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(54) Title: COMPUTER TABLE FOR A FURNITURE

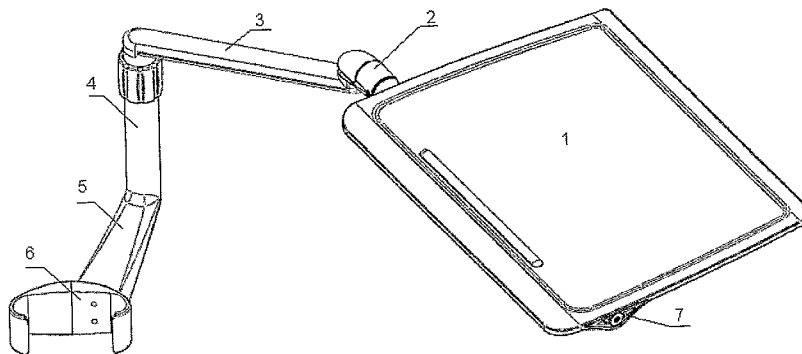


Fig. 1

(57) Abstract: The invention relates to a fixing means for table top comprising a profile (7) installed into the table top (1). The profile can be cast-in into the table top, or the table top can be laminated round the profile. The profile comprises a through bore (10) having a number of longitudinal grooves (11, 12). A shaft (15) is arranged to be directed through the bore (10). A sleeve (18) terminates the shaft (15) at one end as well as a fixing means terminates the shaft at the other end. The sleeve comprises a number of locking lugs (19, 20) arranged to engage into the grooves (11, 12).

COMPUTER TABLE FOR A FURNITURE

Field of the invention

5 The present invention relates to a fixing device for table top, a profile being an integral part of the fixing device as well as a table top utilizing the fixing device. The fixing device can be utilized for all types of tables having free-hanging table tops, and especially for computer tables.

10 Background of the invention

It is prior known tables for computer screens, raising the screen up from the desk. The screen is placed on a small plate. The plate is mounted on a rotating arm, which again is standing on a clamp fastener gripping round the rim of the desk.

15

In the prior known solutions, the table top is fixed to a rotating joint or an arm by means of a small bracket which again is fixed to the desk with bolts, rivets or similar. This fixing point is a weak point mechanically speaking, requiring space and is therefore not allowing a slim mounting of the plate, and is not much satisfactory from an aesthetic point of view.

20

Thus, there is a demand of an improved fixing device which being more solid and stable in use, simultaneously providing an improved visual expression than existing solutions.

25 Summary of the invention

The object of the present invention is to provide such a fixing device, a profile for embedding into a table top as well as a table top utilizing such a fixing device. The extent of the invention is evident from the following patent claims.

30

According to a first aspect, the invention comprises a fixing device for table top comprising a profile arranged to be fixed in the table top, wherein the profile comprises a through bore, a shaft arranged to be directed through the bore, a sleeve terminating the shaft at one end as well as a fixing means terminating the shaft at the other end.

35

According to a second aspect, the invention comprises a profile for fixing table top comprising a flat base having a curved or double curved upper surface and a through channel provided with a circular bore having a number of longitudinal grooves.

According to a third aspect, the invention comprises a table top as with a fixing device according to said first aspect.

Brief description of the figures

The invention is now described in more detail by reference to the attached drawings, wherein:

Fig. 1 is a drawing of a computer table.

Fig. 2 is showing schematically a table top according to the invention, **a** seen from above, **b** schematically from in front, **c** in cross section, and **d** a detail from the section **c**, respectively.

Fig. 3 is showing single components being an integral part of the fixing device, **a** exploded in perspective, **b** composed in longitudinal sections from the side, **c** seen from above, and **d** in cross section, respectively.

Detailed description

Computer table of the type described herein comprises a plate that shall hold the computer, more specifically a portable computer, often named laptop. The computer table comprises an arm holding the table top itself, and which again is fixed on a furniture. It must be possible to rotate said arm out and in of the working area of the user, thereby ensuring that it simply can be placed in correct working position and be turned away when it is not in use.

