

(19)



Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) Publication number:

**0 343 358
A2**

(12)

EUROPEAN PATENT APPLICATION

(21) Application number: 89106380.2

(51) Int. Cl.⁴: **A47G 29/12**

(22) Date of filing: 11.04.89

(30) Priority: 27.05.88 IT 2132188 U

(43) Date of publication of application:
29.11.89 Bulletin 89/48

(84) Designated Contracting States:
AT BE CH DE ES FR GB GR LI LU NL SE

(71) Applicant: Canziani, Francesco
Via Contardo Ferrini 21
San Macario Varese(IT)

(72) Inventor: Canziani, Francesco
Via Contardo Ferrini 21
San Macario Varese(IT)

(74) Representative: Magenbauer, Rudolf, Dipl.-Ing.
et al
Patentanwälte Dipl.-Ing. Rudolf Magenbauer
Dipl.-Phys. Dr. Otto Reimold Dipl.-Phys. Dr.
Hans Vetter Hölderlinweg 58
D-7300 Esslingen(DE)

(54) Letter box with devices intended to prevent foreign bodies from being introduced in it.

(57) Letter box comprising a wall dividing the inner room in two compartments, the rear one intended to collect the mail, and the front one for receiving foreign bodies - if any - introduced in the box itself, the access to said correspondence-receiving compartment being closed by a movable wall arranged in such a way as to open only if items resembling the correspondence in size and shape are introduced.

EP 0 343 358 A2

LETTER BOX WITH DEVICES INTENDED TO PREVENT FOREIGN BODIES FROM BEING INTRODUCED IN IT

The present invention relates to a letter box provided with devices intended to prevent foreign bodies accidentally inserted in the box itself from getting mixed with the correspondence.

More specifically, the box according to the invention is provided, in the proximity to the mouth, with means suitable to direct any foreign body (differing from the mail either in size or weight) towards a zone kept separate from that where the introduced correspondence is deposited.

As it is known, the letter-boxes are provided with a mouth, generally closed by a leaf hinged at a box wall.

It sometimes happens, however, that foreign bodies introduced in the boxes cause various inconveniences at the moment of collecting the correspondence, with which they have mixed.

It is therefore a deeply felt exigency that of having means available that are capable of avoiding this inconvenience; this requirement is met by the box according to the invention, being provided with devices, located in the proximity to the mouth, for directing foreign bodies - if any - having sizes and/or weight different from the letters, towards a zone separate from that where the mail introduced in the box is deposited.

In particular, inside the box there is provided a movable wall that is so designed as to be shifted only by items having the same sizes as the correspondence; they can thus have access to the collecting zone, whilst foreign bodies - if any - fall onto a chute heading to a separate container.

The present invention will now be described in detail, with special reference to the accompanying drawings, in which:

- Fig. 1 is a schematic section of a box provided with the devices according to the invention;

- Fig. 2 shows the box of Fig. 1 at the moment when an item other than a letter or the like is being introduced in it;

- Fig. 3 shows the same box as a letter is being introduced in it;

- Fig. 4 is a schematic section of a different embodiment of the invention.

With reference to Fig. 1, the letter box according to the invention is so shaped as to have the front wall 1 in a recessed position. A leaf 2, hinged at 3 to the wall 1, forms with the latter a chamber 4, set in the front part of the box. On the inside of the box, an inclined plane 5 is secured to leaf 2 and is heading towards a chute 6 that is joined to the upper edge of wall 1.

A movable wall 7 is hinged at 8 to the pair of

arms 11 inside leaf 10 that is located above the inclined plane 5, about at a height corresponding to that of the upper edge of the mouth 9 of the box. Wall 7, accordingly, is resting against the upper free edge of chute 6.

The box mouth is closed by a leaf 10 whose ends are secured to a pair of supports or arms 11, hinged at 12 in the proximity to the rear wall of the box.

The working takes place as follows: after lifting leaf 10, the correspondence (that is introduced through mouth 9) will shift the movable wall 7 and deposit at the bottom of the box.

Should items whose size or weight are not fit to shift wall 7 be introduced, said items will slide along the inclined plane 5, passing then onto chute 6 wherefrom they fall inside chamber 4 (see Fig. 2).

The items could then be discharged or collected by simply lifting leaf 2.

Fig. 4 shows a different embodiment of the same principle, wherein the movable wall 7 is replaced by a pair of flexible membranes 14 forming an inclined plane along which items other than correspondence slide, and gather into the front chamber; said membranes open, instead, if there are introduced letters or the like, that can thus head towards the collecting area.

Of course both the sizes and the employed materials can vary as a function of the different requirements of use.

Claims

1. Letter box characterized by providing a wall dividing the inner room in two compartments, the rear one intended to collect the mail, and the front one for receiving foreign bodies - if any - introduced in the box itself, the access to said correspondence-receiving compartment being closed by a movable wall arranged in such a way as to open only if items resembling the correspondence in size and shape are introduced.

2. Letter box characterized by the fact of providing, besides the first mouth covered by a leaf, a second mouth covered by a hinged movable leaf, openable by effect of the correspondence weight; a chute in contact with the first leaf, and a counter-chute in contact with the second leaf; by virtue of these chutes, the items whose weight and sizes are different from those of the correspondence will gather in a compartment separate from the correspondence compartment.

3. Letter box according to claim 2, wherein the front wall is hinged, so as to be openable in order to provide an access to the foreign bodies compartment.

4. Letter box according to claim 2, wherein the access to the correspondence compartment is possible either through a hinged leaf, or through a pair of flexible membranes, the distance of the latter from the box mouth being equal to the minimum size of the correspondence.

