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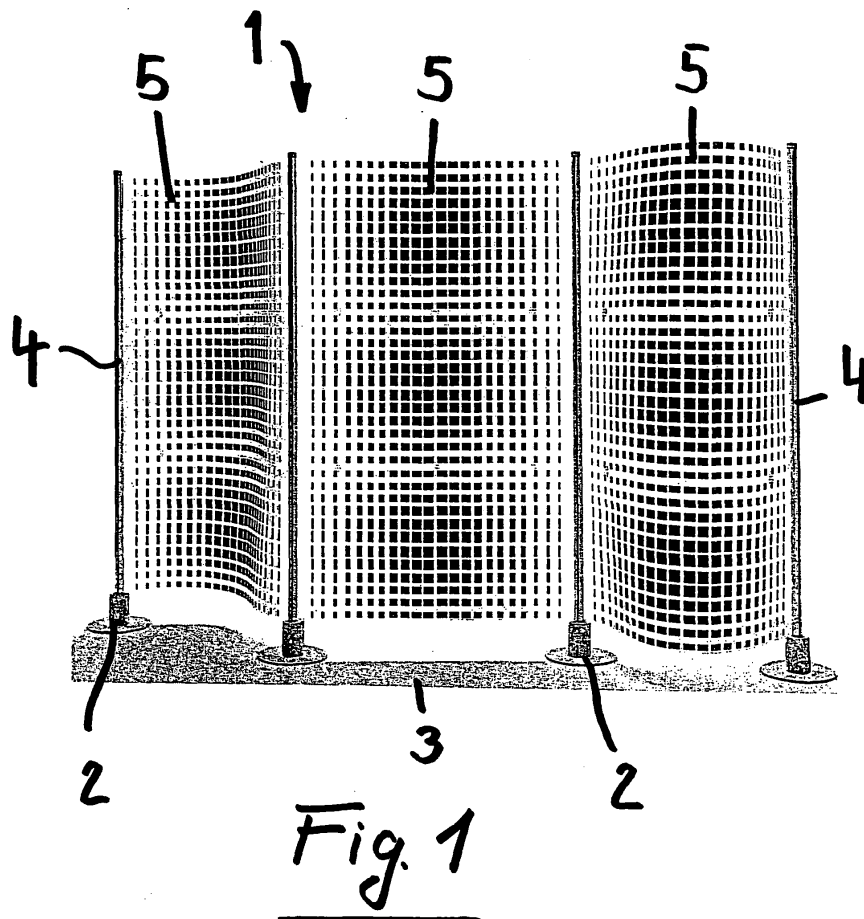
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(54) **Modular construction for making environmental partition assemblies**

(57) A modular construction for making environmental partition assemblies comprises floor bearing support members, therefrom stand up a plurality of columns hav-

ing coupling slots for coupling with partition panels, each partition panel (5) comprising a thin flexible synthetic material plate (11), thin decoration layers (12, 13) being glued on both sides of the plate (11).



Description

BACKGROUND OF THE INVENTION

[0001] The present invention relates to a construction for making environmental partition assemblies.

[0002] Environmental partition assemblies, which are used, for example, in large spaces such as hotels, restaurants, airports, museum, hospitals, offices, are conventionally constituted by uprights vertically extending from floor bearing support members.

[0003] Between the individual uprights are engaged panels so as to provide partition elements or assemblies.

[0004] The panels are generally made of wood structures, which are made fireproof or synthetic material panels are used.

[0005] Both the above mentioned prior panel types have the drawback that they cannot perfectly be fitted to the encompassing environment. Actually, the partition assemblies constituted by strong wood panels have a comparatively high weight, whereas the synthetic material panels, while having decorations printed thereon, cannot be freely fitted to meet architectural requirements.

SUMMARY OF THE INVENTION

[0006] Accordingly, the aim of the present invention is to overcome the above mentioned drawbacks of the prior art, by providing a novel panel to be used in combination with uprights for forming partition constructions, said panel being of small weight, fireproof, flexible and adapted to be freely curved, and including surfaces adapted to be coated by any desired coating material.

