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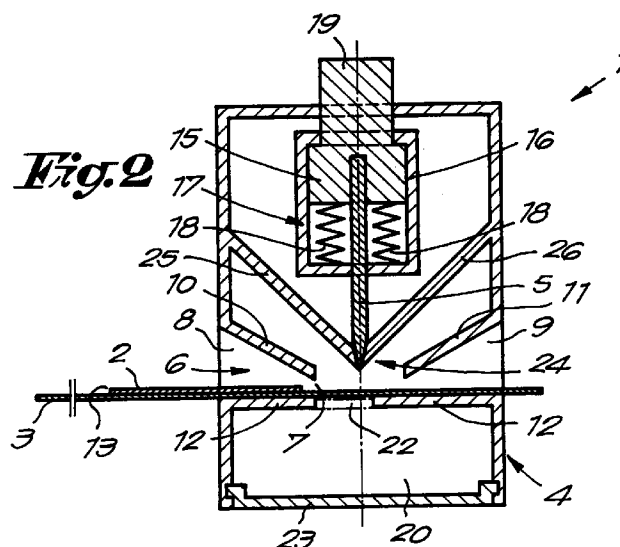
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(54) **Device for removing a top layer from lottery tickets**

(57) Device for removing a top layer from lottery tickets and such, characterized in that it consists of a frame (4) which is provided with at least one scraping element (5), as well as with guide means (6) which allow for a mutual movement between the scraping element (5) and a lottery ticket (3) to be scraped off.



Description

The present invention concerns a device for removing a top layer from lottery tickets and such.

It is known that in lotteries and such, use can be made of lottery tickets which are locally provided with a top layer which is meant to be scraped off, after which one or several figures and/or signs will appear, whereby the buyer of such a ticket, depending on the figures and/or signs which become visible after the top layer has been scraped off, wins a prize, either in the form of an amount of money or in any other form whatsoever.

The top layer is usually scraped off by means of a hard object, to which end a coin is often used. Especially with lottery tickets whereby the top layer conceals several signs, and thus covers a large surface, it is not easy to remove the entire layer with a coin or such.

Also, the invention aims a means with which such a top layer, irrespective of the size of the surface that is covered, can be easily removed, which moreover offers the convenience that no remnants of the scraped-off top layer remain on clothing or furniture.

To this end, the invention concerns a device for removing a top layer from lottery tickets and such, characterized in that it consists of a frame which is provided with at least one scraping element, as well as with guide means which allow for a mutual movement between the scraping element and a lottery ticket to be scraped off.

This invention makes it possible to remove such a top layer in a quick and efficient manner.

According to the most preferred embodiment the scraping element used hereby consists of a knife extending over the width of the surface to be scraped off, such that the entire top layer can be removed in one single movement.

According to a first possibility, the scraping element is mounted in a fixed place and the guide means consist of a guide provided on the frame which makes it possible to shift the lottery ticket along the scraping element.

According to a second possibility, the device is provided with a scraping element which can be moved in relation to the frame in the scraping direction.

In order to better explain the characteristics of the invention, the following preferred embodiments are described as an example only without being limitative in any way, with reference to the accompanying drawings, in which:

- figure 1 shows a device according to the invention, together with a lottery ticket whose top layer needs to be removed;
- figure 2 shows a section according to line II-II in figure 1 to a larger scale;
- figure 3 shows a view as in figure 2, but for another position;
- figure 4 shows a variant according to the invention.

As represented in the figures, the invention consists of a device 1 which is designed to remove a top layer 2

from a lottery ticket 3 or such, characterized in that it mainly consists of a frame 4 which is provided with a scraping element 5, as well as with guide means 6 which allow for a mutual movement between the scraping element 5 and the lottery ticket 3 to be scraped off.

Figures 1 to 3 show an embodiment whereby the scraping element 5 is mounted in a fixed place in relation to the guide means 6, whereas the guide means 6 consist of a guide provided on the frame 4, which makes it possible to shift the lottery ticket 3 along the scraping element 5.

