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(11) **EP 1 090 724 A1**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
11.04.2001 Bulletin 2001/15

(51) Int Cl.7: **B28B 7/34**

(21) Application number: **99119915.9**

(22) Date of filing: **08.10.1999**

(84) Designated Contracting States:
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE**
Designated Extension States:
AL LT LV MK RO SI

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(54) **Method of making a hollow building block**

(57) A method of making a hollow building block has a step of suspending a thermoplastic resin foam (1) in a mold (2), a step of filling concrete (3) in the mold (2), a step of solidifying the concrete (3), a step of heating

the mold (2) under a high pressure and a high temperature to form a polycondensate therein, and a step of forming a hollow building block having a closed hollow interior.

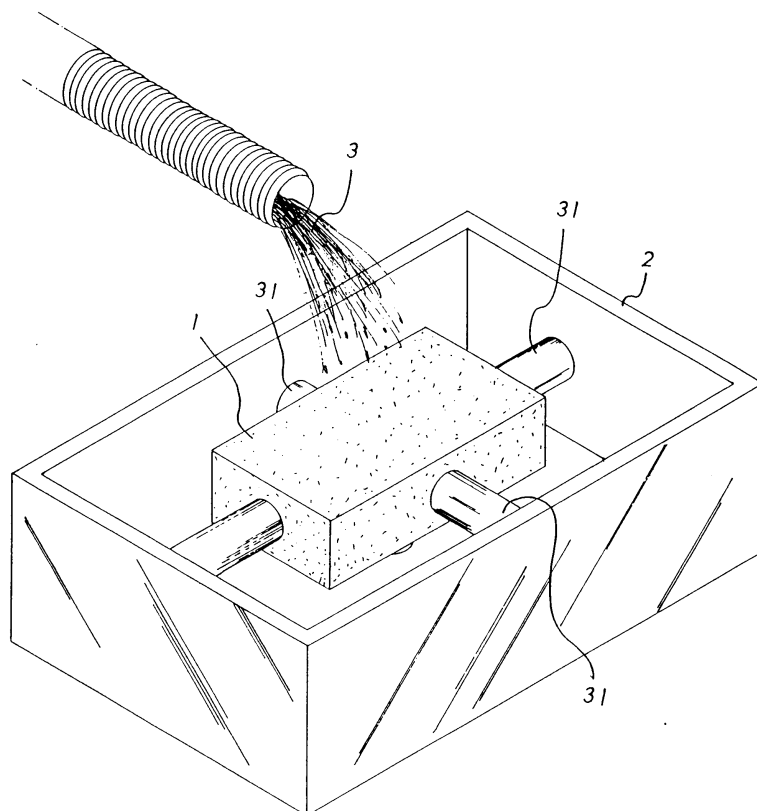


FIG. 3

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Description**BACKGROUND OF THE INVENTION**

[0001] The present invention relates to a method of making a building block. More particularly, the present invention relates to a method of making a hollow building block.

[0002] An expandable polystyrene is used as a building block to divide rooms in a building. However, the expandable polystyrene is inflammable. When the expandable polystyrene is on fire, the expandable polystyrene will produce toxic gas.

SUMMARY OF THE INVENTION

[0003] An object of the present invention is to provide a method of making a hollow building block in order to form a building block having a closed hollow interior.

[0004] Another object of the present invention is to provide a method of making a hollow building block which provides a step of heating a thermoplastic resin foam and a concrete in a mold in order to form a polycondensate. After the polycondensate is formed, the thermoplastic resin foam disappears. The polycondensate is nonflammable.

BRIEF DESCRIPTION OF THE DRAWINGS**[0005]**

FIG. 1 is a flow diagram of a method of making a hollow building block of a preferred embodiment in accordance with the present invention;

FIG. 2 is a sectional view of a hollow building block of a preferred embodiment in accordance with the present invention;

FIG. 3 is a perspective schematic view illustrating a thermoplastic resin foam is suspended in a mold of a preferred embodiment in accordance with the present invention; and

FIG. 4 is a perspective schematic view illustrating a thermoplastic resin foam is suspended in a mold of another preferred embodiment in accordance with the present invention.