[0007] The above mentioned aim is achieved by a modular construction for making environmental partition assemblies, comprising floor bearing support members, therefrom stand up columns including coupling slots therein for coupling with partition panels, each partition panel including a thin flexible plastic material plate, the two sides of the flexible plates having thin decorating layers glued thereon.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] The subject matter according to the present invention will be disclosed and illustrated in a more detailed manner hereinafter, with reference to an embodiment thereof which is illustrated, by way of an example, in the accompanying drawings, where:

Figure 1 is a view showing a construction including uprights and panels to provide a partition assembly; Figure 2 is a cross-sectional view, on a greatly enlarged scale, showing the novel panel according to the present invention; Figure 3 shows a panel, according to figure 2, having a curvilinear contour; and Figure 3 is a front view of the panel.

DESCRIPTION OF THE PREFERRED EMBODIMENT

[0009] As is shown in figure 1, the subject partition construction, which has been generally indicated by 1, comprises a plurality of support members 2, bearing on a floor 3. From each support member 2 stands up a column 4, which may have any desired height, and comprises longitudinal coupling slots for coupling with panels 5.

[0010] Figure 2 shows, on a greatly enlarged scale, a detail of the novel panel 10 according to the present invention.

[0011] Such panel 10 comprises a panel core in the form of a plate 11.

[0012] Said plate 11 is made of a synthetic or plastics material and is very resilient and deformable.

[0013] The plate 11, which is advantageously fireproof, is made of PVC and has a thickness of about 0.6 - 0.7 mm.

[0014] On the two sides of the plate 11, decorating layers, indicated by 12 and 13, are glued.

[0015] Considering that the central synthetic material plate 11 is substantially adapted to meet all the static requirements, the decorating layers 12 and 13 may have each a small thickness of about 0.3 mm.

[0016] Accordingly, the thus made panel 10 has a high stiffness, and in the meanwhile it can be freely deformed about a vertical axis, and this with a thickness of about 1.2 - 1.3 mm.

[0017] This small thickness allows the panel 10 to be easily engaged in the narrow support slots of conventional uprights 4.

[0018] Advantageously, the plastic material plate 11 may be coated, on both sides thereof, by any desired coating material.

[0019] Thus, for example, the coating layer 12 comprises a very thin die-cut wood layer, and the coating layer 13 can comprise, for example, a high value and very thin fabric material.

[0020] It should be apparent that the coating layers 12 and 13 can also comprise other decorating materials such as, for example, thin aluminium or steel metal sheet elements, having machined surfaces, for example made by mechanical machining devices (brushing devices) or by chemical products (acid processed).

[0021] Said coating layers 12 and 13 can also comprise surfaces of any desired colors, and coated by an opaque or bright protective paint, depending on the installing environment and partition assembly construction.

[0022] Figure 3 shows, in cross section, and with a curved contour, a support plate 11, the coating layer 12, for example made of a wood material, and a coating layer 13, for example made of a fabric material.

[0023] Advantageously, the fabric material coating layer 13 may have an exposed to view surface 14 provided with printed partial decorations and, accordingly, by graphically joining several partition panels arranged in a plurality of uprights 4, it is possible to also reproduce large size images, for example large pictures or drawings and patterns.

[0024] The coating layer can also comprise leather, cork, ceramics, and Viennese straw materials.

[0025] The modular construction is constituted by columns 4, and the partition panels 5 have advantageously a variable height.

[0026] Moreover, the flexible plate 14 can also have the two faces thereof coated by flexible coating layers of larger thicknesses.

