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(56) Documents Cited:
WO 2000/073749 A1 **US 5257164 A**
US 5224060 A **US 4202607 A**

(58) Field of Search:
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(54) Abstract Title: **Weighing device**

(57) A wall mounted weighing device(1) comprising a support (2) for mounting on a substantially vertical member of a building, and a body (4) supporting a weight receiving platform (5), which in one embodiment is made of glass. The body(4) is rotatably mounted with respect to the support (2) between an inoperative and an operative position, and has a display element (10) mounted on the body (4) at the opposite end of where the body (4) is rotatably mounted.

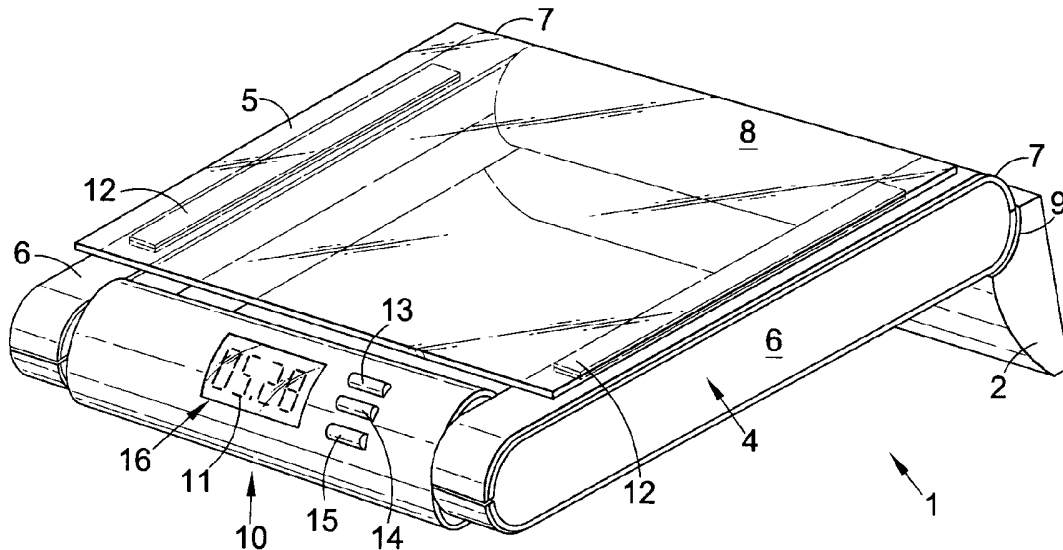


Fig.1

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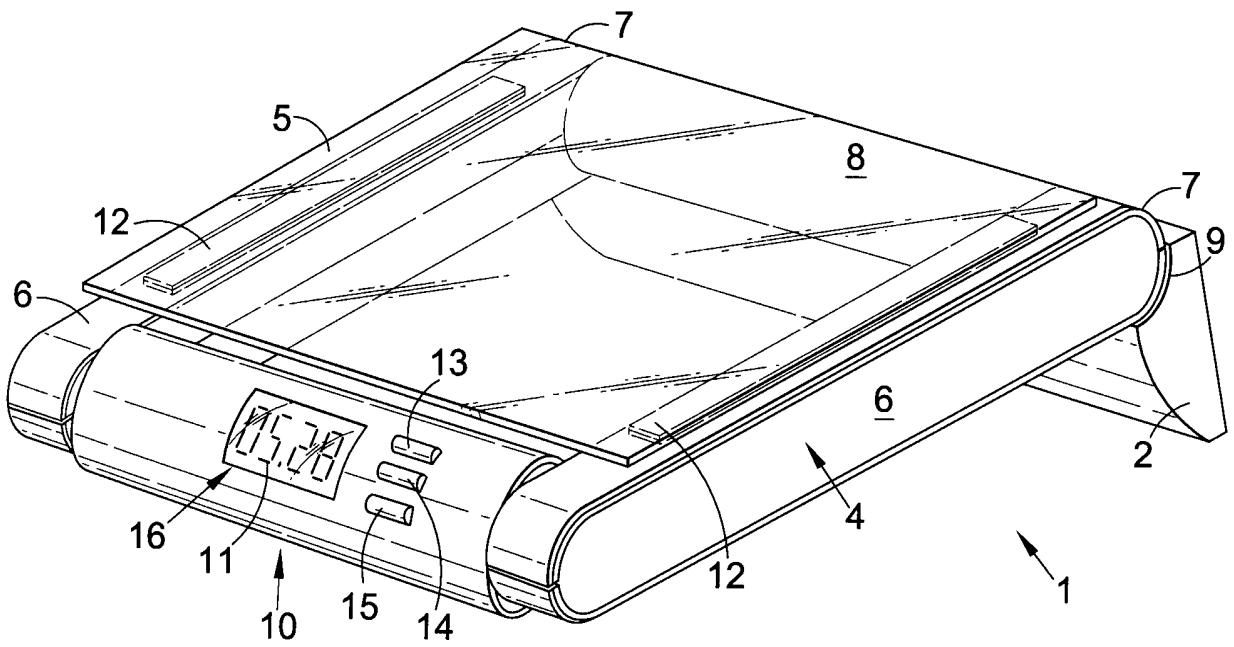


