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(54) **Extension to an existing building**

Erweiterung an einem bestehenden Gebäude

Extension à un bâtiment existant

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EP 1 601 839 B1

Description

[0001] This invention concerns a base for a building structure and building structures on such a base.

[0002] GB 2171427A describes an extension for an existing building which may be adapted to be used as a kitchen or bathroom where services are required. The extension comprises a base, and corner posts 2, 3 supporting a roof. The walls may consist of an inner tile panel and an outer wall panel which are fixed to one another in spaced apart relationship. The wall panel may include thermal insulation and a vapour barrier. A part of the tile panel can be replaced by fittings such as a sink. Plumbing and electrical services may be secured in the space between the two panels in such a way that the vapour barrier is not perforated. The extension is free standing. There is a flexible weatherproof connection with the existing building.

[0003] Conservatories are popular forms of extensions to existing buildings as well as becoming increasingly provided as part of a new house. However, there are various conditions attached to the erection of a conservatory regarding size and the need for building regulations approval in certain circumstances. One such condition is that building regulations approval is always needed unless existing doors in the wall against which the conservatory is erected are kept in place.

[0004] Furthermore, many houses may not be able to accommodate an add-on conservatory because of space restrictions, although the benefits of a conservatory type add-on structure may be desirable.

[0005] An object of this invention is to facilitate the provision of an extension to a house or other suitable building having conservatory type properties but for which building regulations approval may be readily obtained.

[0006] According to a first aspect of the invention there is provided an extension to an existing building, which extension is a glazed structure, with no closure between the extension and the existing building, wherein the extension is erected on a base comprising a plastics shutter having a. base and sides to be filled with concrete or the like, and wherein the shutter has an outward lip that on one side, intended for abutting the existing building, is deeper thin on the other sides of the shutter to provide a damp proof course at said one side.

[0007] According to a second aspect of the invention there is provided a method of providing an extension to an existing building, which extension is a glazed structure, with no closure between the extension and the existing building comprising providing a base for the extension by filling a plastics shutter having a base and sides with concrete or the like and erecting said extension on the base, wherein the shutter has an outward lip that on one side, intended for abutting the existing building, is deeper than on the other sides of the shutter to provide a damp proof course of said one side.

[0008] The shutter will usually be rectangular in section but other shapes may be provided suitable for different shapes of building structures to be erected on the base. Preferably the base of the shutter has at least one raised portion to reduce the amount of concrete required to fill the shutter.

[0009] The shutter has an outwards lip. On one side the lip is deeper than on the other sides of the shutter in order to provide an integral damp proof course, which can be integrated into brickwork of the existing building against which the base is situated. The lip of the shutter may also be used as a level for tamping down the concrete.

[0010] The base may be provided with insulating material either internally or externally thereof. The insulating material may be bonded to the surface of the shutter. Suitable insulating material for use in the invention may include foamed plastics material, such as of polystyrene.

[0011] The base may also have means for locating and/or attaching side frames, such as window frames thereon. Such means may be in the form of clips that connect with the side frames. The base of the invention may be especially suitable for use with small glazed extensions to existing rooms. Such extensions. are ideally glazed structures that are not necessarily classed as conservatories. When a conservatory is to be added to a house, it is usually against a wall that has an opening closed by means of patio doors or French windows. These closures are left in place otherwise building regulations approval is required even if the conservatory is less than $35m^2$. However, for a smaller structure, where advanced glazing systems are used, building regulations approval is more easily obtainable and so the patio doors or French windows can be removed to create with the smaller structure a light extension to a room without taking up garden space that would otherwise be occupied by a conservatory.

[0012] This invention will now be further described, by way of example only, with reference to the accompanying drawings, in which:

Figure 1 is a section through a base for an extension to a house;
Figure 2 shows the base from above; and
Figure 3 is a side view of a typical extension to be erected on the base of Figures 1 and 2;
Figure 4 is a plan view from above of the extension of Figure 3;
Figure 5 is an opposite side view of the extension of Figure 3;
Figure 6 is a perspective view from one side of the extension of Figure 3;
Figure 7 is a perspective view from the opposite side of the extension of Figure 3; and
Figure 8 is a front view of the extension of Figure 3.

