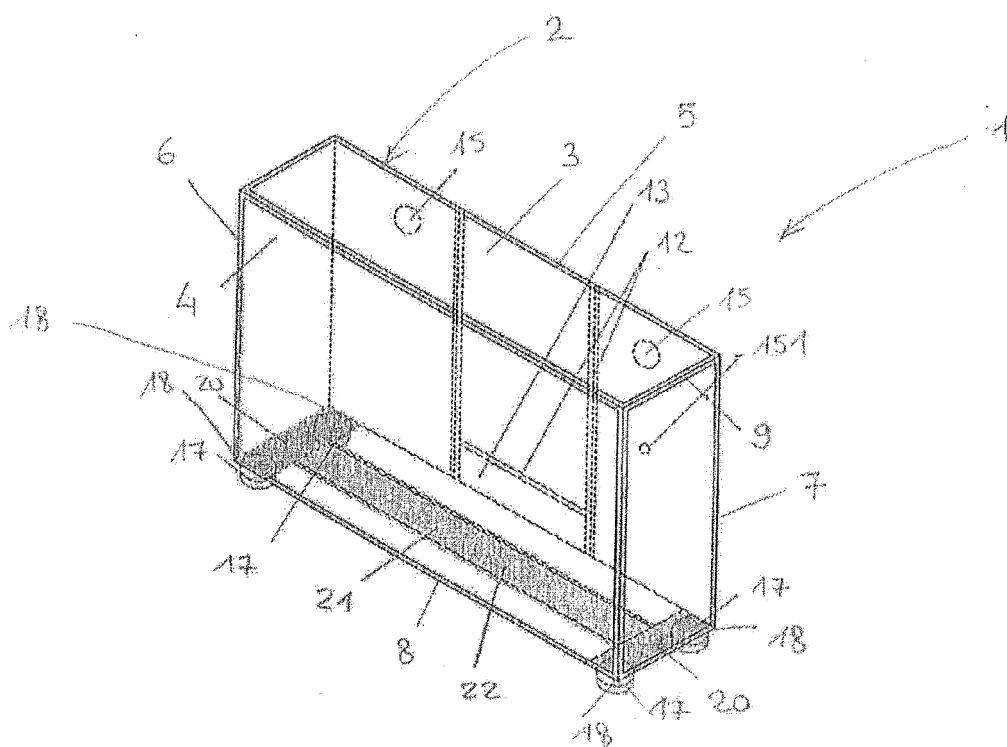


FIG. 1

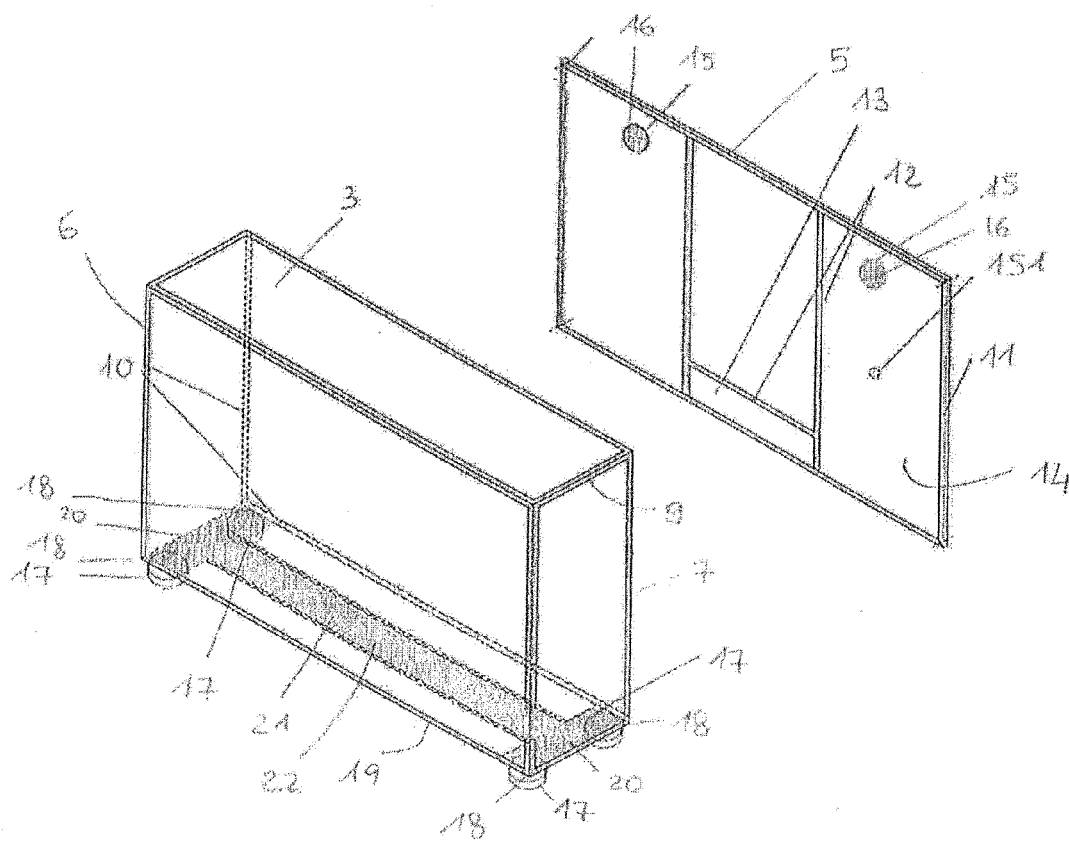


FIG. 2

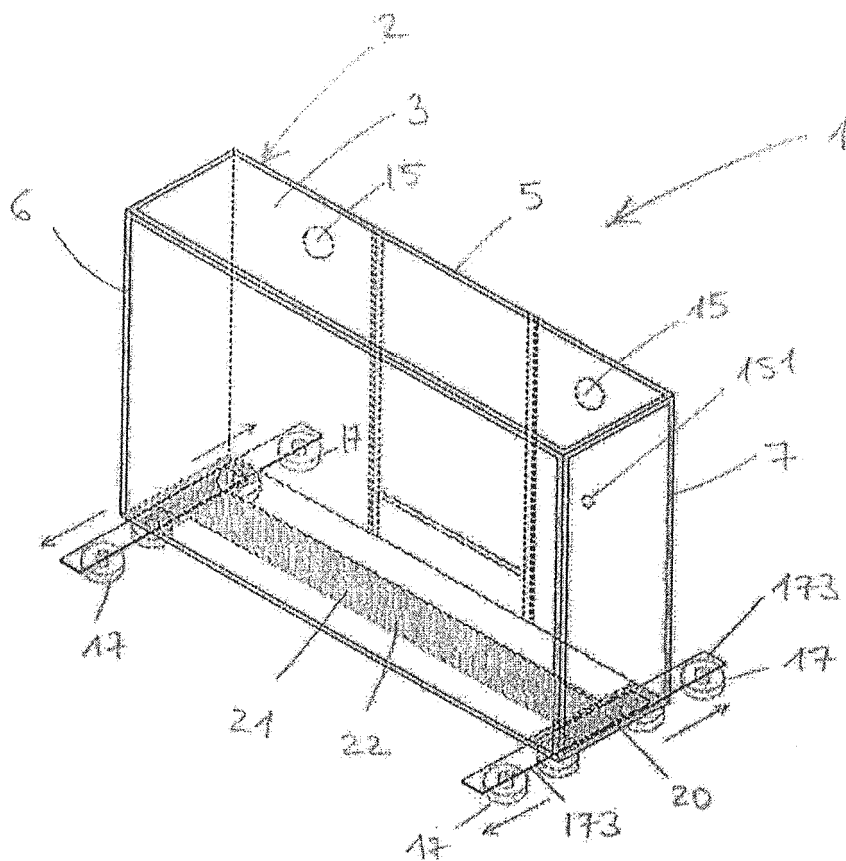


FIG. 3

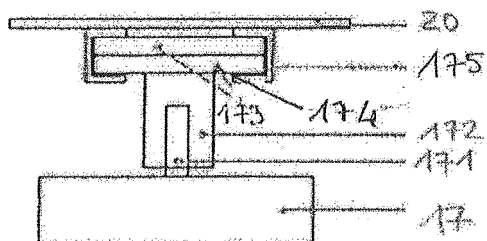


FIG. 4

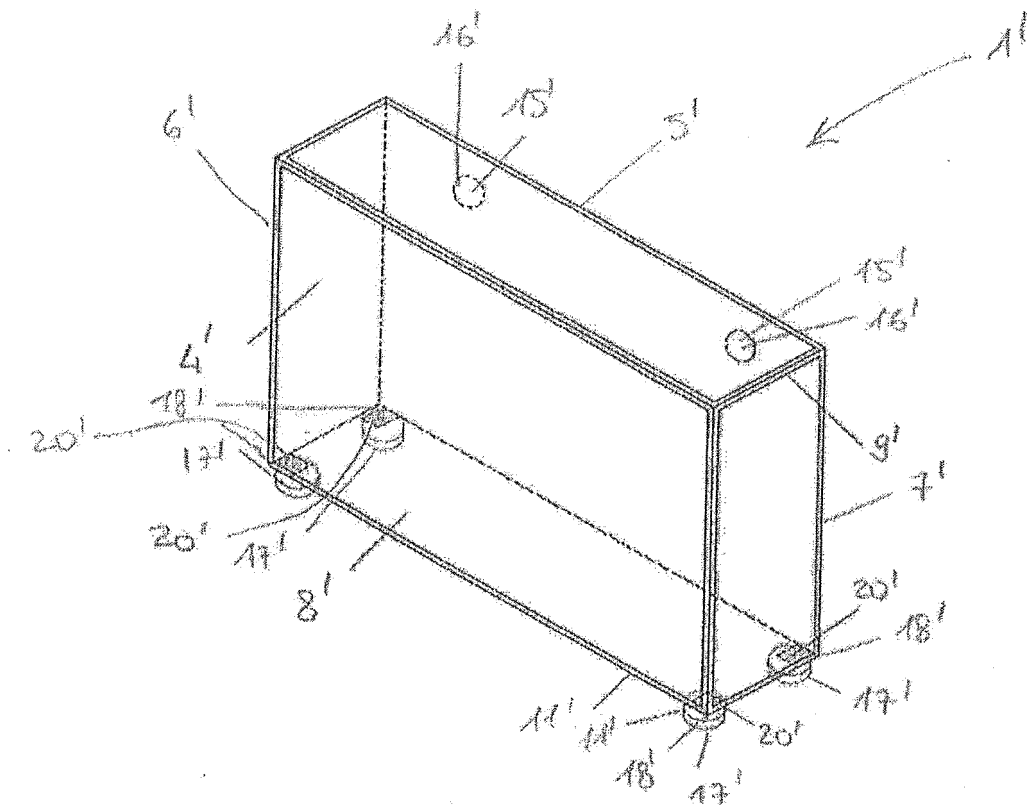


FIG. 5



## EUROPEAN SEARCH REPORT

Application Number  
EP 21 02 0049

5

10

15

20

25

30

35

40

45

50

55

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	US 8 717 751 B2 (THOMAS MICHAEL MARKER) 6 May 2014 (2014-05-06) * column 2, line 23 - column 9, line 11; figures 1-6 * -----	1-10	INV. A47B47/00 A47F3/04 H05K5/00 A47F3/00 A47B81/06
			TECHNICAL FIELDS SEARCHED (IPC)
			A47B H05K A47F
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 1 June 2021	Examiner Kohler, Pierre
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			

 1  
EPO FORM 1503 03/82 (P04C01)



01-06-2021

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 8717751	B2	06-05-2014	NONE
-----			

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82