



Europäisches Patentamt
European Patent Office
Office européen des brevets

19

11

Publication number:

**0 011 422
A1**

12

EUROPEAN PATENT APPLICATION

21 Application number: 79302428.2

51

Int. Cl.³: **E 06 B 3/60**

22 Date of filing: 02.11.79

E 04 B 2/74, E 06 B 5/16

30 Priority: 06.11.78 GB 4331778

43 Date of publication of application:
28.05.80 Bulletin 80/11

84 Designated Contracting States:
DE FR GB NL

71

Applicant: **PHOENIX FLANGEKLAMP LIMITED**
Stanmore
Bridgnorth Salop. WV15 5JA.(GB)

72

Inventor: **Worton, Robin**
16 Holmes Orchard
Alveley Nr. Bridgnorth(GB)

72

Inventor: **Cartwright, Keith**
11 Oakum Avenue
Dudley Bridgnorth(GB)

72

Inventor: **Whittaker, Charles Gordon**
Severndale Oldbury
Bridgnorth(GB)

72

Inventor: **Giles, Donald Leonard**
1 Oak Street
Highley Nr. Bridgnorth(GB)

74

Representative: **Hartley, David et al,**
WITHERS & ROGERS 4 Dyer's Buildings Holborn
London, EC1N 2JT(GB)

54 **Building or partitioning systems including frames for door sets or glazing panels.**

57 A building or partitioning system in which door sets or glazing ponds including one or more panes of glass (40) comprise a frame (35) around which are secured spaced pairs of metal clips (42) over which glazing beads (39) fit to define a channel receiving a peripheral edge portion of the pane. The metal clips (42) are secured to the frame (35) by tabs (44) which are pressed out from the metal forming the clips. A sealant may be applied between the glazing beads and the glass. This is destroyed by fire but the pane of glass will remain intact to preserve the fire resistant properties of the system.

EP 0 011 422 A1

./...

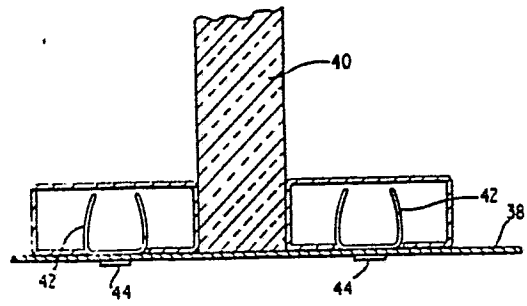
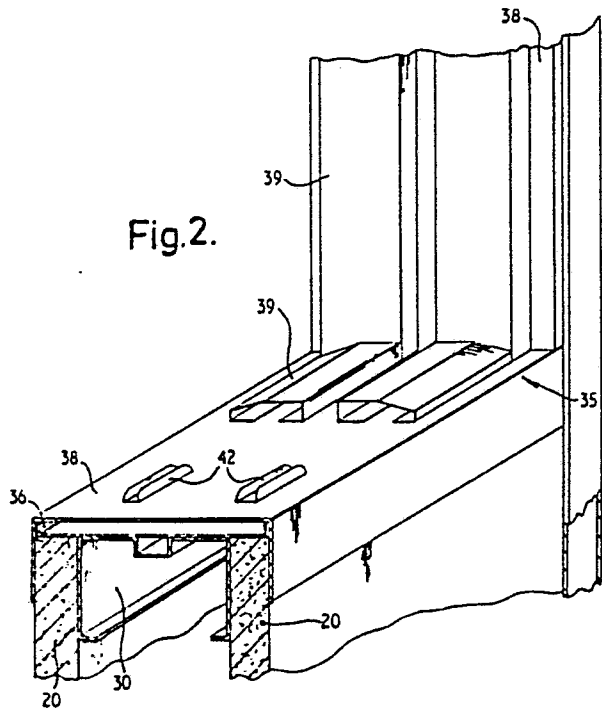


Fig.4.

see front page

"Building or Partitioning Systems"

This invention relates to building or partitioning systems or the like and more particularly to door sets and glazing ponds including one or more panes of glass.