Fig.1

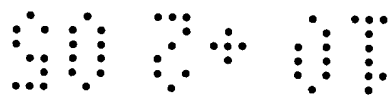


Fig.2

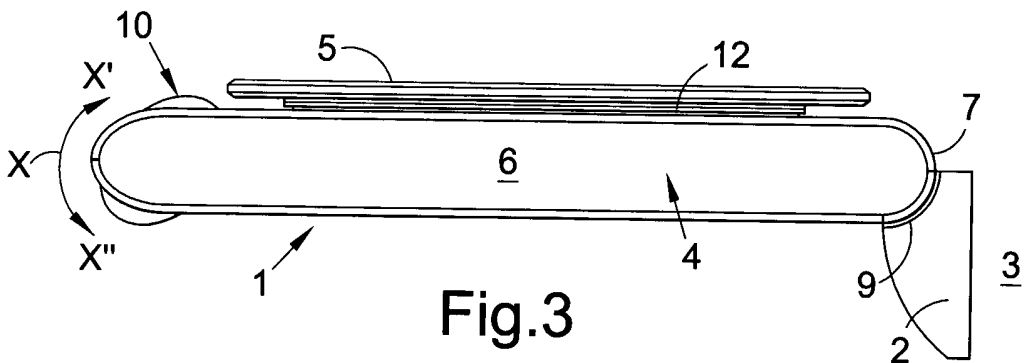
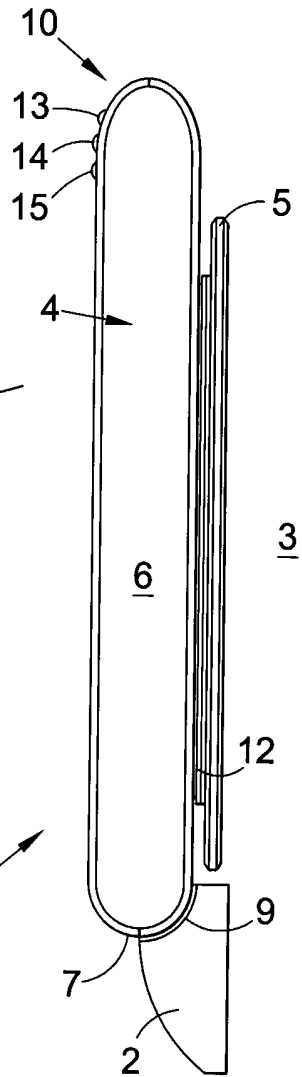
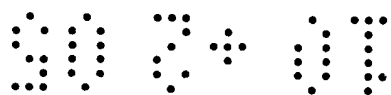