The frame 4 hereby consists of a convenient little holder, whereas the guide means 6 consist of a seating extending through said frame 4 in the shape of a groove 7 through which the lottery ticket 3 can be shifted. As can be seen in figure 2, the groove 7 can be provided on either side with conical entrances 8-9, formed of slanting wall parts 10-11 which facilitate the insertion of the lottery ticket 3. The edge of the groove 7 turned away from the scraping element 5, however, consists of a flat prop 12 to support the lottery ticket 3 during the scraping.

As is shown in figure 1, the scraping element 5 preferably consists of a knife extending at least over the width B1 of the surface 13 to be scraped off.

As is further represented in figure 1, use can be made of a scraping element 5 which extends over only a certain part of the width B2 of the seating, in this case the groove 7, such in order to prevent that a top layer 14 which conceals a check number or such is not removed.

The scraping element 5 can move in relation to a lottery ticket 3 or such provided in the device 1 between a position, as indicated in figure 2, in which it is situated at a distance above the surface 13 to be scraped off and a position, as represented in figure 3, in which it has contact with the surface 13 to be scraped off, such that the scraping element 5, after a lottery ticket 3 has been provided in the device 1, can be put into contact with the lottery ticket 3. According to the embodiment of figures 1 to 3, the scraping element 5 is held to this end in a holder 15 which can shift in guides 16.

The whole is hereby preferably provided with readjusting means 17, which for example consist of springs 18 which force the scraping element 5 in a lifted position in relation to the lottery ticket 3. In order to move the scraping element 5 against the force of the readjusting means 17, it is provided with a push button 19 which extends to the outer side of the frame 4 or of a similar system which aims the same result.

The device 1 is preferably also provided with a waste receiver 20 to collect the scraped-off material 21 of the top layer 2, for example via an opening 22 provided in the prop 12. The waste receiver 20 can be emptied via an opening which is closed by means of a removable lid 23. As represented by the chain line, the opening 22 can be provided with a framework and/or supporting ribs so as to prevent the scraping element 5 from pushing through the lottery ticket 3.

As shown in figures 2 and 3, the device can also be

provided with a mechanism 24 to clean the scraping element 5. As represented in these figures, this may consist of scrape-off elements 25-26 along which the scraping element 5 can be shifted, such as elastically bending ribs which press on either side against the scraping element 5.

The working of the above-described device 1 can be easily derived from the figures 1 to 3 and is mainly as described hereafter.

At first instance, the push button 19 is released and the lottery ticket 3 concerned is put in the groove 7 as represented in figures 1 and 2. When the lottery ticket 3 is in the position as represented in figure 2, the scraping element 5 is pushed on the lottery ticket 3 by means of the push button 19 and subsequently the lottery ticket 3 is pulled through the groove 7 whereas a pressure is permanently exerted on the push button 19. Consequently, the top layer 2 is scraped off from the lottery ticket 3 as represented in figure 3.

After the lottery ticket 3 has been pulled entirely through the scraping element 5, the scraped off material 21 ends up in the waste receiver 20.

When the push button 19 is released again, the scraping element 5 is raised by the readjusting means 17, and any material 21 which possibly sticks to the scraping element 5 is removed from it by the scrape-off elements 25-26.

An embodiment is represented in figure 4 whereby the device 1 is provided with a scrape element 5 which can be moved in relation to the frame 4 in the scrape direction.

The device 1 hereby has a supporting surface 27 upon which the lottery ticket 3 can be placed and a carriage 28 to which the scraping element 5 is fixed. The above-mentioned guide means 6 in this case consist of guides 29-30 which make it possible to move the carriage 28, together with the scraping element 5, over the above-mentioned supporting surface 27.

The carriage 28 is preferably equipped with readjusting means which force it in the starting position, which in the example shown consist of draw springs 31-32.

In such an embodiment, the device 1 is preferably equipped with means to retain the lottery ticket 3 or such on the supporting surface 27. In the example shown in figure 4, these means consist of a stop 33 which prevents the lottery ticket 3 from shifting along with the scraping element 5.

Analogous to the embodiment of figures 1 to 3, the scraping element 5 can be moved in the height, it is provided with a push button 19 and with readjusting means 17, consisting of compression springs 34 which are provided between the carriage 28 and the push button 19.

