

Modular Display System

The invention relates to a modular display system which exhibits wall elements having vertical interior profiles arranged in the lateral corner regions, which are connectable among themselves by horizontally oriented profiles, and the face side of which exhibits a covering.

Wall elements constructed in such a manner are already known from room dividers.

The present invention seeks to provide, starting from wall elements of the stated type, a modular display system versatile in use and in demounting.

According to the present invention there is provided a modular display system which exhibits wall elements having vertical interior profiles arranged in the lateral corner regions, said lateral corner regions being connectable by horizontally oriented profiles, the vertical profiles exhibit a first contact surface oriented at ^aright angle to ~~the~~^{an} extension of the wall element for the horizontal profiles, and exterior rigid covering parts are attachable to the profiles oriented in the direction of extension of the wall element, and the vertical profiles exhibit a housing channel oriented outwards in the direction of extension of the vertical profile, wherein the vertical profiles exhibit, in addition to the first contact surface oriented at right angles to the extension of the wall element for the horizontal profiles, a second contact surface oriented in the direction of extension of the wall element for identical horizontal profiles oriented transversely to the direction of extension of the wall element.

The invention will now be described by way of example with reference to the accompanying drawings, in which:

Fig. 1 shows a horizontal section through two mutually connected vertical profiles in the corner region of a wall element,

Fig. 2 shows a plan of a plug-like connecting

element,

Fig. 3 shows a side elevation of this connecting element,

Fig. 4 shows in a plan possible variants of erection of wall elements,

Fig. 5 shows a section through a triangular hollow profile serving as an intermediate piece,

Fig. 6 shows diagrammatically a possibility of fastening for selves slideable on from the outside,

Fig. 7 shows a perspective exploded view of a wall element with shelves,

Fig. 8 shows in the vertical section the fastening of formally rigid covering parts to the horizontal profiles oriented in the direction of extension of the wall element,

Fig. 9 shows a locking means for such a fastening means, and

Fig. 10 shows diagrammatically a perspective exploded view of a video tower assembled from elements.

Fig. 1 of the drawings shows two vertical profiles 2 held together in mirror image relationship by a screw 1, which form a part of the supporting structure of a wall element 3. On a member 4 protruding outwards, the profiles 2 carry first contact surfaces 5 for horizontally oriented profiles 6, which are connected to the member 4 by a screw connection 7. The horizontal profiles 6 extend as far as the other end region, not shown, of the wall element 3 and are likewise screwed to vertical profiles 2 there. The cross-sectional shape of the horizontal profiles 6 may be seen from Fig. 8 of the drawing.

In their left-hand end regions (in Fig. 1) the profiles 2 respectively exhibit a partially open housing channel 8 of circular cross-section oriented in the direction of extension of the profile. These housing channels 8 serve for fastening a plurality of wall elements 3 together. This is effected by plug-like connecting elements 9, illustrated in Figs. 2 and 3, in which four circular pins 11, the external diameter of

which is adapted to the shape of the housing channels 8, protrude from a base plate 10.

Now if only two mutually adjacent and mutually aligned wall elements 3 are to be connected, then it is only necessary for a connecting element 9 to be introduced by its pins 11 into the associated housing channels 8 at the top and/or the bottom.

However, in case it is required to attach a further wall element, which is not aligned with the first, or a plurality of wall elements to one side of a wall element 3, as shown in Fig. 4 of the drawing, intermediate pieces 12 (Fig.1) or 13 (Fig.5) are provided for the connection, which likewise exhibit on their interior surface partly open circular guide channels 14 or 15 to receive pins 1 by pairs in each case.

It should be stated with reference to the profiles 2 that the use of two profiles screwed together in mirror image relationship is only necessary when it is required to produce a free-standing wall element. If it is required to produce a "half" wall element so to speak, which is required to be screwed to a building wall for example, one profile 2 is sufficient and the screw 1 may then serve for the wall fixing of the "half" wall element.

It is furthermore possible to use the second contact surface 16 of the lower profile 2 in Fig.1 as a contact surface for horizontal profiles 6 (Fig.1) oriented transversely to the direction of extension of the wall element 3, which could then be fixed by the screw 1, so as to produce the supporting structure for a video tower as shown in Fig.10, for example.