Fig. 1 shows a computer table according to the invention comprising a table top 1. The table top is fixed to a rotatable joint 2 which again is fixed to an upper arm 3. The upper arm is fixed to a rotating telescopic arm or pillar 4, which again is fixed to a lower arm 5 and a clamp fastener 6. The clamp fastener is estimated to be able to grip round an arm rest, or another suitable component, of a chair, such as a recliner.

The table top 1 comprises a through profile 7 (Fig. 2) being installed into the table top. The profile is preferably manufactured from metal, such as aluminum, or alternatively from a synthetic material such as fibre reinforced plastic composite. The profile can be installed into the table top by being cast-in, or by the plate consisting of several layers

which are laminated round the profile. Thus, the profile is suitable both to table tops made from synthetic material, laminated synthetic material, and laminated wood.

5 Sectionally, the profile has a flat base 8 having a curved or double curved upper surface 9. Further, the profile has a through channel. The channel is in form of a circular bore 10 having a longitudinal groove 11, 12 on each side. It can be fewer or more longitudinal grooves, as required. On each side of this channel, there are two side channels 13, 14 which are able to remove redundant material.

10 Fig. 3 shows the arrangement fixing the table to the rotating joint 2. The arrangement comprises a shaft 15 estimated to be treaded into the bore 10. The shaft has at the one end a threaded part 17 which is to be screwed in on a sleeve 18. The sleeve 18 has two locking lugs 19, 20 arranged to engage into the grooves 11, 12 of the profile 7. Thus, the
15 table will be locked to the sleeve 18 and rotate this one in the joint 2, without the shaft being exposed of any rotating moment. At the other end, the shaft 15 is locked with a suitable fixing means. In the embodiment shown, this is a threaded bore 16 which can admit a bolt. The shaft can of course be fixed in many ways.

20 This arrangement is advantageous by being simple to mounting and dismounting the table top, e.g., if it is desired to mount a computer table on opposite side of the chair. As the table top is held firmly by one screw only, it can easily be taken off and treaded on the shaft from opposite side.

Claims

1. Table top (1) comprising a profile (7) installed into material of the table top, characterized in that the profile has a flat base (8) and a curved or double curved upper surface (9), and wherein the table top is formed by several layers being laminated round the profile.
5
2. Table top according to claim 1, wherein the profile is made from a fibre reinforced composite material or metal.
10
3. Table top according to claim 1, wherein the profile is made from aluminum.
4. Table top according to claim 1, wherein the profile comprises a through bore (10), wherein the table top additionally comprises a shaft (15) arranged to be directed through the bore (10), a rotatable fixing means (2, 18) terminating the shaft at one end, as well as means locking the shaft to the table top.
15
5. Table top according to claim 4, wherein the profile (7) comprises a number of longitudinal grooves (11, 12) in and along the bore (10), as well as said means for locking the shaft to the table top comprise locking lugs (19, 20) arranged on the rotatable fixing means and being arranged to engage into the grooves (11, 12) and locking the profile (7) and the table top (1) against rotation round the shaft (15).
20