5 In existing building or partitioning systems it is generally the glazing panel which offers the lowest resistance to fire. Often the glass is mounted by means of P.V.C. or other plastics material beads and fittings which deteriorate and burn after only a short exposure to intense heat. Even some aluminium fittings have proved unsatisfactory.

10 What we now propose is a building or partitioning system in which door sets or glazing ponds including one or more panes of glass comprise a frame, spaced pairs of resilient metal clips arranged at intervals around the frame, and metal beads which fit over the clips to define a channel for receiving
15 a peripheral edge portion of a pane of glass. Preferably, the clips are secured to the frame by tabs which are pressed from the metal forming the clip.

20 An embodiment of the invention will now be described by way of example with reference to the accompanying drawings of which:

Figure 1 is a fragmentary view of a section of a partition including a glazing pond;

Figure 2 is a perspective view generally on arrow A in Figure 1;

25 Figure 3 is a perspective view of a resilient metal bead clip; and

Figure 4 is a cross-section showing the manner in

which glazing beads are arranged for holding a pane of glass.

The partition has vertical studs 10 (one shown) secured at intervals in a base channel 12 their upper ends 14 being connected to a head channel 16 by stud extending brackets 18
5 affording limited adjustment of the height of the partition.

Panels 20 of plasterboard or other suitable material are clamped to the vertical studs 10 by battens 22 in the form of shallow channel sections over which cover strips 24 are fitted to conceal the clamping screws 26. The cover
10 strip 24 is cut away for clarity at the bottom of Figure 1.

At intervals along the foot of the partition are clips 28 carrying a skirting 29 extruded P.V.C. or other plastics material.

When a glazing pond is required a horizontal stud 30
15 is secured between adjacent vertical studs 10 (one shown) by stud angle brackets 34 and a rectangular frame 35 is built by horizontal and vertical glazing spacers 36 which are secured to this respective studs 30 and 10 but extend beyond the edges thereof so as to bridge the full width of the partition
20 including the thickness of two plasterboard panels 20 and the stud (10 or 30) therebetween. A facing is provided by further cover strips or glazing channels 38.

A pane of glass 40 is mounted in the frame 35 by means of metal (e.g. aluminium) glazing beads 39 held by pairs of
25 spaced resilient metal glazing bead clips 42 secured at intervals along the horizontal and vertical glazing channels. For ease of construction the clips 42 are not fitted with screws or bolts but have tabs 44 pressed out of the metal into holes in the glazing channels.

The metal glazing beads themselves are generally C-shaped in cross-section and fit over the clips as shown, to define there-between a space receiving a peripheral edge portion of a pane of glass. If desired a P.V.C. sealant possibly in the form of a tape 5 commonly referred to as a self-extinguishing tape (to ASTM.D-1692), may be used to seal between the glazing beads and the glass. The sealant will deteriorate or disintegrate in the event of a fire but the pane itself will remain intact hence preserving the fire resistant properties of the partition.

CLAIMS:

1. A building or partitioning system of the kind including door sets or glazing ponds comprising one or more panes of glass and a frame for each of the said panes characterised by spaced pairs of resilient metal clips (42) arranged at intervals around each frame (35) and metal glazing beads (39) which fit over the clips to define a channel for receiving a peripheral edge portion of the pane of glass (40).
5
2. A system according to Claim 1 characterised in that each resilient clip (42) is secured to the frame (35) by tabs (44) which are pressed from the metal forming the clip (42).
10
3. A system according to Claim 1 or Claim 2 wherein the glazing beads (39) are generally C-shaped in cross-section, and fit over the clips (42) such that the clips extend into the interior of the glazing beads (39).
4. A system according to any one of Claims 1 to 3 characterised in that a sealant is applied between the glazing beads and the pane of glass.
15
5. A building or partitioning system constructed and arranged substantially as hereinbefore described with reference to and as illustrated in the accompanying drawings.
20

