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A PANEL FOR PARTITIONING A ROOM

This invention relates to a panel for partitioning a room, and to a partitioning system including a panel and a support therefor.

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Panels currently available for partitioning an office are connected to upstanding supports to form dividing walls. Electrical wiring for the office is generally provided along skirting of the panels and/or within these upstanding supports. The construction of partitioning systems is often made awkward by the positioning of the wiring duct along the skirting, and, further, electrical fittings, for example plugs and switches, must be located on the supports or skirting.

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According to one aspect of the present invention, there is provided a panel comprising: means extending along an edge of the panel and defining a channel having side walls and a base, the base having an aperture constituting one end of a first wiring duct extending through the panel to the opposite edge of the panel; and attachment means for attaching the panel to a support so that the side walls and the base define with the support a second wiring duct communicating with the first wiring duct via said aperture whereby electrical wires may be passed through the second and first wiring ducts for the connection of electrical fittings at convenient locations on the panel.

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Preferably the panel also comprises means extending along a further edge of the panel defining a further duct for electrical wires, the further duct communicating with the second duct.

The first wiring duct can have a side piece which is removable to provide access to electrical wires passing through the duct.

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The present invention also provides a partitioning system comprising: a panel according to the one aspect of the present invention; and a support having attachment means complementary to the attachment means provided on the panel.

1 The attachment means on the panel may be hooks, in
which case the support is provided with complementary
means, e.g. apertures.

5 The support may be provided at its upper end
region with an aperture which, with the panel attached to
the support, communicates with the further duct whereby
electrical wires may be passed along the further duct,
through the aperture in the support to communicate with a
further duct of another similar panel attached to the
10 support.

 The support preferably comprises an elongate body
portion and a detachable end piece which defines with an
upper end of said body portion said aperture whereby,
with the end piece detached, electrical wires can pass
15 from the further duct of one panel to the further duct of
the other panel over the upper end of said body portion,
the electrical wires being enclosed by subsequently
attaching the end piece to the body portion.

 With this arrangement of intercommunicating ducts,
20 the electrical wiring for an office partitioning system
can be carried out very simply and effectively. Further,
it enables electrical fittings to be provided at any
convenient locations on the panel itself.

 For a better understanding of the present
25 invention, and to show how the same may be carried into
effect, reference will now be made, by way of example, to
the accompanying drawings, in which:-

 Figures 1 and 2 illustrate possible layouts using
a partitioning system in accordance with an embodiment of
30 the present invention;

 Figure 3 is a side view showing two panels with
supports attached along their edges;

 Figure 4 is a section along IV-IV of Figure 3;

 Figure 5 shows detail in the portion encircled V
35 in Figure 4;

 Figure 6 shows detail of the portion encircled VI
in Figure 4;

 Figure 7 is an perspective view showing connection
of two panels to a support.

1 Figure 8 is a section along line VIII-VIII in Figure 3 (but only showing a section through one of the panels);

 Figure 9 is a section through a support;

5 Figure 10 shows detail of the portion encircled X in Figure 9;

 Figure 11 shows detail of the portion encircled XI in Figure 9; and

10 Figure 12 is an exploded, cut-away view of a support.

 Referring firstly to Figures 3 to 6 illustrating the panel, Figure 3 shows two panels 1 connected via a support 2. The panels 1 are substantially the same, and will now be described in detail below.

15 The panel has two vertical edges 3,4 along each of which there extends a channel section 5 (see Figure 8). The channel sections 5 each have side walls 6 and a base 7.

 As shown more clearly in Figure 8, the panel is
20 constructed with upstanding hardwood members 8 and has two 6mm plywood facing members 9 and 10 spaced apart by these members 8. As shown in Figure 4 wooden crosspieces 11, 12 and 13, 14 define upper and lower edges of first and second panel portions 1a, 1b. The panel portions are
25 connected together via a duct structure 15a (Fig.6) which is attached to the crosspieces 12 and 13 by screws 51, 52. The duct structure 15a defines a transversely extending first wiring duct 15 and is formed by two steel side pieces 16, 17 and upper and lower pieces 18,19. The
30 side pieces 16,17 have upper and lower flanges 20 each of which is provided with a protrusion 21 which is received by a groove 22 of the upper or lower piece 18,19 respectively.

 The upper and lower pieces 18,19 are each formed
35 with screw receiving portions 23 by means of which the channel section 5 can be screwed to the edge of the panel portions 1a, 1b to form the panel 1.

1 The side pieces 16, 17 can slide along the duct 15
to expose electrical wires disposed in the duct 15.
Further, the side pieces can be removed from the panel 1
if necessary by removing the channel section 5 and
5 sliding the side pieces along the duct 15 so that
electrical fittings can be fitted to the sidepieces. The
Channel section 5 is also secured to the upstanding
members 8, 9 by further screws 53, 54 spaced lengthwise
of the base 7 of the channel section.

10 The channel section 5 has an aperture, which is
indicated by a dotted line and by reference numeral 24 in
Figures 4 and 6, forming one end of the duct 15. As
shown in Figure 5, the upper cross piece 11 is disposed
slightly below the upper edges of the facing members 9
15 and 10 of the panel 1. A steel channel 25 runs across
the top of the panel 1 and is enclosed by a slidable
cover 26. In this way a further duct 27 is formed
running across the top of the panel 1. The cover 26 can
slide with respect to the channel 25 by virtue of
20 protrusions 27 running in grooves 28.

