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(54) Locking box for electrical plug(s)

(57) A security device for a domestic, mains electricity plug comprises a housing 10 for accommodating the plug and a lock 18 in a lockable hinged door 14 for preventing removal of the plug. A finger hole 28 provides means to eject the plug from pin-receiving recesses 24 in the housing 10. Alternatively, a member formed to receive the pins of a plug can be slidably and lockably received within the housing to retain the plug therein (Fig. 4, not shown).

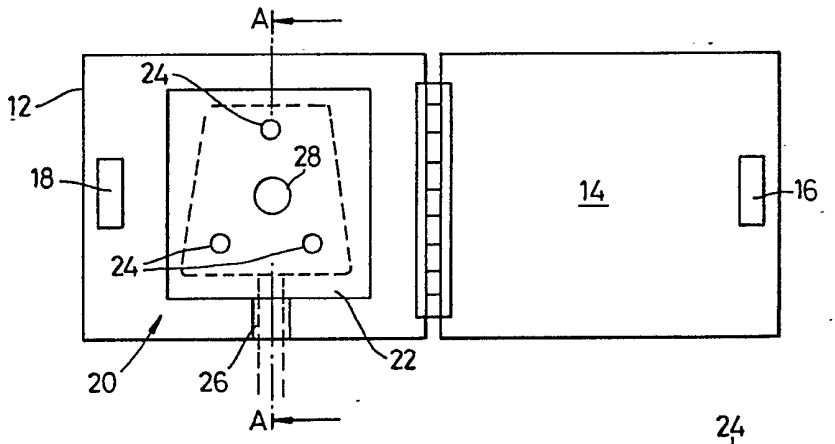


Fig. 2

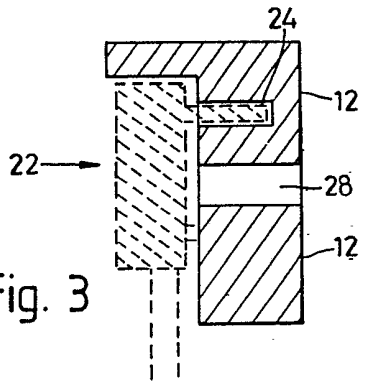


Fig. 3

At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy

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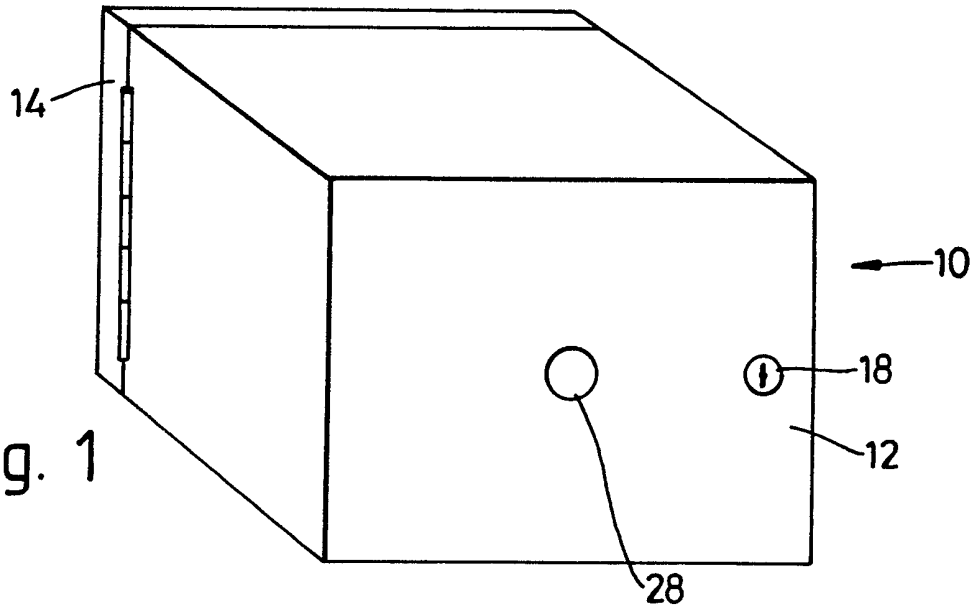