DETAILED DESCRIPTION OF THE INVENTION

[0006] Referring to FIGS. 1 to 3, a method of making a hollow building block comprises a step of disposing a thermoplastic resin foam (1) in a mold (2), and the method comprises the following steps:

Step 101: Suspend a thermoplastic resin foam 1 in a mold 2.

Step 102: Fill concrete 3 in the mold 2.

Step 103: Solidify the concrete 3.

Step 104: Heat the mold 2 under a high pressure

and a high temperature to form a polycondensate therein.

Step 105: Form a hollow building block having a closed hollow interior.

[0007] It is an option to select the thermoplastic resin foam 1 as an expandable polystyrene.

[0008] Referring to FIG. 3 again, a plurality of concrete rods 31 are disposed between the mold 2 and the thermoplastic resin foam 1.

[0009] Referring to FIG. 4, a plurality of support posts 4 are disposed between the mold 2 and the thermoplastic resin foam 1.

[0010] The invention is not limited to the above embodiment but various modification thereof may be made. Further, various changes in form and detail may be made without departing from the scope of the invention.

Claims

1. A method of making a hollow building block comprising a step of disposing a thermoplastic resin foam (1) in a mold (2), characterized in that the method comprises the following steps:

suspend a thermoplastic resin foam (1) in a mold (2),
fill concrete (3) in the mold (2),
solidify the concrete (3),
heat the mold (2) under a high pressure and a high temperature to form a polycondensate therein, and
form a hollow building block having a closed hollow interior.

2. A method of making a hollow building block as claimed in claim 1, wherein a plurality of concrete rods (31) are disposed between the mold (2) and the thermoplastic resin foam (1).

3. A method of making a hollow building block as claimed in claim 1, wherein a plurality of support posts (4) are disposed between the mold (2) and the thermoplastic resin foam (1).