It is clear that in the carriage 28 can also be built in scrape-off elements 25 and 26, analogous to the embodiment of figure 2.

The scraping element 5, which in this case also consists of a knife, can extend, analogous to the embodiment of figures 1 to 3, over only a part of the

width of the seating for the lottery ticket 3, as a function of the surface 13 to be scraped off.

The waste receiver 20 is in this case provided at the end of the supporting surface 27 and is equipped with a lid 35 which can be opened for example against the force of a spring which is not represented, in this case automatically, as the carriage 28 at the end of its course makes contact with a lip 36 provided on the lid 35.

In order to obtain that the device 1 can be more easily put in one's pocket, especially in the embodiment of figure 4, it can be folded up. To this end, the frame 4 is composed of two parts 38-39 coupled by means of a joint link 37 which can be clicked together by means of a locking device 40 in opened position.

When using the device 1 of figure 4, the lottery ticket 3 is placed in the right direction on the supporting surface 27 and the carriage 28 is moved over the lottery ticket 3. By subsequently exerting a pressure on the push button 19 and by shifting the scraping element 5 by means of the carriage 28 over the surface 13, the top layer 2 is scraped off and the scraped-off material finally ends up in the waste receiver 20.

The present invention is by no means limited to the embodiments described as an example and represented in the accompanying drawings; on the contrary, such a device for removing a top layer from lottery tickets and such can be made in various forms and dimensions while still remaining within the scope of the invention.

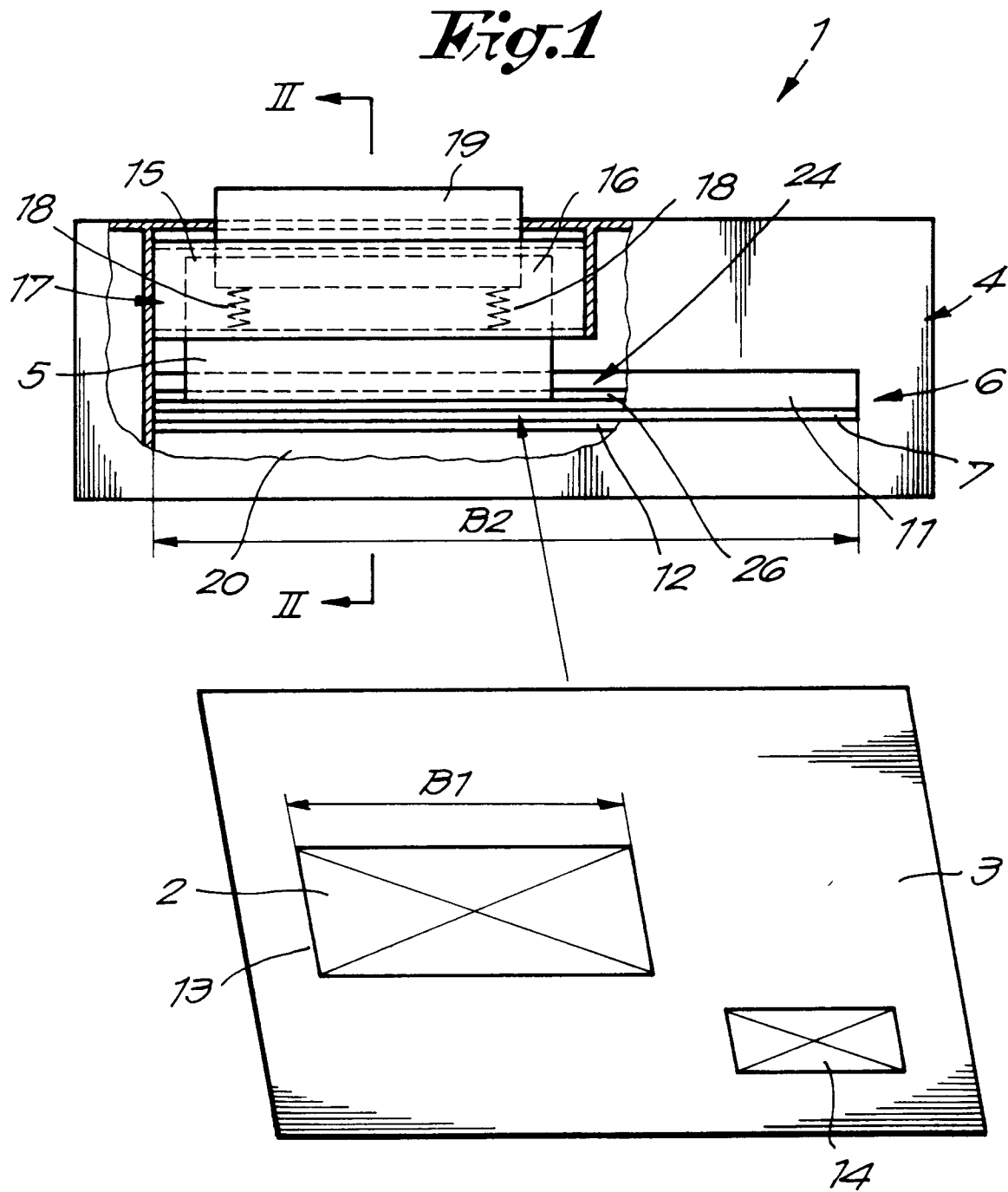
Thus, the width of the scraping element 5 and its position can differ as a function of the lottery tickets for which the device is designed. Nor is it excluded to provide several scraping elements which can be used as desired, or scraping elements whose position and/or width can be adjusted.