[0013] Referring to Figures 1 and 2 of the accompanying drawings, a base 10 for an extension to a house or other building 12 comprises a plastics profiled shutter 14 of rectangular section. The shutter 14 has a base 16

and sides 18. The base 16 includes a raised central portion 20 and the sides 18 have a lip 22. The lip 22 is narrow around three sides of the base but is deeper along the side to abut the house, in order to provide an integral damp proof course 22A. The base is particularly suitable for a small glazed extension to a room with patio doors or French windows.

[0014] The shutter is either lined with insulating material 24, such as of foamed plastics material, especially polystyrene, or is surrounded by such insulating material. The insulating material will be bonded to the shutter. The shutter may be supplied with the insulating material already bonded to it. To complete the base, the shutter is filled with concrete 26 up to the lip, which provides an edge for tamping the concrete. The surface of the concrete may be given a trowel finish.

[0015] To create the base 10, ground is excavated to a depth greater than that required for the base and sand and cement or levelling grout 28 laid in the excavation to provide a level surface for the shutter 14. Insulating material 24 can form the top surface or may be added to the inside of the shutter. The shutter 14 is then positioned on the grout surface with its damp proof course lip fed in between the appropriate brick courses and its level checked before concrete is poured into the shutter. Finally, any space around the shutter can be back filled with stone chippings and sand 29.

[0016] Side frames for, for example, a glazed extension structure 40 of the type shown in Figures 3 to 8 are then erected on the base followed by laying of a flooring surface on the base. The shutter may be provided with means for location and/or attachment of the side frames, such as clips. The structure of Figure 3 is based on an aluminium frame with uPVC cladding, although other structures of different shapes or materials may be erected on the base. In Figure 3 the structure 40 is intended to provide a small extension to a room with its patio doors or French windows removed to create a light extension to the room without having to erect a full conservatory.

[0017] The structure 40 has front wall 42, side walls 44 and a roof 46. The side walls are angled outwardly from the front wall. The roof has is hipped and is formed of three triangular glazed sections. One of the side walls 44 includes a door 48, although the door could be in the other side wall or even the front wall 42. If in the front wall, the door could be in the form of a patio door or French windows.

[0018] The structure 40 is erected against a wall with an opening 48 therein, which originally may have been closed by means of patio doors or French windows now removed. Not shown is flashing to seal the roof to the existing wall nor is a trim around the base.

Claims

1. An extension (40) to an existing building (12), which extension is a glazed structure, with no closure between the extension and the existing building, wherein the extension is erected on a base (10) comprising a plastics shutter (14) having a base (16) and sides (18) to be filled with concrete or the like (26), and wherein the shutter has an outward lip (22) that on one side, intended for abutting the existing building, is deeper than on the other sides of the shutter to provide a damp proof course (22A) at said one side.

2. An extension as claimed in claim 1 **characterised in that** the base (10) is rectangular.

3. An extension as claimed in claim 1 or 2, **characterised in that** the base (16) of the shutter (14) has at least one raised portion (20) to reduce the amount of concrete required to fill the shutter.

4. An extension as claimed in claim 1, 2 or 3, **characterised in that** the shutter (14) has insulating material (24) internally thereof.

5. An extension as claimed in any one of claims 1 to 4, **characterised in that** the shutter (14) has insulating material (24) externally thereof.

6. An extension as claimed in claim 4 or 5, **characterised in that** the insulating material (24) is bonded to the surface of the shutter (14).

7. An extension as claimed in claim 4, 5 or 6, **characterised in that** the insulating material (24) is of foamed plastics material.

8. An extension as claimed in claim 7, **characterised in that** the insulating material (24) is of polystyrene.

9. An extension as claimed in any one of claims 1 to 8, **characterised in that** the shutter (14) has means for locating and/or attaching side frames (42, 44) of a building structure.

10. An extension as claimed in claim 9, **characterised in that** said means is in the form of clips that connect with the side frames (42, 44).

11. A method of providing an extension (40) to an existing building (12), which extension is a glazed structure, with no closure between the extension and the existing building comprising providing a base (10) for the extension by filling a plastics shutter (14) having a base and sides with concrete or the like (26) and erecting said extension on the base, wherein the shutter has an outward lip (22) that on one side, intended for abutting the existing building, is deeper than on the other sides of the shutter to provide a damp proof course (22A) at said one side.

12. A method as claimed in claim 11, **characterised in**

the base (10) is rectangular.

13. A method as claimed in claim 11 or 12, **characterised in that** the base (16) of the shutter (14) has at least one raised portion (20) to reduce the amount of concrete (26) required to fill the shutter.