Fig.3



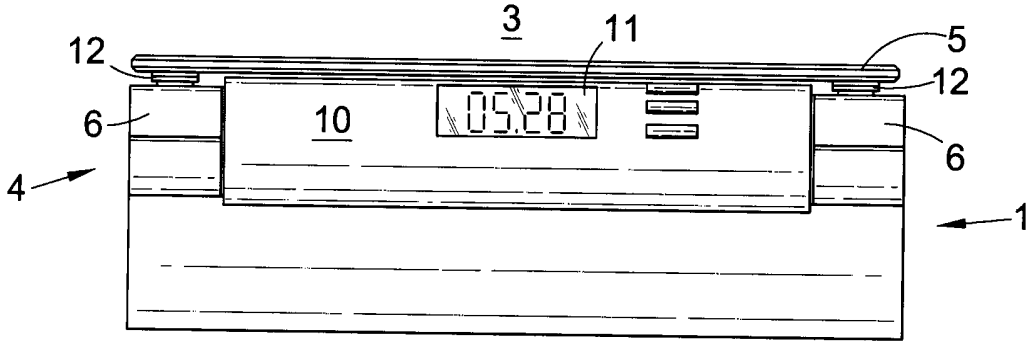


Fig.4

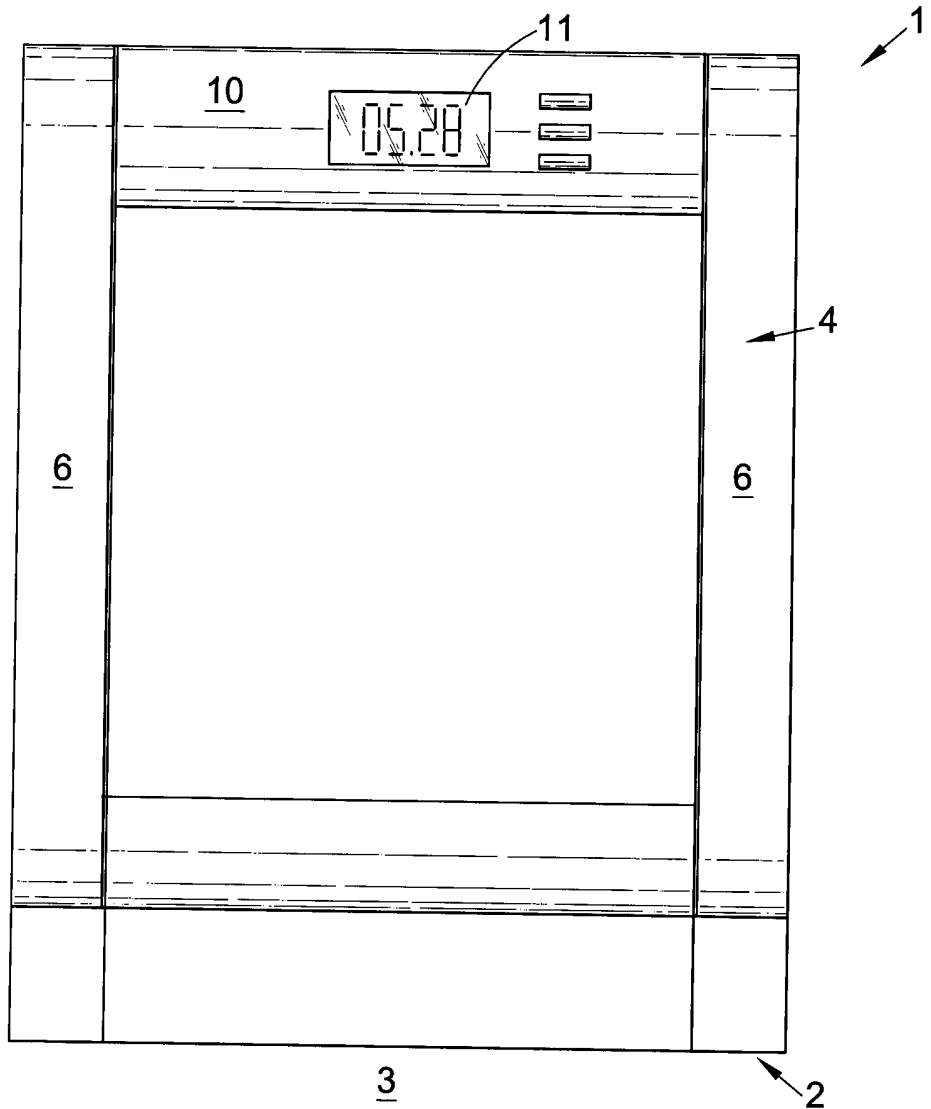


Fig.5



WEIGHING DEVICE

The invention relates to a weighing device, particularly such a device as is adaptable so as to save space, particularly for storage.