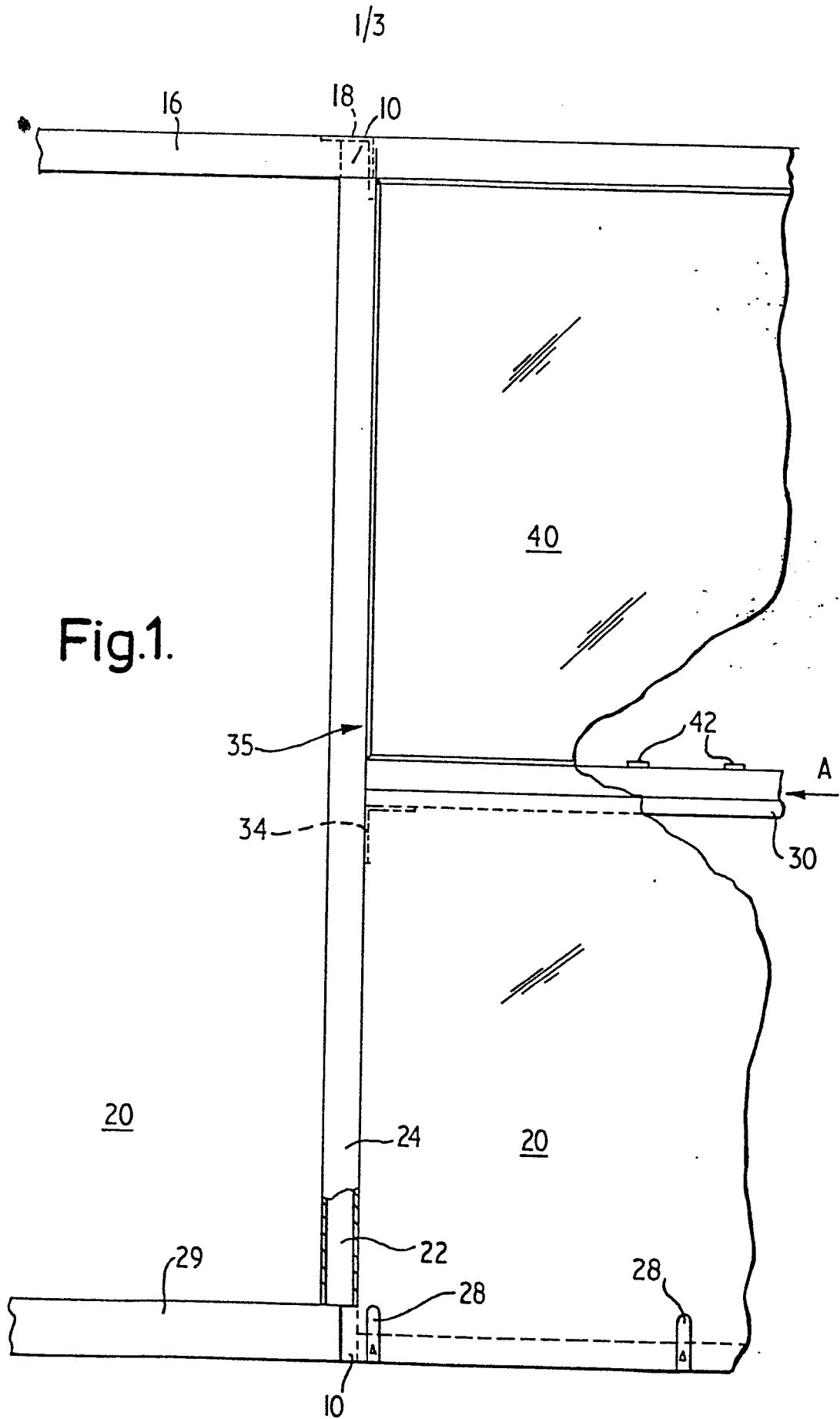


Fig.2.