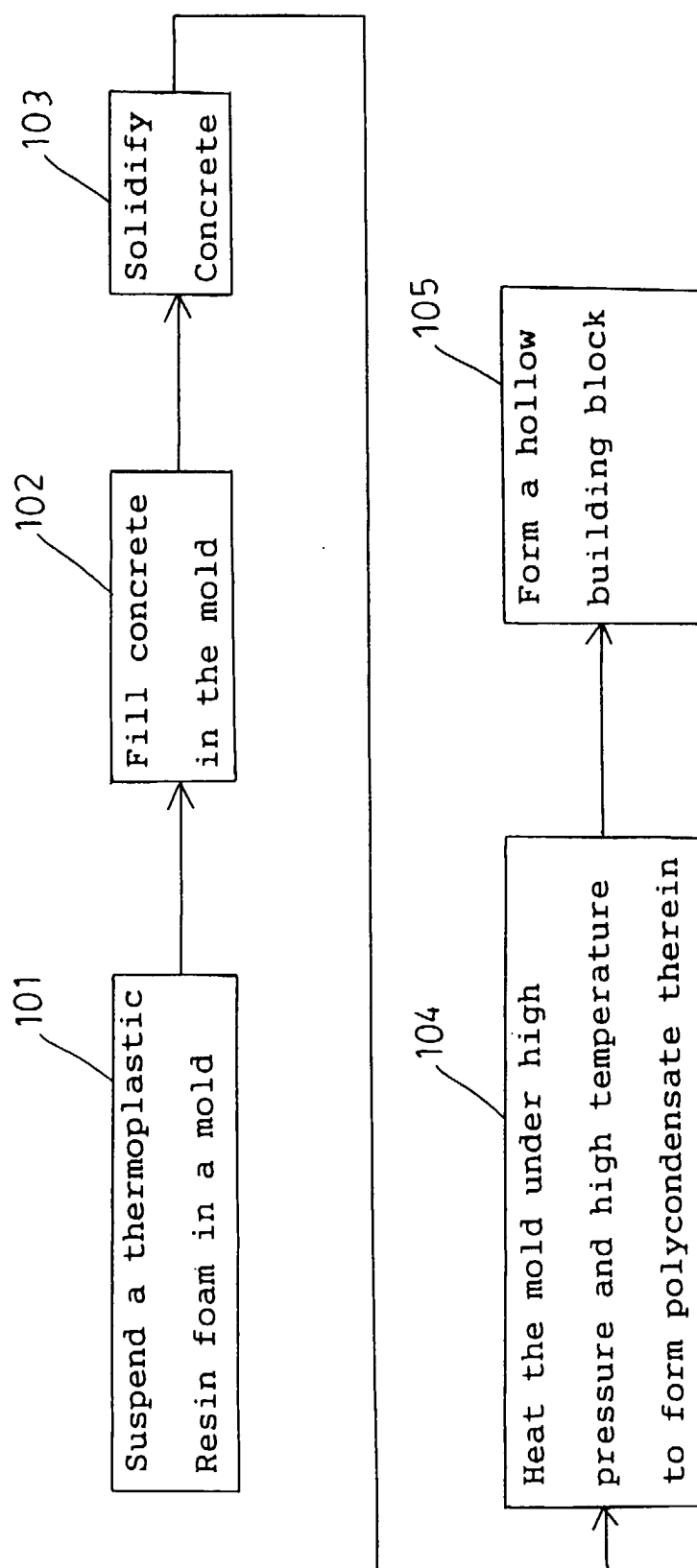


FIG. 1

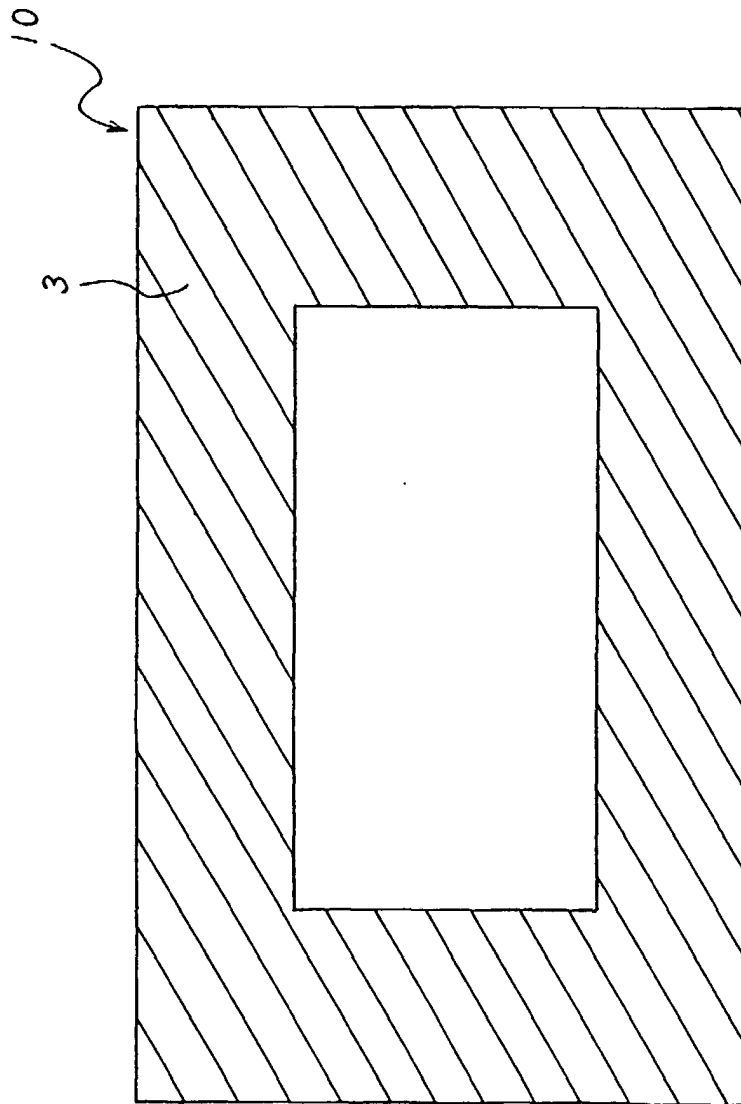


FIG. 2

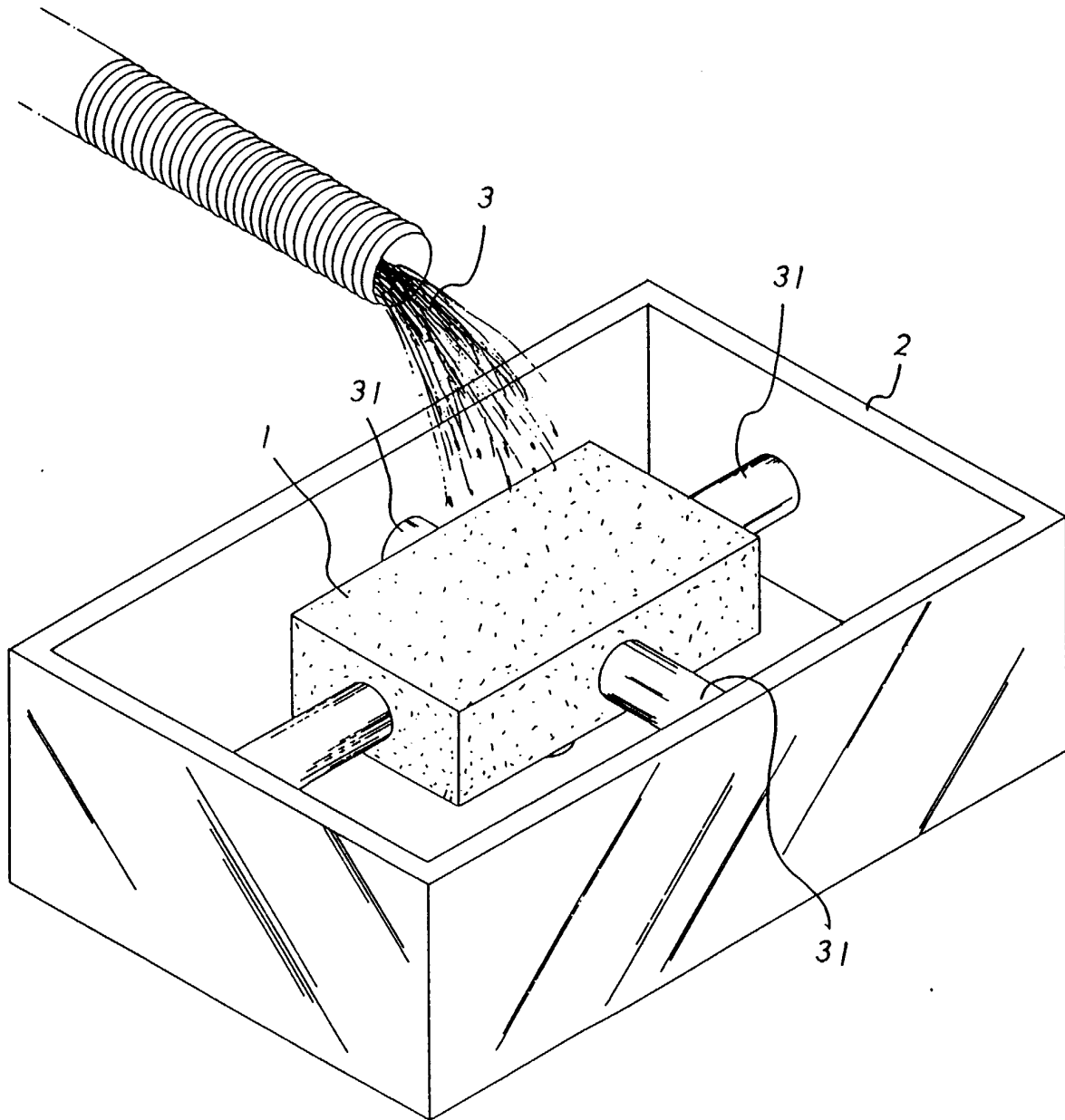


FIG. 3

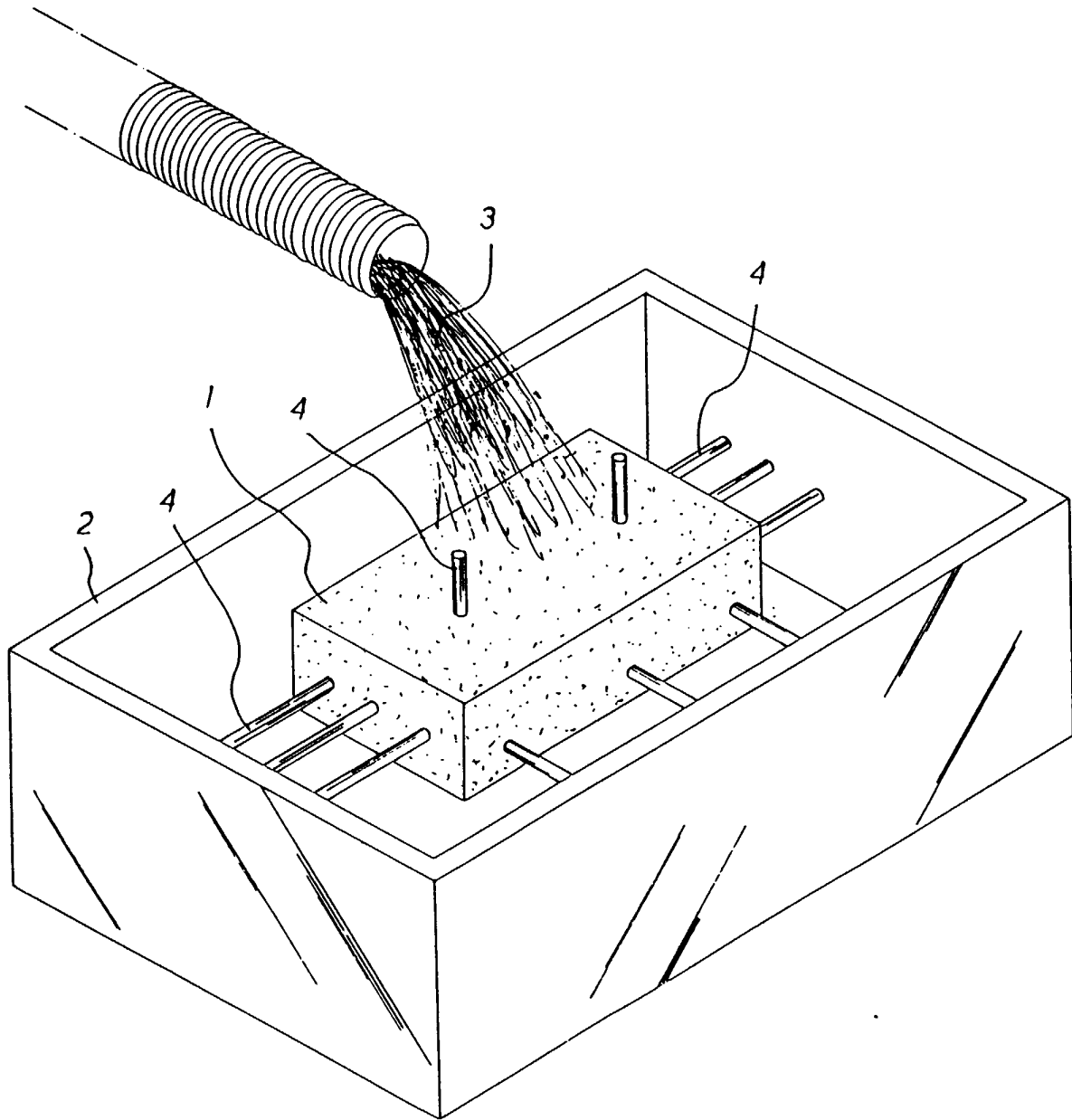


FIG. 4



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EUROPEAN SEARCH REPORT

Application Number
EP 99 11 9915

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Place of search THE HAGUE		Date of completion of the search 10 March 2000	Examiner Gourier, P
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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