Fig. 1

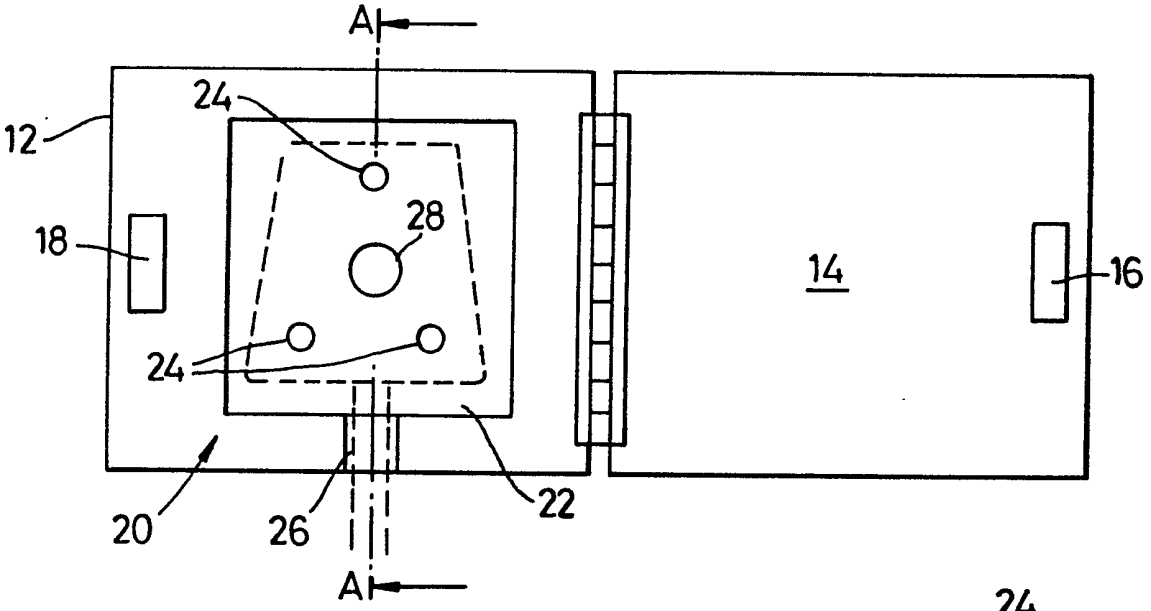


Fig. 2

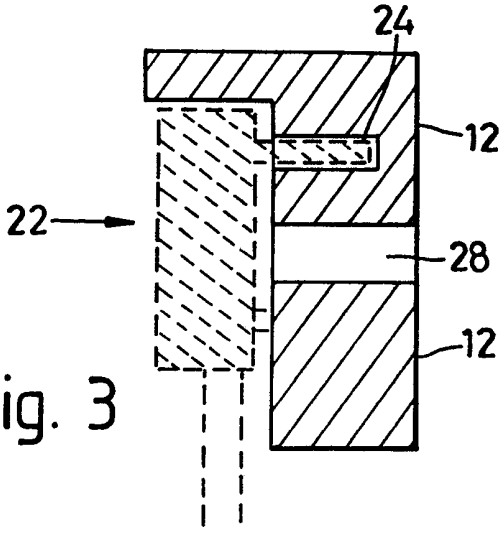


Fig. 3

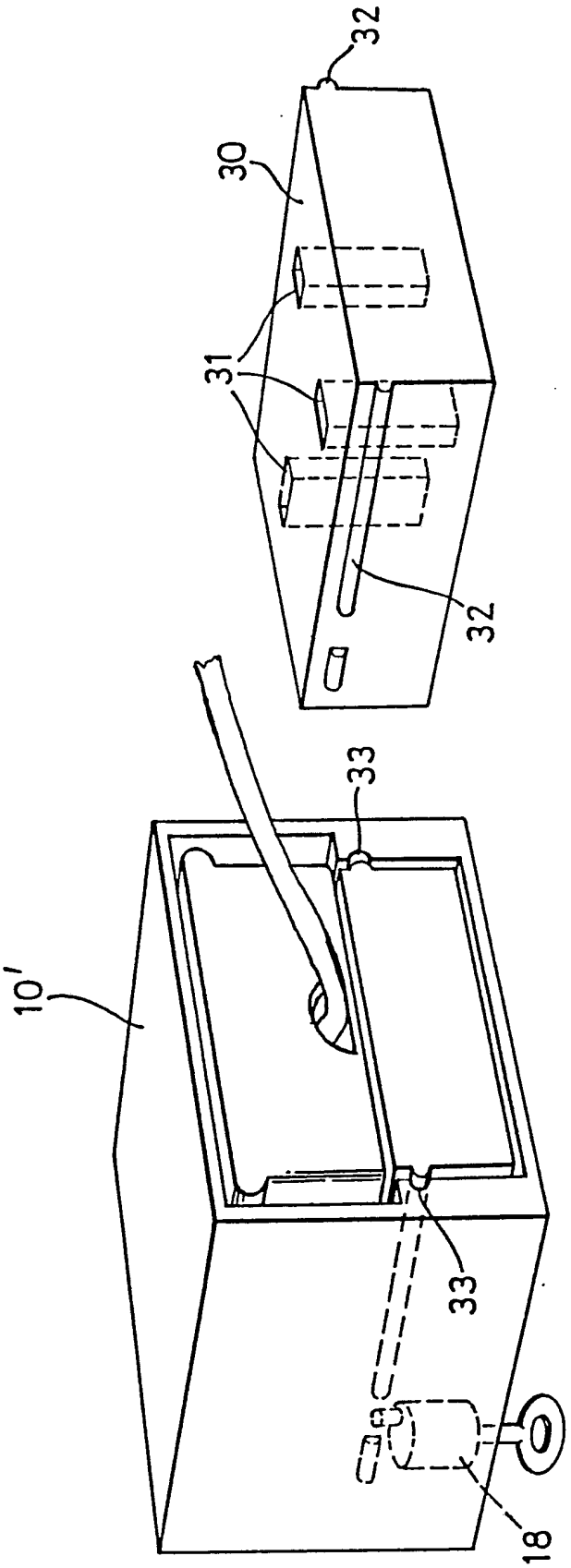


Fig. 4

IMPROVEMENTS RELATING TO SAFETY AND SECURITY DEVICES

This invention relates to a safety and security device incorporating a locking device for use with a domestic mains electricity plug.

Standard three-pin domestic, mains electricity plugs are well known and are used in substantial numbers in the home and office, for example, to provide mains electricity power supply to electrical equipment. The unauthorised use of such equipment can lead to damage or injury and is a constant problem where minors are involved.

It is an object of the present invention to obviate or mitigate the aforesaid disadvantages.

According to the invention there is provided a security device for a domestic, mains electricity plug which comprises a housing formed to receive and retain a plug in a non-operative condition and a lockable securing means for selectively preventing removal of the plug from the housing.

The housing may include a lockable hinged door for selectively preventing removal of a plug located within the housing.

Alternatively the device may comprise a member formed to receive the pins of a plug and to be slidably and lockably located within the housing to selectively retain the plug therein.

In yet a further alternative the housing may comprise two mating parts adapted to lockably secure a plug therebetween.

The housing may be formed to accommodate a plurality of plugs. Ejection means may be co-operable with the plug(s) upon opening the housing.

The housing may be formed with at least one finger hole to allow the plug(s) to be manually ejected from the housing upon opening.