14. A method as claimed in claim 11, 12 or 13, **characterised in that** the shutter (14) has insulating material (24) internally thereof.

15. A method as claimed in any one of claims 11 to 14, **characterised in that** the shutter (14) has insulating material (24) externally thereof.

16. A method as claimed in claim 14 or 15, wherein the insulating material (24) is bonded to the surface of the shutter (14).

17. A method as claimed in claim 14, 15 or 16, **characterised in that** the insulating material (24) is of foamed plastics material.

18. A method as claimed in claim 17, **characterised in that** the insulating material (24) is of polystyrene.

19. A method as claimed in any one of claims 11 to 18, **characterised in that** the shutter (14) has means for locating an/or attaching side frames (42, 44) of the building structure (40).

20. A method as claimed in claim 19, **characterised in that** said means is in the form of clips that connect with the side frames (42, 44).

Patentansprüche

1. Anbau (40) für ein bestehendes Gebäude (12), wobei der Anbau eine verglaste Struktur ohne Verschluss zwischen dem Anbau und dem bestehenden Gebäude ist, wobei der Anbau auf einer Basis (10) errichtet ist, welche eine Kunststoffverschalung (14) mit einer Basis (16) und Seiten (18) umfasst, welche mit Beton oder dergleichen (26) gefüllt wird, und wobei die Verschalung eine nach aussen gerichtete Lippe (22) aufweist, welche auf einer Seite, welche dafür vorgesehen ist, um an das bestehende Gebäude anzugrenzen, tiefer ist, als an den anderen Seiten der Verschalung, um eine feuchtigkeitsbeständige Isolierschicht (22A) an der einen Seite vorzusehen.

2. Anbau nach Anspruch 1, **dadurch gekennzeichnet, dass** die Basis (10) rechteckförmig ist.

3. Anbau nach Anspruch 1 oder 2, **dadurch gekennzeichnet, dass** die Basis (16) der Verschalung (14) zumindest einen erhöhten Bereich (20) aufweist, um die Menge an notwendigem Beton zu verringern, um die Verschalung zu füllen.

4. Anbau nach Anspruch 1, 2 oder 3, **dadurch gekennzeichnet, dass** die Verschalung (14) in ihrem Inneren ein Isoliermaterial (24) aufweist.

5. Anbau nach einem der Ansprüche 1 bis 4, **dadurch gekennzeichnet, dass** die Verschalung (14) äusserlich Isoliermaterial (24) aufweist.

6. Anbau nach Anspruch 4 oder 5, **dadurch gekennzeichnet, dass** das Isoliermaterial (24) auf die Oberfläche der Verschalung (14) gebondet wird.

7. Anbau nach Anspruch 4, 5 oder 6, **dadurch gekennzeichnet, dass** das Isoliermaterial (24) Schaumstoffmaterial ist.

8. Anbau nach Anspruch 7, **dadurch gekennzeichnet, dass** das Isoliermaterial (24) aus Polystyren ist.

9. Anbau anch einem der Ansprüche 1 bis 8, **dadurch gekennzeichnet, dass** die Verschalung (14) Einrichtungen zum Anordnen und/oder Befestigen von Seitenrahmen (42, 44) einer Baustruktur aufweist.

10. Anbau nach Anspruch 9, **dadurch gekennzeichnet, dass** die Einrichtungen in der Form von Klipsen ausgebildet sind, welche mit den Seitenrahmen (42, 44) verbunden sind.

11. Verfahren zum Vorsehen eines Anbaus (40) für ein bestehendes Gebäude (12), wobei der Anbau eine verglaste Struktur ohne Verschluss zwischen dem Anbau und dem bestehenden Gebäude ist und das bestehende Gebäude das Vorsehen einer Basis (10) für den Anbau durch Füllen einer Kunststoffverschalung (14) mit Beton oder dergleichen (26) umfasst und das Errichten des Anbaus auf der Basis, wobei die Verschalung eine nach aussen gerichtete Lippe (22) aufweist, welche auf einer Seite, welche dafür vorgesehen ist, um an das bestehende Gebäude anzugrenzen, tiefer ist, als an den anderen Seiten der Verschalung, um eine feuchtigkeitsbeständige Isolierschicht (22A) an der einen Seite vorzusehen.