 The supports 2 will now be described with
reference to Figures 9 to 12 of the accompanying
drawings.

 As shown most clearly in Figure 12, the support
25 comprises a metal box section 29. The lower portion of
the support 2 has a foot 30 formed of a plastics material
and carrying a vertically extending screw threaded
portion 31. (Fig.10). A support structure 32 provided in
the section 29 carries a nut 33 through which the
30 screw-threaded portion 31 extends so that rotation of the
foot 30 enables the height of the support to be adjusted.
The foot 30 can be rotated by using the knurled wheel 34
(see Fig.12).

 The support 2 is provided with attachment means in
35 the form of slots 35 in its upper and lower regions.
These slots are arranged to receive corresponding hooks
(e.g. 36 in Figure 7) extending from the base 7 of the

1 channel section 5 extending along the edges of the panels
1. A further internally threaded support structure 37 is
provided in the upper region of the support 2. This
portion 37 carries an internally threaded nut 38 for
5 receiving a vertically extending threaded portion 39
carrying a disc 40. The threaded portion 39 has an
aperture 41 in its upper end region for receiving an
Allen key or the like. In this way, with the hooks of
the panel engaging the slots 35, the system so formed can
10 be secured by lowering the disc 40 to clamp each hook 36
in its slot 35. A detachable plastics cap 42 is received
by the box section 29 at its upper end and is provided
with weakened regions 43 which can be removed for reasons
to be described hereafter.

15 A partitioning system, for example for an
open-plan office, can be constructed by attaching a panel
between two supports to form a wall.

Figures 1 and 2 show possible arrangements of the
panels to provide open plan office systems. The supports
20 have slots in each of their four sides to enable corners
to be formed by two panels connected to adjacent sides of
the support 2. As shown most clearly in Figures 7 and 8,
with the support 2 connected to a panel 1, the channel
section 5 forms with the support 2 a second wiring duct
25 44. The interconnection of ducts 15, 44 and 27 mean that
the provision of electrical wires, and the fitting of
electrical outlets can be carried out very simply. The
upper ends of the box section 29 are disposed below the
upper edges of the panels 1 so that electrical wires can
30 be passed from the further duct 27 of one panel to the
further duct 27 of another panel over the box section 29.
The detachable cap 42 with appropriate ones of its
weakened regions 43 removed, can be inserted into the box
section 29 to retain the electrical wires. For example,
35 as shown in Figure 7, electrical wires 45 may extend
along the top edge of a panel 1 through duct 27 through
an aperture in cap 42 formed by the removal of weakened

1 regions 43 and along the upper edge of a second panel via
its duct 27. In another case, electrical wires 46 may
pass through a duct 27 of panel 1 along an upper edge
thereof and then down duct 44 along the edge of the panel
5 1 to communicate with first wiring duct 15 via aperture
24. In this way, electrical fittings may be provided at
any convenient location on the panel, for example as
illustrated at 48 in Figure 3. The provision of sliding
covers 26, 17, 16 means that assembly of this system is
10 very simple, and that the assembled system does not have
unsightly wiring. Vinyl inserts 49 (Figure 7) are
received by flanges of the side walls 5 of the channel
section 7 to form a trim. In addition, a panel cap 50,
made of a plastics material, is provided which is
15 received by the flanges of the side walls 5 of the
channel section 7 to close the duct 44 for the sake of
neatness.

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1 Claims:

1. A panel comprising: means extending along an edge of the panel and defining a channel having side walls and a base, the base having an aperture
5 constituting one end of a first wiring duct extending through the panel to the opposite edge of the panel; and attachment means for attaching the panel to a support so that the side walls and the base define with the support a second wiring duct communicating with the first wiring
10 duct via said aperture whereby electrical wires may be passed through the second and first wiring ducts for the connection of electrical fittings at convenient locations on the panel.

2. A panel as claimed in claim 1, which also
15 comprises means extending along a further edge of the panel defining a further duct for electrical wires, the further duct communicating with the second duct.

3. A panel as claimed in claim 1 or 2, which comprises first and second panel portions connected to
20 each other via a duct structure defining the first wiring duct.

4. A panel as claimed in claim 1, 2 or 3 in which the first wiring duct has a side piece which is removable to provide access to electrical wires passing through the
25 duct.

5. A panel as claimed in any preceding claim, in which the channel is provided with a detachable end member for closing the second wiring duct without interfering with the further wiring duct, when present.

30 6. A panel substantially as hereinbefore described with reference to Figures 1 to 6 of the accompanying drawings.

7. A partitioning system comprising: a panel as claimed in any preceding claim; and a support having
35 attachment means complementary to the attachment means provided on the panel.



1 8. A system as claimed in claim 7, in which the
attachment means on the panel comprise hooks and the
attachment means on the support comprises corresponding
openings.

5 9. A system as claimed in claim 7 or 8, in which
the support is provided at its upper end region with an
aperture which, with the panel attached to the support,
communicates with the further duct whereby electrical
wires may be passed along the further duct, through the
10 aperture in the support to communicate with a further
duct of another similar panel attached to the support.

15 10. A system as claimed in claim 9, in which the
support comprises an elongate body portion and a
detachable end piece which defines with an upper end of
said body portion said aperture whereby, with the end
piece detached, electrical wires can pass from the
further duct of one panel to the further duct of the
other panel over the upper end of said body portion, the
electrical wires being enclosed by subsequently attaching
20 the end piece to the body portion.

11. A partitioning system substantially as
hereinbefore described with reference to the accompanying
drawings.

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