The device may be moulded of synthetic plastics material and the lockable means may be key operated.

The foregoing and further features of the invention will be more readily understood from the following description of two preferred embodiments thereof, by way of example, with reference to the accompanying drawings of which:-

Fig. 1 is a front perspective view of a plug security device;

Fig. 2 is a plan view of the device of Fig. 1 in an open condition;

Fig. 3 is a cross-sectional view of the device of Figs. 1 and 2; through A-A of fig. 2, and

Fig. 4 is an exploded perspective view of an alternative plug security device.

Referring firstly of Figs. 1 to 3 of the drawings a security device 10 comprises a substantially cubical housing 12 provided with a lockable door 14 hingeably attached to the top of the housing 12.

A latch means 16 is provided on the door 14 and cooperates with a key actuated lock 18, incorporated in the body of the housing 12, to allow the housing 12 to be locked.

The interior 20 of the housing 12 is shaped to provide a recess 22 to accommodate a three-pin domestic, mains

electricity plug. A plug is presented into the recess 22, pins first, such that the pins are located in blind apertures 24 situated at the base of the recess 22 and a body of the plug is accommodated in the recess 22 as shown in Figs. 2 and 3 in broken outline. A slot 26 is provided adjacent the recess 22 to accommodate a mains supply lead to the plug.

A plug placed into the locking device can be secured from use by locking the door 14. To aid removal of the plug from the plug-lock a finger hole 28 is provided in the body of the housing 12 accessing the centre of the recess 22 such that manual pressure can be applied to the plug pushing it out from the recess 22 after the door 14 has been opened. Alternatively a resilient ejection device (not shown) could be located in recess 22 to be beneath the plug, to provide automatic ejection thereof when the door 14 is opened.

Referring now to Fig. 4 there is shown an alternative device which comprises a member 30 formed with pin receiving blind apertures 31 and protruding ribs 32. The housing 10' is open-ended and is formed with slots 33 to receive ribs 32 of member 30. In use, a plug is located with its pins engaged in apertures 31 and member 30 is slidably located in housing 10' with ribs 32 engaging in slots 33. Lock 18 can then be actuated to retain member 30 within housing 10'.

In a further alternative arrangement (not shown) the housing may comprise two mating parts arranged to lockably secure a plug therebetween. Further any of the devices may be formed to accommodate a plurality of plugs. Preferably the devices are formed of a moulded synthetic plastics material.

Although the embodiments shown include a metal key-operated lock, which would be provided to prevent unauthorised use of office equipment, for example, it is envisaged that a simple locking means, actuable by a screw driver or coin edge, could be provided as a safety device to prevent misuse of a plug by children.

CLAIMS:

1. A security device for a domestic, mains electricity plug which comprises a housing formed to receive and retain a plug in a non-operative condition and a lockable securing means for selectively preventing removal of the plug from the housing.

2. A security device as claimed in claim 1 wherein said housing includes a lockable hinged door for selectively preventing removal of a plug located within the housing.

3. A security device as claimed in claim 1 comprising a member formed to receive the pins of a plug and to be slidably and lockably located within the housing to selectively retain the plug therein.

4. A security device as claimed in claim 1 wherein the housing comprises two mating parts adapted to lockably secure a plug therebetween.

5. A security device as claimed in any preceding claim wherein the housing is formed to accommodate a plurality of plugs.

6. A security device as claimed in any preceding claim including ejection means cooperable with the plug(s) upon opening the housing.

7. A security device as claimed in any one of claims 1 to 5 inclusive wherein the housing is formed with at least one finger hole to allow the plug(s) to be manually ejected from the housing upon opening.

8. A security device as claimed in any preceding claim moulded of synthetic plastics material.

9. A security device as claimed in any preceding claim wherein the lockable means is key actuated.

10. A security device substantially as hereinbefore described with reference to the accompanying drawings.

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