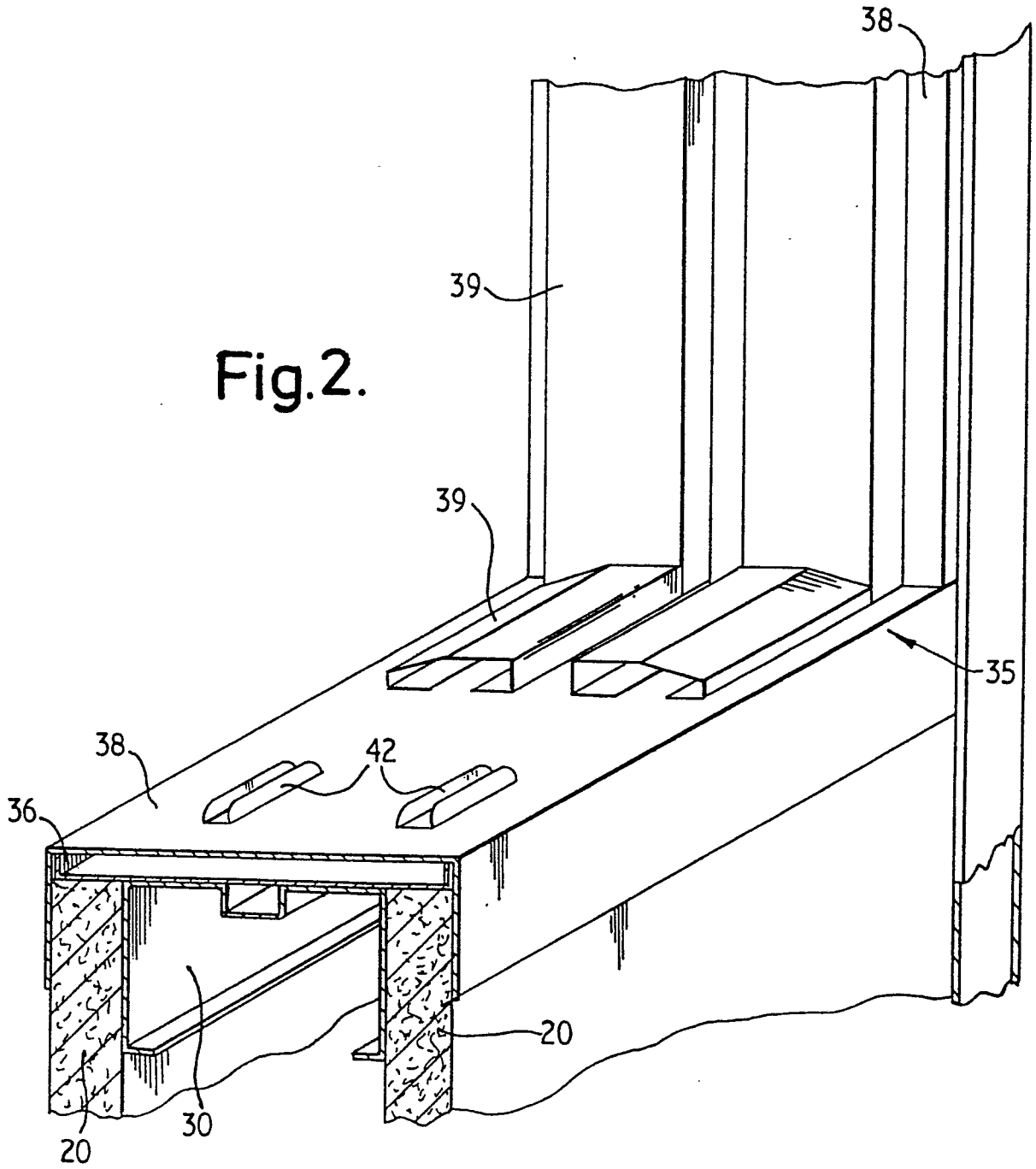
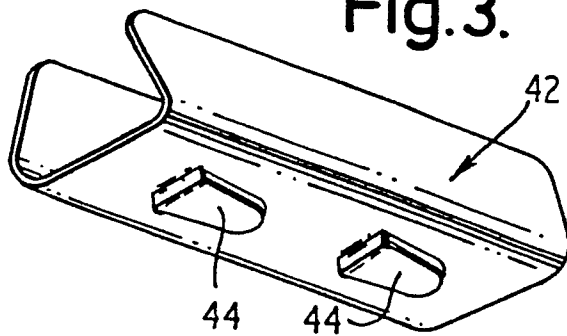


Fig.3.



