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Remarks

Amended claims in accordance with Rule 137(2)

EPC.

#### (54) Suspended chimney

(57) The invention solves the problem of the suspended chimney. It is characterized by two transverse support plates, a bottom one ( $\underline{8}$ ) and an upper one ( $\underline{7}$ ), connected with each other, and the proper chimney with

insulation-ceramic layer  $(\underline{5},\underline{6})$  and a support layer  $(\underline{2})$ , while the upper transverse support plate  $(\underline{7})$  is connected with the ceiling with a stabilization channel  $(\underline{10})$ .

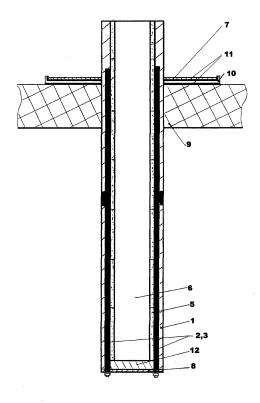


FIG.1

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**[0001]** The object of the invention is a suspended chimney.

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**[0002]** There are known chimneys which are made of brick on a foundation of a building by its internal wall or in corners of the walls.

Such chimneys project above the surface of the roof.

**[0003]** A multilayered chimney known from a Inventions FR 2791374, DE 4324522 and PL197662, consists of: heat resistant pipe, external casing, a layer made of ceramic fiber, separating layer and a layer made of mineral wool located coaxially over side surfaces of cylinders.

**[0004]** The passage through interstorey floors consists of a fire resistant plate, a layer made of mineral wool, a separating layer, a ceramic wool layer, a heat resistant pipe and a passage support.

**[0005]** The essence of the invention comprises a suspended chimney containing a ceramic insert covered with insulation wool, characterized by two transverse support plates, a bottom one and an upper one, connected with each other, and the proper chimney has an insulation-ceramic layer and a support layer, while the upper transverse support plate is connected with the ceiling by a stabilization channel.

The stabilization channel has a dilatation - compensating material.

The proper chimney is mounted on the bottom support plate.

The proper chimney is mounted on a bottom support plate with an insulation-ceramic layer.

The bearing connecting both support plates has a stiffening reinforcement. Between the bottom support plate and the top of the proper chimney established on it, there is an intermediate closing layer.

The dilatation-compensating material is on the outer and inner side of the stabilization channel.

**[0006]** The suspended chimney, according to the invention, allows for foundation of the fire place in any place inside the building. It enables to install panoramic-four rail fireplace inserts therein.

The solution of a suspended chimney according to the invention enables its suspension over the fireplace insert and its fixing on the upper support plate.

**[0007]** The object of the invention was visualized in the enclosed figure, and fig. 1 represents a cross section of the suspended chimney, fig.2 represents a suspended chimney in an exploding perspective view, fig. 3 represents a suspended chimney with the ceiling in an exploding perspective view.

**[0008]** A suspended chimney, according to the invention, consists of an outer layer  $\underline{1}$ , comprising a chimney hollow brick shielding the proper chimney with a support  $\underline{2}$  with reinforcement  $\underline{3}$  and a ceramic insulation layer  $\underline{4}$ . The ceramic - insulation layer has insulation wool  $\underline{5}$ , pref-

erably mineral wool and a ceramic insert 6.

The support  $\underline{2}$  connects two transverse support plates, the upper one  $\underline{7}$  and the bottom one  $\underline{8}$ .

The upper support plate <u>7</u> is connected with the ceiling <u>9</u> by means of a stabilizing channel <u>10</u>.

The stabilizing channel <u>10</u> over its whole surface is lined with a dilating-compensating material <u>11</u>.

The material <u>11</u> compensates all stresses and thermal expansion. Preferably, the dilatation - compensating material <u>11</u> is on the outer and inner side of the stabilizing channel <u>10</u>.

The proper chimney is mounted on the bottom support plate  $\underline{8}$  by an insulation-ceramic layer  $\underline{4}$ . There is a closing intermediate layer  $\underline{12}$  between the bottom support plate  $\underline{8}$  and the end of the proper chimney established on that plate  $\underline{8}$ 

#### Claims

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- 1. The suspended chimney containing a ceramic insert covered with insulation wool, **characterized by** two transverse support plates, a bottom one (8) and an upper one (7), connected with each other, and the proper chimney with insulation-ceramic layer (5,6) and a support layer (2), while the upper transverse support plate (7) is connected with the ceiling with a stabilization channel (10).
- 30 **2.** The chimney according to Claim 1, **characterized by** the stabilization channel (10) which has a dilatation compensating material (11)..
  - The chimney according to Claim 1, characterized by the proper chimney which is mounted on the bottom support plate (8)
  - **4.** The chimney according to Claim 1, **characterized by** the proper chimney, which is mounted on a bottom support plate (8) with an insulation-ceramic layer (5.6).
  - **5.** The chimney according to Claim 1, **characterized by** the bearing (2) connecting both support plates, which has a stiffening reinforcement (3).
  - 6. The chimney according to Claim 1 or 3 or 4, characterized by the fact that between the bottom support plate (8) and the end of the proper chimney established on it, there is an intermediate closing layer(12).
  - 7. The chimney according to Claim 1 or 2, **characterized by** the fact the dilatation- compensating material <u>11</u> is on the outer and inner side of the stabilization channel <u>10</u>.