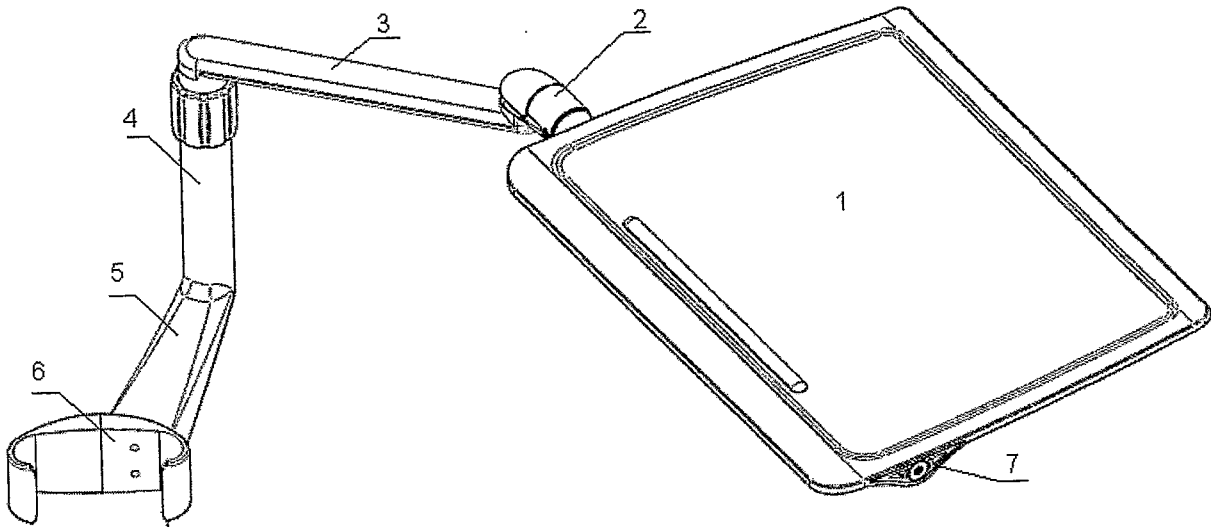


Fig. 1

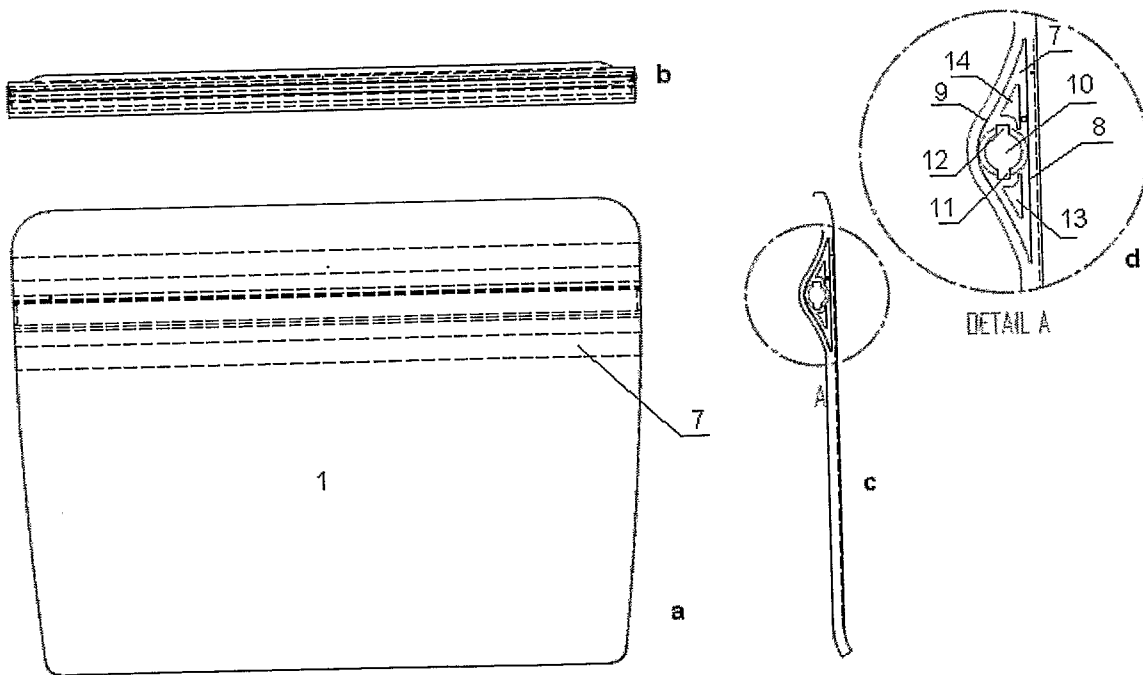


Fig. 2

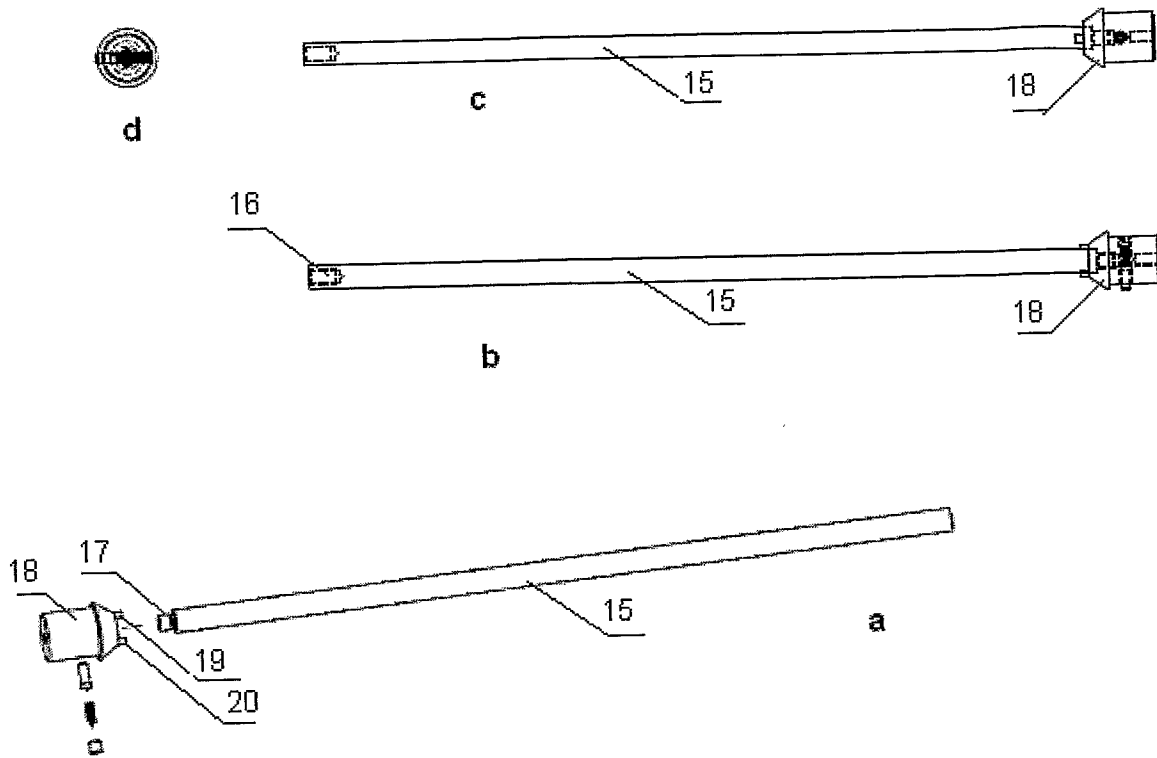


Fig 3

INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER

INV. A47B13/08 A47C7/70 A47B96/18
ADD.

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)

A47B A47C

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 practical, search terms used)

EP0-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2006/003155 A1 (STEWART SIMON [US]) 5 January 2006 (2006-01-05)	1-3
A	the whole document	4,5
X	FR 2 880 403 A1 (FAVRESSE PIERRE [FR]) 7 July 2006 (2006-07-07)	1-3
A	the whole document	4,5
X	US 2005/005827 A1 (CHANG KUN-SHUNG [TW]) 13 January 2005 (2005-01-13)	1-3
A	the whole document	4,5



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 document but published on or after the international filing date

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"O" document referring to an oral disclosure, use, exhibition or other means

"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

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"&" document member of the same patent family

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2006003155	A1	05-01-2006	NONE
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US 2005005827	A1	13-01-2005	NONE