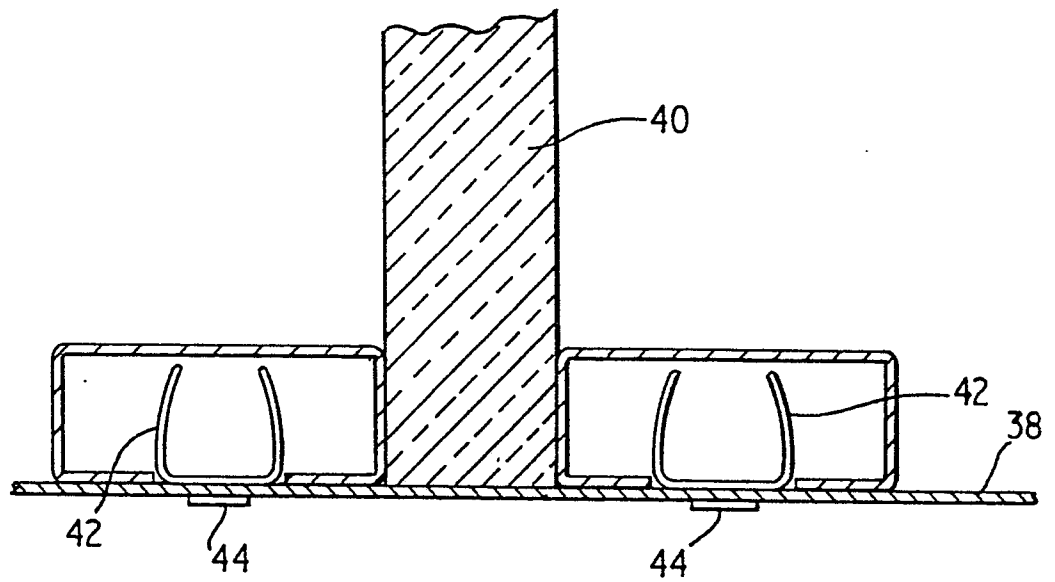


Fig.4.



DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int. Cl. 3)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	FR - A1 - 2 325 795 (SOCIETE EUROPE ISOLATION S.A.R.L.) * complete document *	1,3	E 06 B 3/60 E 04 B 2/74 E 06 B 5/16
X	DE - C - 1 073 721 (ALUMINIUM-WALZWERKE SINGEN GMBH) * columns 2, 3; fig. 2 *	1,2,3	
X	DE - B - 1 683 673 (VAW LEICHTMETALLWERKE GMBH) * claim; fig. 3 *	1,3,4	TECHNICAL FIELDS SEARCHED (Int. Cl. 3) E 04 B 2/74 E 06 B 3/60 E 06 B 5/16
X	DE - A - 1 509 528 (KAETHER & CO, GMBH) * page 4, paragraph 1; fig. 1 *	1,3,4	E 04 B 2/74 E 06 B 3/60 E 06 B 5/16
X	DE - U - 1 889 577 (W. HARTMANN & CO.) * claim; fig. 1 *	1,2,3,4	
	FR - A - 765 935 (ETABLISSEMENTS MALATRE & TONNELIER) * page 2, lines 22 to 26; fig. 3 *	1,2,3	
	DE - B1 - 2 746 243 (VEREINIGTE GLASWERKE GMBH) * column 2, line 40 to column 3, line 47; fig. 1 *	1,2,3	CATEGORY OF CITED DOCUMENTS X: particularly relevant A: technological background O: non-written disclosure P: intermediate document T: theory or principle underlying the invention E: conflicting application D: document cited in the application L: citation for other reasons
X	The present search report has been drawn up for all claims		&: member of the same patent family, corresponding document
Place of search		Date of completion of the search	Examiner
Berlin		18-02-1980	WUNDERLICH