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# Amended claims in accordance with Rule 137(2) EPC.

- 1. The suspended chimney containing many pipe ceramic inputs, put one onto another, of which each is wrapped with insulation wool making up the proper chimney, in which each single ceramic insert with insulation is placed in the inner opening of the external layer, making up in this way a single section which is put one onto another, makes up a multi-sectional whole, which is connected to the ceiling, while the bottom section has a closing support lower plate, characterized by a transverse upper support plate (7) adjacent to the stabilization channel (10), which consists of a plate and is connected to the upper plane of the slab (9), while at the bottom of the chimney there is a support layer (2) consisting of the elements realizing bearing of the whole chimney.
- 2. The chimney, according to Claim1, **characterized by** the plate of the stabilization channel (<u>10</u>), padded with dilatation-compensating material over its whole surface, where the padding covers the inner and outer side of the channel (10).
- **3.** The chimney according to Claim 1, **characterized by** the proper chimney consisting of the ceramic insulation layer (5.6) is supported at its seating by the bottom support plate (8).
- **4.** The chimney, according to Claim 1 or 3, **characterized by** the fact that between the bottom support plate (8), and the top of the proper chimney there is an intermediate closing layer (12).
- 5. The chimney according to Claim 1, characterized by the support layer (2) is made from sections of rods which prolong into the stiffening reinforcement (3) which goes through all sections of outer layers (1) and supporting plates (7,8) connecting them into whole.

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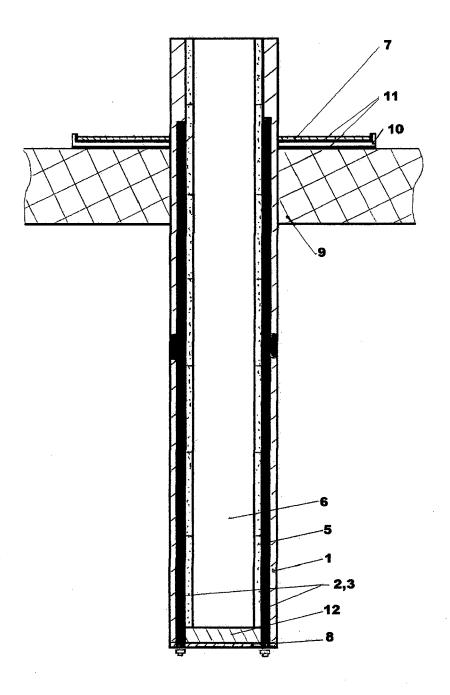


FIG.1

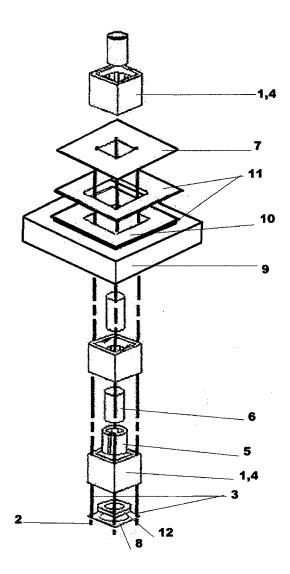


FIG.2

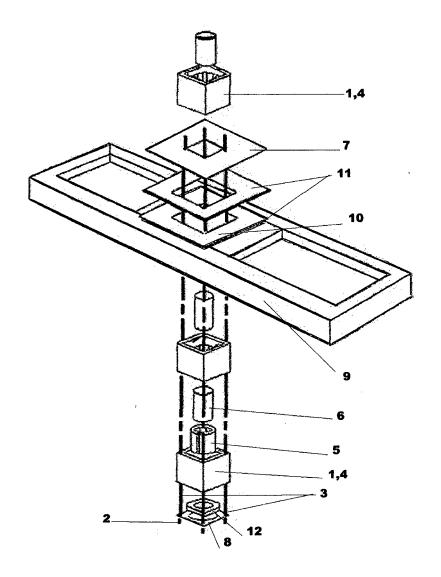


FIG. 3



## **EUROPEAN SEARCH REPORT**

Application Number EP 12 00 8429

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#### ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

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#### REFERENCES CITED IN THE DESCRIPTION

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