12. Verfahren nach Anspruch 11, **dadurch gekennzeichnet, dass** die Bais (10) recheckförmig ist.

13. Anbau nach Anspruch 11 oder 12, **dadurch gekennzeichnet, dass** die Basis (16) der Verschalung (14) zumindest einen erhöhten Bereich (20) aufweist, um die Menge an notwendigem Beton zu verringern, um die Verschalung zu füllen.

14. Anbau nach Anspruch 11, 12 oder 13, **dadurch gekennzeichnet, dass** die Verschalung (14) in ihrem

Inneren ein Isoliermaterial (24) aufweist.

15. Anbau nach einem der Ansprüche 11 bis 14, **dadurch gekennzeichnet, dass** die Verschalung (14) äusserlich Isoliermaterial (24) aufweist.

16. Anbau nach Anspruch 14 oder 15, **dadurch gekennzeichnet, dass** das Isoliermaterial (24) auf die Oberfläche der Verschalung (14) gebondet wird.

17. Anbau nach Anspruch 14, 15 oder 16, **dadurch gekennzeichnet, dass** das Isoliermaterial (24) Schaumstoffmaterial ist.

18. Anbau nach Anspruch 17, **dadurch gekennzeichnet, dass** das Isoliermaterial (24) aus Polystyren ist.

19. Anbau anch einem der Ansprüche 11 bis18, **dadurch gekennzeichnet, dass** die Verschalung (14) Einrichtungen zum Anordnen und/oder Befestigen von Seitenrahmen (42, 44) einer Baustruktur aufweist.

20. Anbau nach Anspruch 19, **dadurch gekennzeichnet, dass** die Einrichtungen in der Form von Klipsen ausgebildet sind, welche mit den Seitenrahmen (42, 44) verbunden sind.

Revendications

1. Extension (40) à un bâtiment existant (12), laquelle extension est une structure vitrée, dépourvue de fermeture entre l'extension et le bâtiment existant, dans laquelle l'extension est érigée sur une base (10) comprenant un coffrage en matière plastique (14) comportant une base (16) et des côtés (18), destiné être rempli de béton ou similaire (26), et dans laquelle le coffrage comporte une lèvre (22) dirigée vers l'extérieur et qui sur un côté, destiné à venir en butée contre le bâtiment existant, est plus profonde que sur les autres côtés du coffrage de manière à obtenir une chape d'étanchéité (22A) sur ledit côté.

2. Extension selon la revendication 1, **caractérisée par le fait que** la base (10) est rectangulaire.

3. Extension selon la revendication 1 ou 2, **caractérisée par le fait que** la base (16) du coffrage (14) comporte au moins une partie surélevée (20) de manière à réduire la quantité de béton nécessaire au remplissage du coffrage.

4. Extension selon la revendication 1, 2 ou 3, **caractérisée par le fait que** le coffrage (14) comporte du matériau isolant (24) disposé à l'intérieur de celui-ci.

5. Extension selon l'une quelconque des revendications 1 à 4, **caractérisée par le fait que** le coffrage (14) comporte du matériau isolant (24) disposé à l'extérieur de celui-ci.

6. Extension selon la revendication 4 ou 5, **caractérisée par le fait que** le matériau isolant (24) est collé sur la surface du coffrage (14).

7. Extension selon la revendication 4, 5 ou 6, **caractérisée par le fait que** le matériau isolant (24) est une mousse en matière plastique.

8. Extension selon la revendication 7, **caractérisée par le fait que** le matériau isolant (24) est du polystyrène.

9. Extension selon l'une quelconque des revendications 1 à 8, **caractérisée par le fait que** le coffrage (14) comporte des moyens de positionnement et/ou de fixation de cadres latéraux (42, 44) de la structure de construction.

10. Extension selon la revendication 9, **caractérisée par le fait que** lesdits moyens sont sous forme de crampons qui se connectent aux cadres latéraux (42, 44).

11. Procédé d'aménagement d'une extension (40) à un bâtiment existant (12), laquelle extension est une structure vitrée dépourvue de fermeture entre l'extension et le bâtiment existant, comprenant l'aménagement d'une base (10) pour l'extension par remplissage avec du béton ou similaire (26) d'un coffrage en matière plastique (14) comportant une base et des côtés, et l'érection de ladite extension sur la base, dans lequel le coffrage comporte une lèvre (22) dirigée vers l'extérieur et qui sur un côté, destiné à venir en butée contre le bâtiment existant, est plus profonde que sur les autres côtés du coffrage de manière à obtenir une chape d'étanchéité (22A) sur ledit côté.