Claims

1. A modular construction for making environmental partition assemblies (1) comprises support members (2) bearing on a floor (3) therefrom stand up a plurality of columns (4) having coupling slots for coupling with partition panels (5), **characterized in that** each said partition panel (5) comprises a thin flexible synthetic material plate (11) and that said flexible plate (11) has two plate sides thereon thin decorating layers (12, 13) are glued.
2. A modular construction, according to claim 1, **characterized in that** said plate (11) is made of a synthetic material PVC.
3. A modular construction, according to claim 1, **characterized in that** said plate (11) has a thickness of about 0.6 - 0.7 mm.
4. A modular construction, according to claim 1, **characterized in that** on said two sides of said plate (11) decoration layers (12, 13) are glued.
5. A modular construction, according to claims 1 and 4, **characterized in that** said decorating layers (12, 13) have a thickness of approximately 0.3 mm.
6. A modular construction, according to claim 1, **characterized in that** said composite panel (10) has a thickness of approximately 1.2 - 1.3 mm.
7. A modular construction, according to claim 1, **characterized in that** one or more coating layers (12, 13) comprise a very thin wood die-cut material.
8. A modular construction, according to claim 1, **characterized in that** one or more coating layers (12, 13) comprise a fabric material.
9. A modular construction, according to claim 1, **characterized in that** one or more coating layers (12, 13) comprise a metal material.
10. A modular construction, according to claim 1, **characterized in that** said coating layers (12, 13) are subjected to a mechanical machining processing, such as a brushing process.
11. A modular construction, according to claim 1, **characterized in that** said coating layers (12, 13) are processed by chemical products, such as an acid.
12. A modular construction, according to claim 1, **characterized in that** said coating layers (12, 13) have colored layer surfaces.
13. A modular construction, according to claim 1, **characterized in that** said surfaces of said coating layers (12, 13) are coated by a protective clear paint.
14. A modular construction, according to claim 1, **characterized in that** one or more of said coating layers (12, 13) comprise a leather material.
15. A modular construction, according to claim 1, **characterized in that** one or more of said coating layers (12, 13) comprise a cork material.
16. A modular construction, according to claim 1, **characterized in that** one or more of said coating layers (12, 13) comprise a ceramics material.
17. A modular construction, according to claim 1, **characterized in that** one or more of said coating layers (12, 13) comprise a Viennese straw material.
18. A modular construction, according to claim 1, **characterized in that** said columns (4) and partition panels (5) have variable heights.
19. A modular construction, according to claim 1, **characterized in that** said flexible plate (11) has, on the two sides thereof, a larger thickness flexible coating layer.