Various ways have been devised for saving space say in a kitchen, particularly by aiming to minimise space taken by a kitchen scale when not in use. For example, a weighing bowl can be used which is reversible to encase the scale body during storage. Such scales have the disadvantage that they require several actions to ready them for use, such as lifting off of the bowl, reversing it, and then replacing it on the scale body.

This is time-consuming.

It is accordingly an object of the invention to seek to mitigate this disadvantage.

According to the invention there is provided a wall mountable weighing device, comprising a support for mounting on a substantially vertical member of a building, and a body supporting a weight receiving platform and being movable with respect to the support between an inoperative and an operative position.

Thus a scale of the invention can be mounted on a kitchen wall, so saving space.

The body may be rotatably movable with respect to the support. This provides for ease of use.

The body may be rotatably mounted at one end to the support. This provides for a cantilever kind of mounting.

The body may have a curved end which may be seated in a complementary curved surface of the support, whereby to permit the body to rotate with respect to the support.

This is a particularly simple construction.

An end of the body opposite the curved end may comprise a display element. This provides for ease of access for reading the display element.

The display element may be rotatable relative to the body whereby a user can set a desired position of the display element.

The body may comprise elongate side members extending from the curved end, supporting the platform and the display element. This is a relatively simple yet effective construction.

The display element may be rotatable from one end display position to an opposite end display position. This provides for a range of visual "settings".

The display element may be movable to one of a plurality of intermediate set positions between the two end positions.

The angle of rotation being in the range 0° to 120° with respect to the plane of the platform, preferably the angle being in the range 0° to 90° .

The display element may be adapted to display a weight, or to display time, and suitably to display weight and time as required.

The weight receiving platform may comprise a transparent or translucent material, preferably glass.

The glass platform may be received on weight sensor means carried by each side member of the body.

The weight sensor means may comprise elongate weight sensitive strips between the platform and the side members. This provides for a positive reading, particularly when the elongate weight sensitive strips may comprise piezo-electric strips.

The device may be electronically operated.

A wall mountable display device embodying the invention is hereinafter described, by way of example, with reference to the accompanying drawings.

Fig. 1 is a schematic perspective view of a device according to the invention in an operative or ready for use mode or position;

Fig. 2 is a schematic side elevational view of the device in a stowed or stored position;

Fig. 3 shows a schematic side elevational view of the device in Fig. 1 position;

Fig. 4 shows a schematic front elevational view of the device in the Fig. 1 and Fig. 3 position; and

Fig. 5 shows a schematic front elevational view of the device in the Fig. 2 position.

Referring to the drawings there is shown a wall mountable weighing device 1 such as a kitchen scale, comprising a support 2 for mounting on a substantially vertical member of a building, such as a wall 3 of a kitchen, and a body 4 supporting a weight receiving platform 5, in the embodiment glass, and being movable with respect to the support 2 and

thus the wall 3, between an inoperative position (Fig. 2) and an operative position, Figs. 1 & 3.

The body 4 comprises two spaced apart elongate members 6, which are curved as by being rounded at 7 at one wall-adjacent end and are connected by a transverse member 8 having a substantially identical outer curvature. The curved end 7, 8 is received in a complementary curved surface 9 of the support 2, the curved end of the body 4 being convex and that of the support 2 concave. These complementary shapes allow for easy rotation of the scale 1 from the stowed position in which it lies substantially parallel to the wall 3, to the in use position in which it lies at substantially 90° to the wall 3.

There are suitable pivot or hinge means (not shown) which connect the support 2 and curved end 7, 8 for such relative rotation.

At the opposite end, or free end in use, the side members 4 are linked by a display element 10. This has a display or read out 11 such as an LED or LCD and is itself rotatable between two end positions as shown by arrow 'X' so that a user can set a desired position for reading the display. The angle of rotation can be between 0° and 120°, preferably in the embodiment about 90°, with respect to the plane of the platform 5. The display element 10 can be set to any desired intermediate position between the operative end positions X' and X'', so that a user can select a desired angle for optimum reading of the display 11.