12. Procédé selon la revendication 11, **caractérisé par le fait que** la base (10) est rectangulaire.

13. Procédé selon la revendication 11 ou 12, **caractérisé par le fait que** la base (16) du coffrage (14) comporte au moins une partie surélevée (20) de manière à réduire la quantité de béton nécessaire au remplissage du coffrage.

14. Procédé selon la revendication 11, 12 ou 13, **caractérisé par le fait que** le coffrage (14) comporte du matériau isolant (24) disposé à l'intérieur de celui-ci.

15. Procédé selon l'une quelconque des revendications 11 à 14, **caractérisé par le fait que** le coffrage (14) comporte du matériau isolant (24) disposé à l'exté-

rieur de celui-ci.

16. Procédé selon la revendication 14 ou 15, **caractérisé par le fait que** le matériau isolant (24) est collé sur la surface du coffrage (14).

17. Procédé selon la revendication 14, 15 ou 16, **caractérisé par le fait que** le matériau isolant (24) est une mousse en matière plastique.

18. Procédé selon la revendication 17, **caractérisé par le fait que** le matériau isolant (24) est du polystyrène.

19. Procédé selon l'une quelconque des revendications 11 à 18, **caractérisé par le fait que** le coffrage (14) comporte des moyens de positionnement et/ou de fixation de cadres latéraux (42, 44) de la structure de construction.

20. Procédé selon la revendication 19, **caractérisé par le fait que** lesdits moyens sont sous forme de crampons qui se connectent aux cadres latéraux (42, 44).