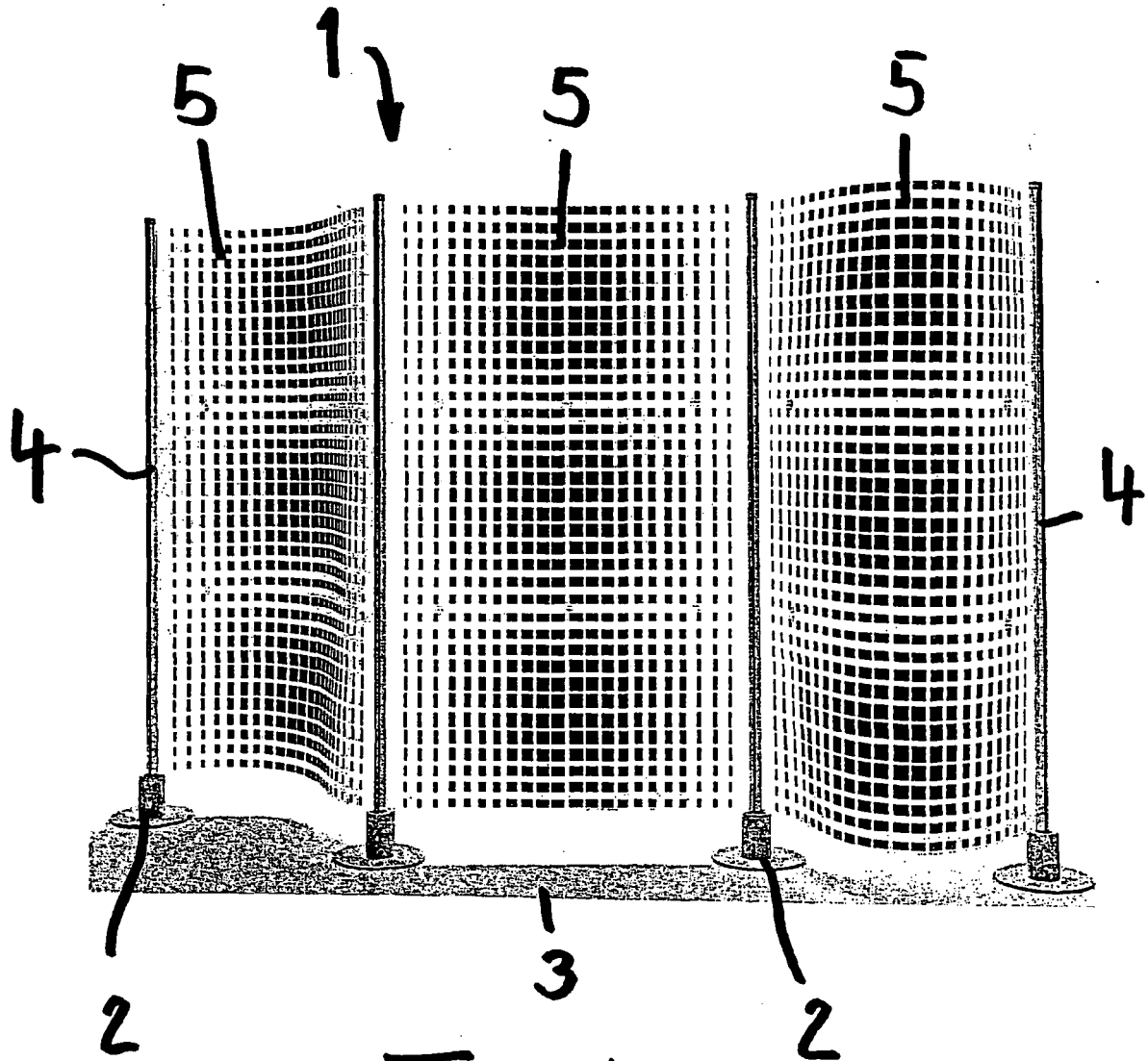
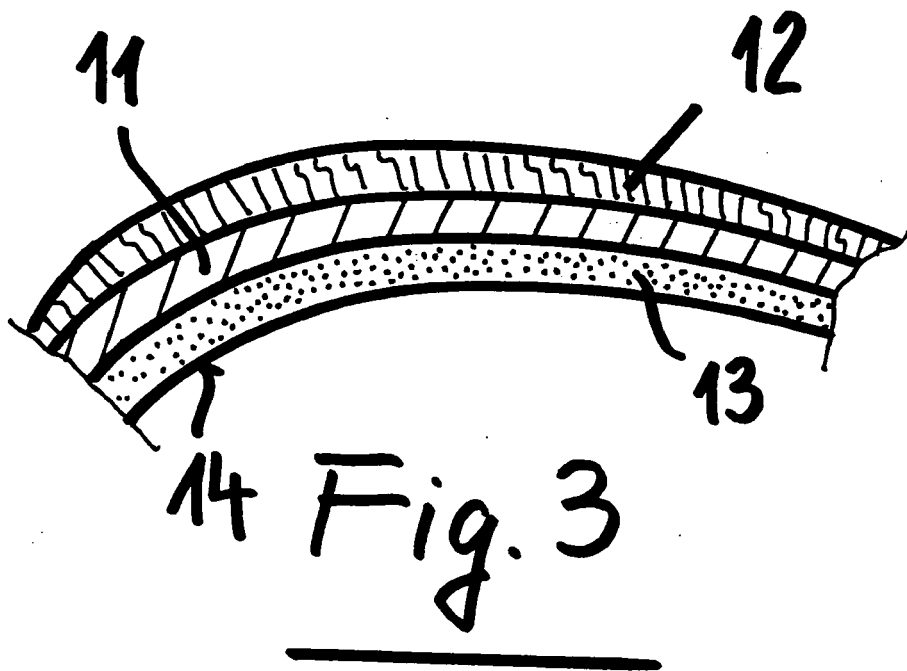
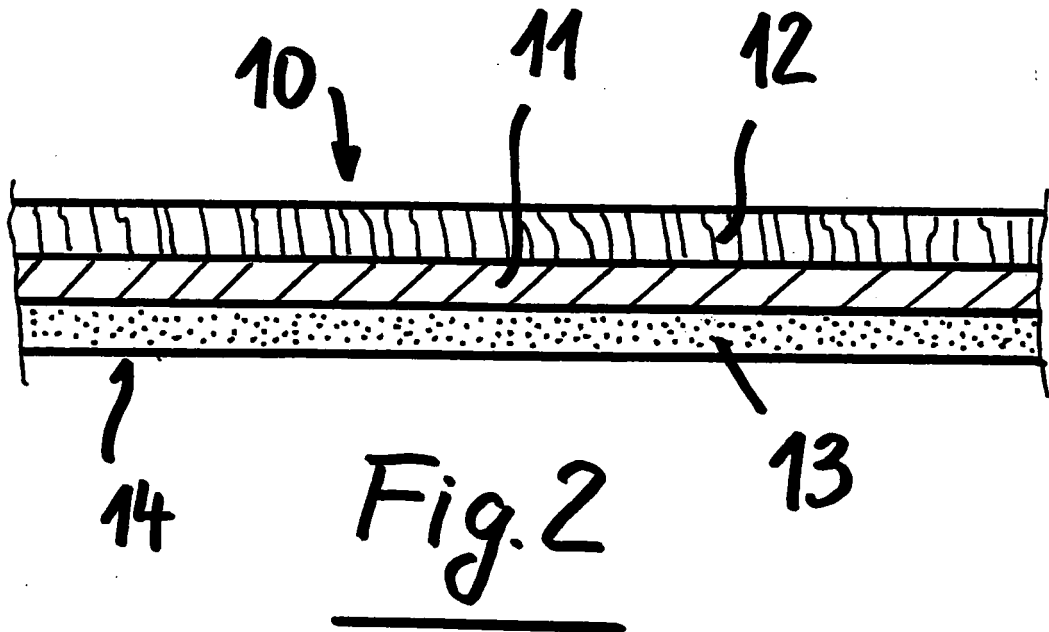