Exterior shelves 17 may also be attached to the wall elements 3 according to the invention in a simple manner, as is shown in Figs. 6 and 7 of the drawing. For this purpose a member region 18 oriented obliquely between the contact surfaces 16 and 5 of the profile 2 exhibits bores 19 provided with a screw thread, so that stirrups 20 can be fastened by a screw connection, not shown, onto which shelves 17, which exhibit internal guide channels, can be

simply pushed.

The outer covering 21 consists here of individual segments 21a arranged superposed at a mutual interval, with the stirrups 20 passing through the gap 22.

The fastening of a segment 21a of the covering 21 to the horizontal profiles 6 is shown in Figs. 8 and 9 of the drawings. For this purpose the segments 21a are each provided on their rear side with angles 23 and 24 pointing upwards and downwards. For fastening the lower angle 24 is pushed behind a member 25 of the profile 6, when the segment 21a comes into contact beneath on a front member 26 of the profile 6 and above on a member 27 of the profile 6. Locking is then effected with a hasp 28 which engages behind the angle 23, and for the movement of which the member 27 exhibits local recesses (at 29). The twisting of the hasp 28 is effected by rotating a cross-head screw 30 which is accessible for a screwdriver through the gap 22.

Lastly, the vertical profiles 2 are provided on the rear side of their member region 18 with inwardly open protruding guide strips 31 with u-shaped end regions, into which holder elements 32 for fluorescent tubes 33 are inserted.

The guide strips also form guides for other elements insertable from above such as other lighting elements. It is possible for the modular display system to have two wall elements which are arranged mutually parallel at an interval and which are mutually connected by the transversely oriented profiles, and installation or attachment elements, such as video screens or drawers are arranged in the course of at least one wall defined by the transversely oriented profiles.



CLAIMS:

1. Modular display system which exhibits wall elements having vertical interior profiles arranged in the lateral corner regions, said lateral corner regions being connectable by horizontally oriented profiles, the vertical profiles exhibit a first contact surface oriented at ^aright angle to ^{an}[the] extension of the wall element for the horizontal profiles, and exterior rigid covering parts are attachable to the profiles oriented in the direction of extension of the wall element, and the vertical profiles exhibit a housing channel oriented outwards in the direction of extension of the vertical profile, wherein the vertical profiles exhibit, in addition to the first contact surface oriented at right angles to the extension of the wall element for the horizontal profiles, a second contact surface oriented in the direction of extension of the wall element for identical horizontal profiles oriented transversely to the direction of extension of the wall element.

2. Modular display system according to Claim 1, wherein two identical vertical profiles are screwable together in mirror image relationship at their second contact surfaces.

3. Modular display system according to Claims 1 and 2, wherein mutually opposite guide strips of said two vertical profiles form guides for elements insertable from above.

4. Modular display system according to any one of Claims 1 to 3, wherein a plug-like connecting element having four pins protruding symmetrically from a base plate is provided.

5. Modular display system according to any one of Claims 1 to 4, wherein for the connection of two mutually



aligned wall elements the said pins of the connecting elements are respectively introducible into the housing channels of the vertical profiles.

6. Modular display system according to any one of Claims 1 to 5, wherein in the case of a nonaligned attachment of more than one wall element, hollow profiles, which hollow pieces are provided as intermediate pieces, exhibit in their interior surfaces guide channels which house said pins by pairs.

7. Modular display system according to any one of Claims 1 to 6, wherein the covering is formed by segments arranged superposed at a mutual interval, and stirrups, which stirrups are respectively attachable to the member region of the vertical profiles, pass through the gap present between the individual segments and are slidable on the shelves which shelves exhibit at least one interior guide channel.

8. Modular display system according to Claim 1, wherein two wall elements which are arranged mutually parallel at an interval are mutually connected by the transversely oriented profiles, and installation or attachment elements are arranged in the course of at least one wall defined by the transversely oriented profiles.

9. Modular display system substantially as hereinbefore described with reference to and as illustrated in the accompanying drawings.