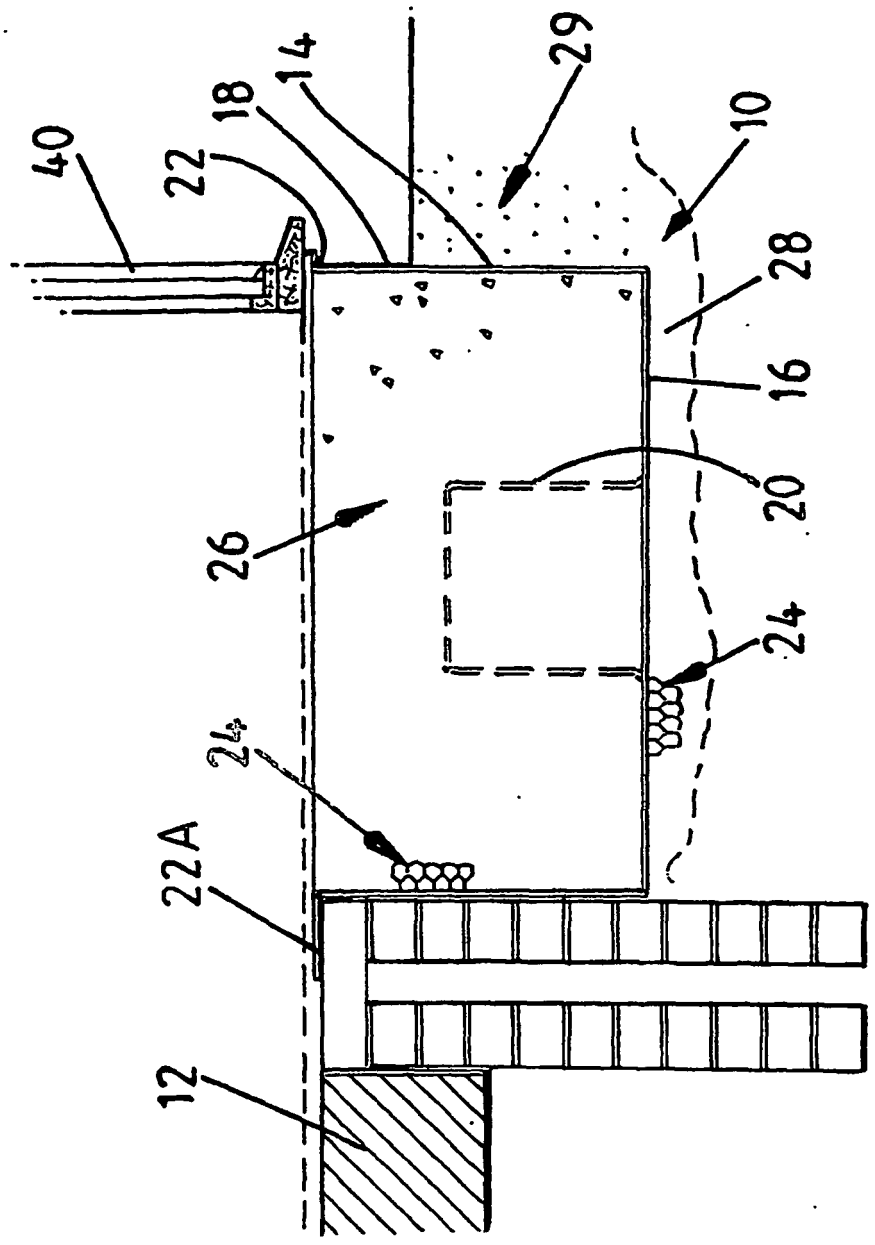


FIG.1

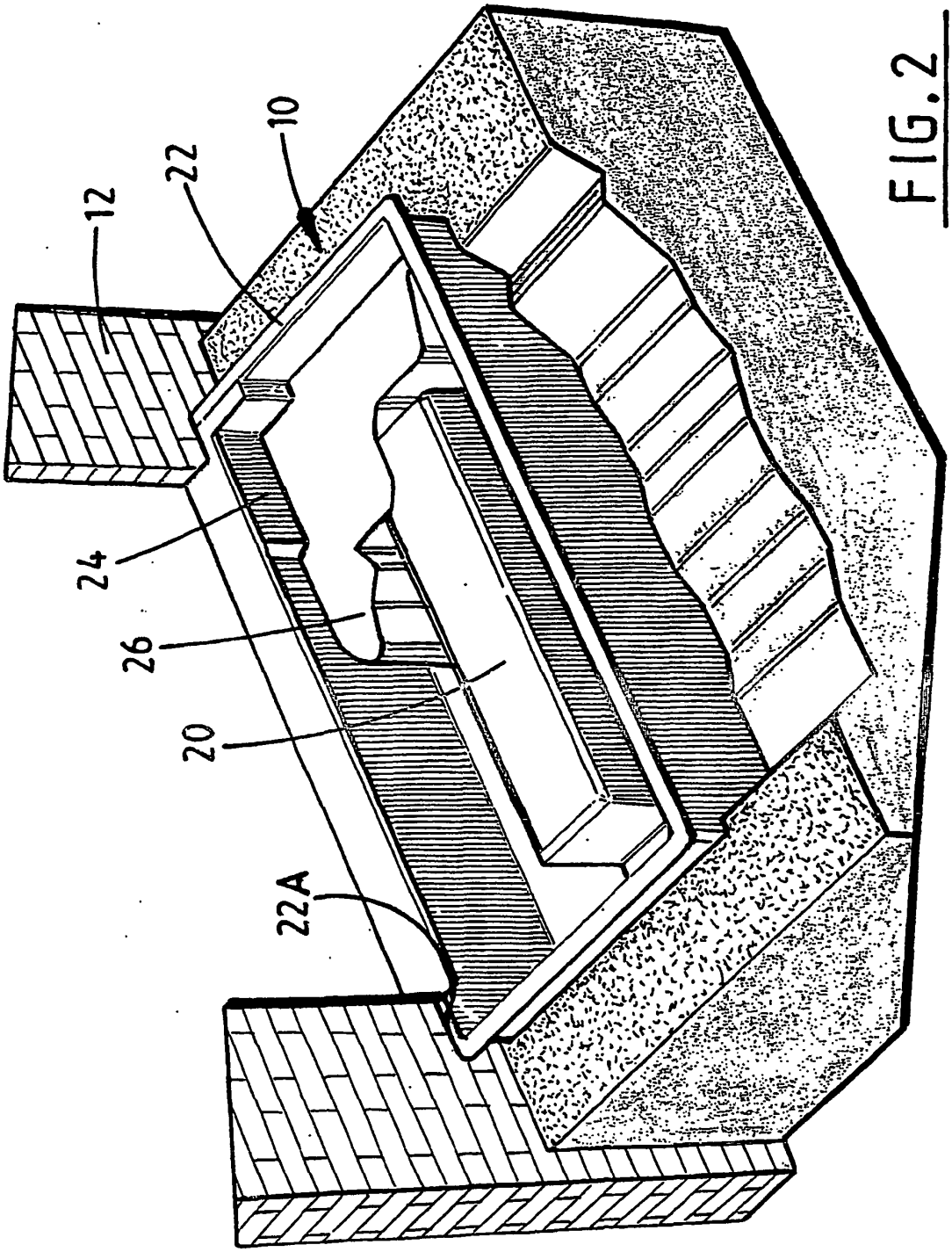