5. Letter box according to claims 2, 3, characterized by providing a guillotine-like hinged first leaf 11 suitable to protect the inside of the box against wind and rain.

5

10

15

20

25

30

35

40

45

50

55

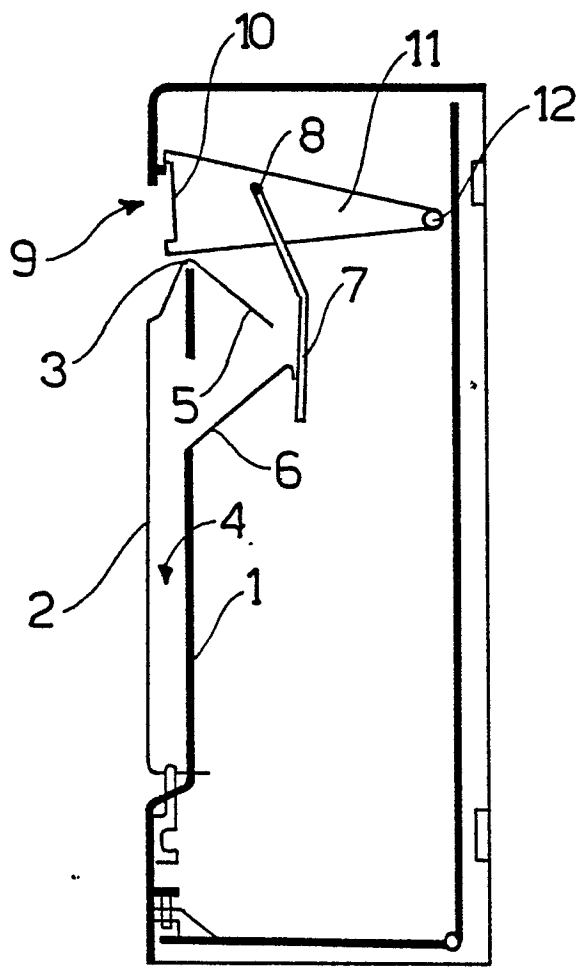


FIG 1

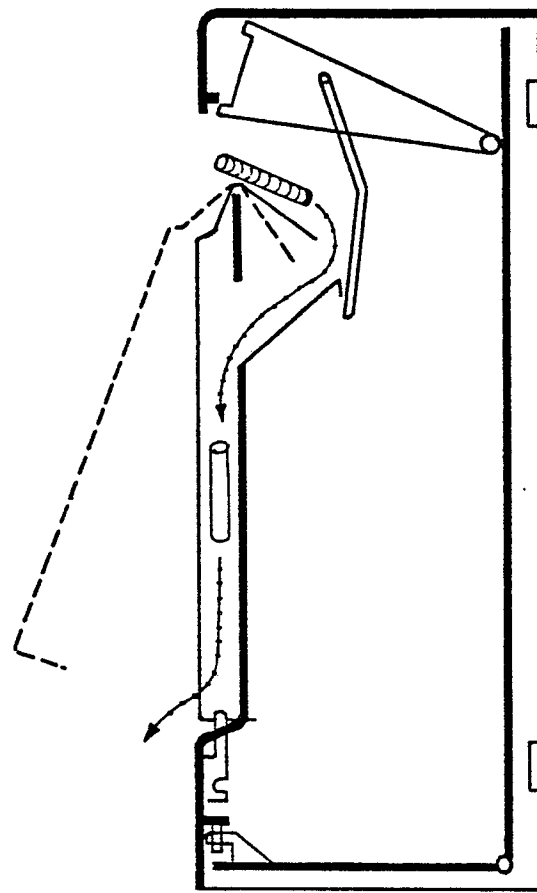


FIG 2

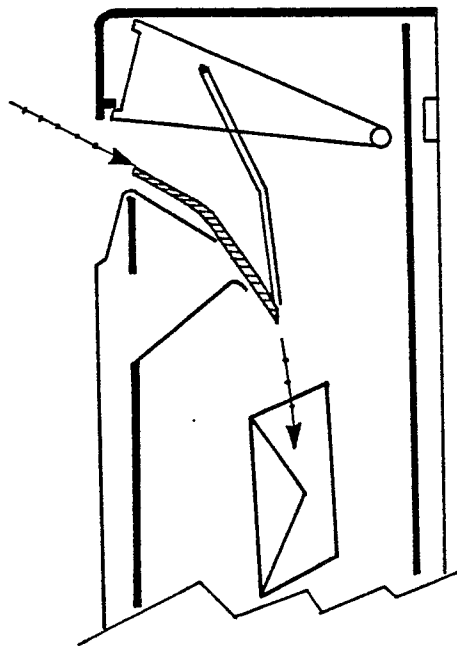


FIG 3

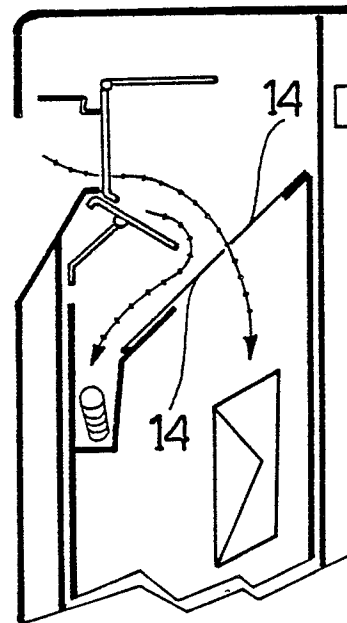


FIG 4