The glass platform 5 is supported on the side support members 6 of the body 4 on elongate weight sensor elements 12 such as piezo-electric sensors. There is an elongate sensor 12 on each side member 6, to provide for a positive sensing action and a positive read-out.

The scale 1 is electronic, being powered by batteries housed in a case in the support 2 or curved end 7, 8 and electronic circuitry housed in the display element, there being an on/off switch 13 and respective buttons 14, 15 for indicating weight or time respectively in a fascia 16 of the display element 10. Electrical connectors such as wires are hidden by being housed say in the support 2 and side members 6.

The scale 1 can thus be readily stowed out of the way when not in use, with the platform 4 and weight sensor elements 12 being protected as they are between an underside of the scale body and the wall 3, as shown in Fig. 2. The display element 10 can also be rotated to provide an aesthetic appearance as shown in Fig. 2 also, when stowed.

CLAIMS

1. A wall mountable weighing device, comprising a support for mounting on a substantially vertical member of a building, and a body supporting a weight receiving platform and being movable with respect to the support between an inoperative and an operative position.
2. A device according to Claim 1, the body being rotatably movable with respect to the support.
3. A device according to Claim 2, the body being rotatably mounted at one end of the support.
4. A device according to Claim 3, the body having a curved end which is seated in a complementary curved surface of the support, whereby to permit the body to rotate with respect to the support.
5. A device according to Claim 4, an end of the body opposite the curved end comprising a display element.
6. A device according to Claim 5, the display element being rotatable relative to the body whereby a user can set a desired position of the display element.
7. A device according to Claim 6, the body comprising elongate side members extending from the curved end, supporting the platform and the display element.
8. A device according to Claim 7, the display element being rotatable from one end display position to an opposite end display position.

9. A device according to Claim 8, the display element being movable to one of a plurality of intermediate set positions between the two end positions.
10. A device according to Claim 9, the angle of rotation being in the range 0° to 120° with respect to the plane of the platform.
11. A device according to Claim 10, the angle being in the range 0° to 90°.
12. A device according to any of Claims 6 to 11, the display element being adapted to display a weight.
13. A device according to Claim 12, the display element being adapted to display time.
14. A device according to Claim 12, the display element being adapted to display weight and time as required.
15. A device according to any of Claims 7 to 14, the weight receiving platform comprising a transparent or translucent material.
16. A device according to Claim 15, the material comprising glass.
17. A device according to Claim 16, the glass platform being received on weight sensor means carried by each side member of the body.
18. A device according to Claim 17, the weight sensor means comprising elongate weight sensitive strips between the platforms and the side members.

19. A device according to Claim 18, the elongate weight sensitive strips comprising piezo-electric strips.
20. A device according to any preceding claim, electronically operated.
21. A wall mountable weight device, substantially as hereinbefore described with reference to the accompanying drawings.



INVESTOR IN PEOPLE

Application No: GB 0330167.8
Claims searched: 1-21

Examiner: Jacob Dahl Jensen
Date of search: 10 May 2005

Patents Act 1977 : Search Report under Section 17

Documents considered to be relevant:

Category	Relevant to claims	Identity of document and passage or figure of particular relevance
X	1-20	WO 00/073749 A1 (SOEHNLE AG) see figures
A	-	US 5224060 A (MA) see figures
A	-	US 5257164 A ((PEREZ ET AL.) see column 4, line 14-21, line 41-46 and figures
A	-	US 4202607 A (WASHIZUKA ET AL.) see figures

Categories

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art
Y	Document indicating lack of inventive step if combined with one or more other documents of same category	P	Document published on or after the declared priority date but before the filing date of this invention
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application

Field of Search:

Search of GB, EP, WO & US patent documents classified in the following areas of the UKC^x:

Worldwide search of patent documents classified in the following areas of the IPC⁷:

G01G, A47J, G04G

The following online and other databases have been used in the preparation of this search report:

WPI, EPODOC