FIG.2

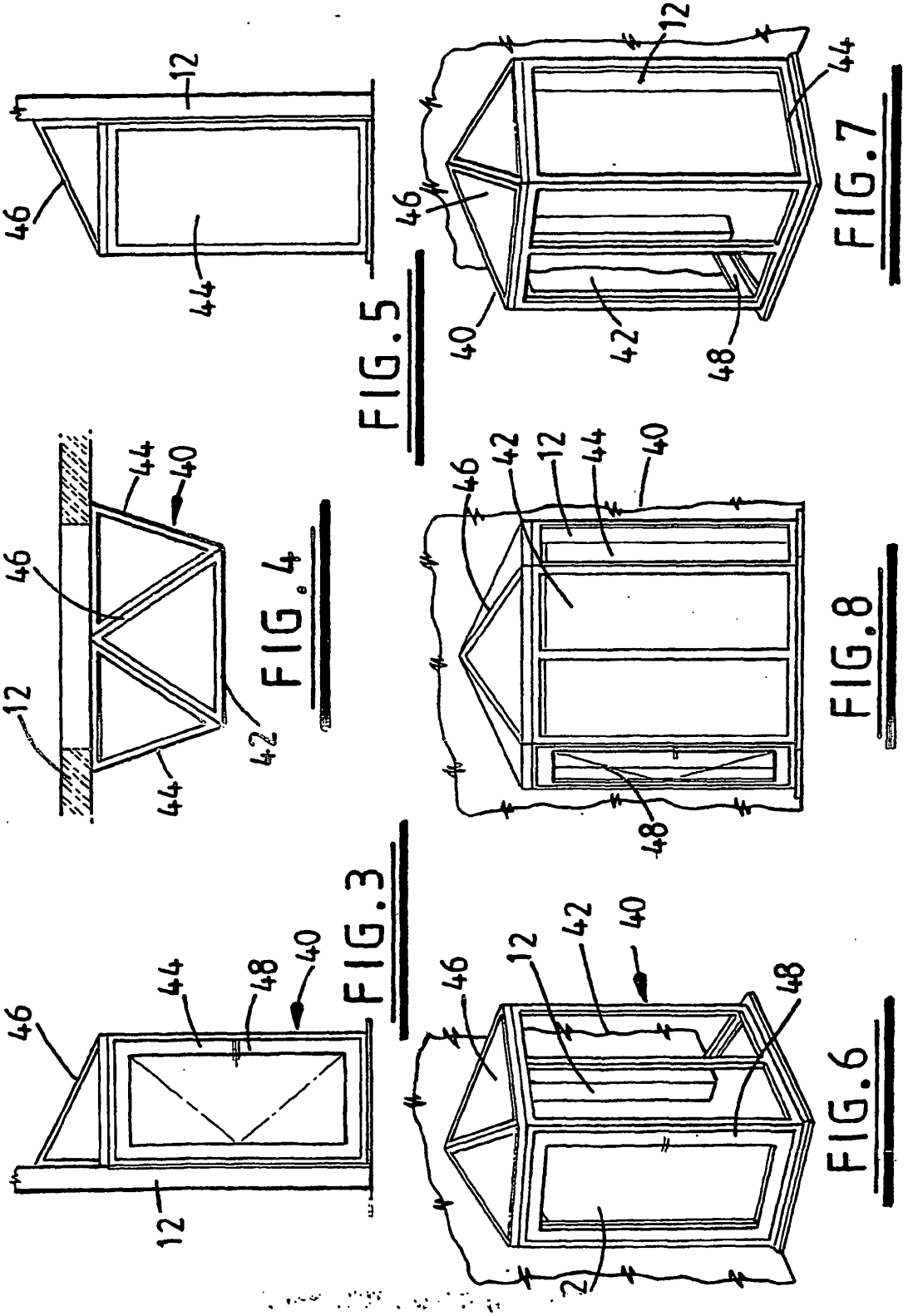


FIG.3

FIG.4

FIG.5

FIG.6

FIG.7

FIG.8