Fig. 1



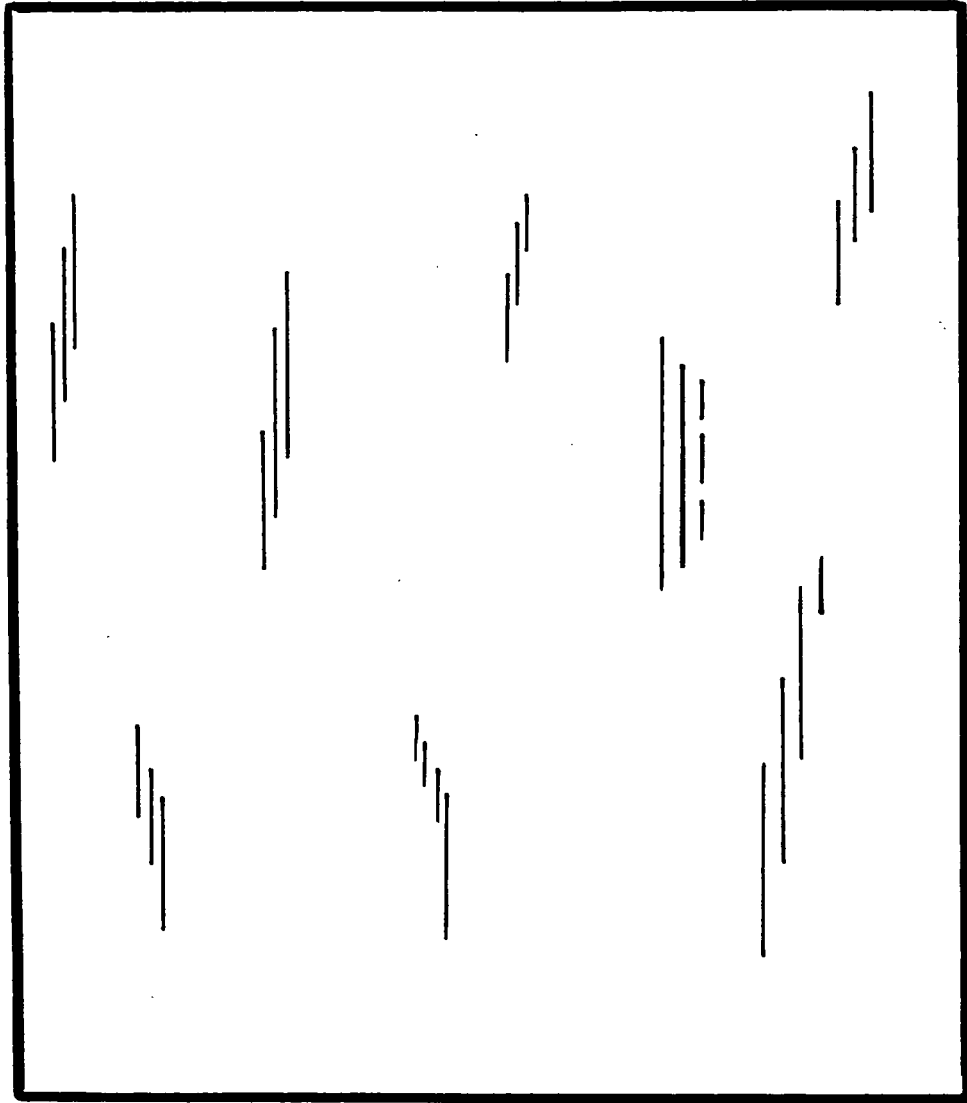


Fig. 4