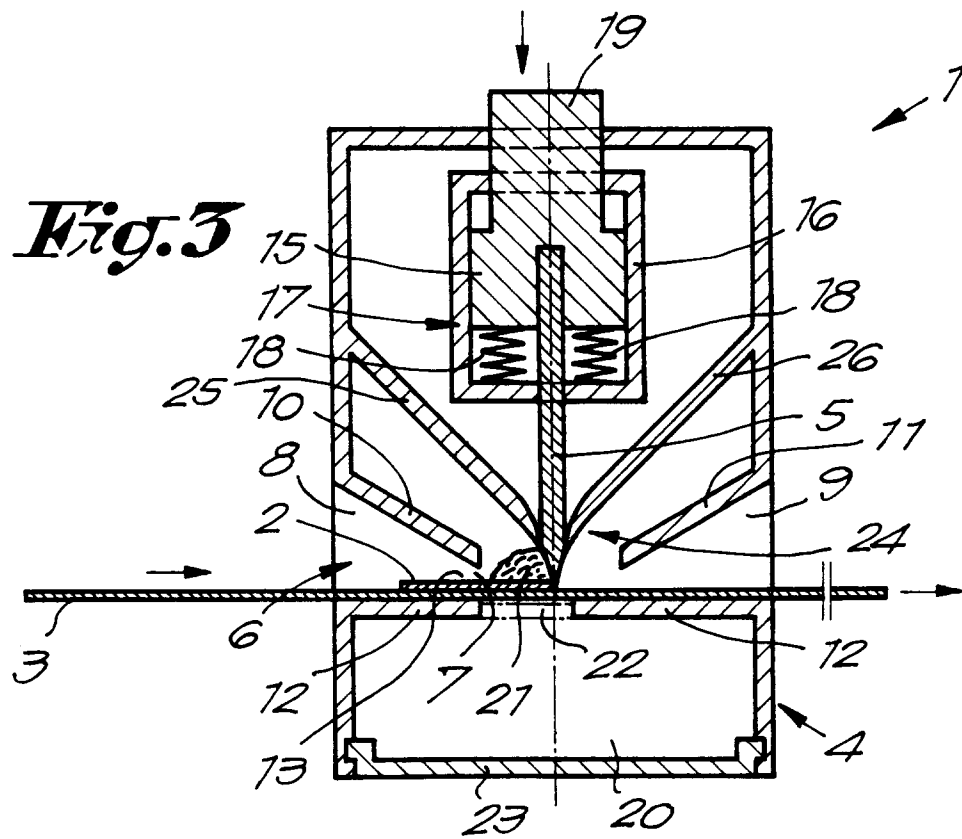
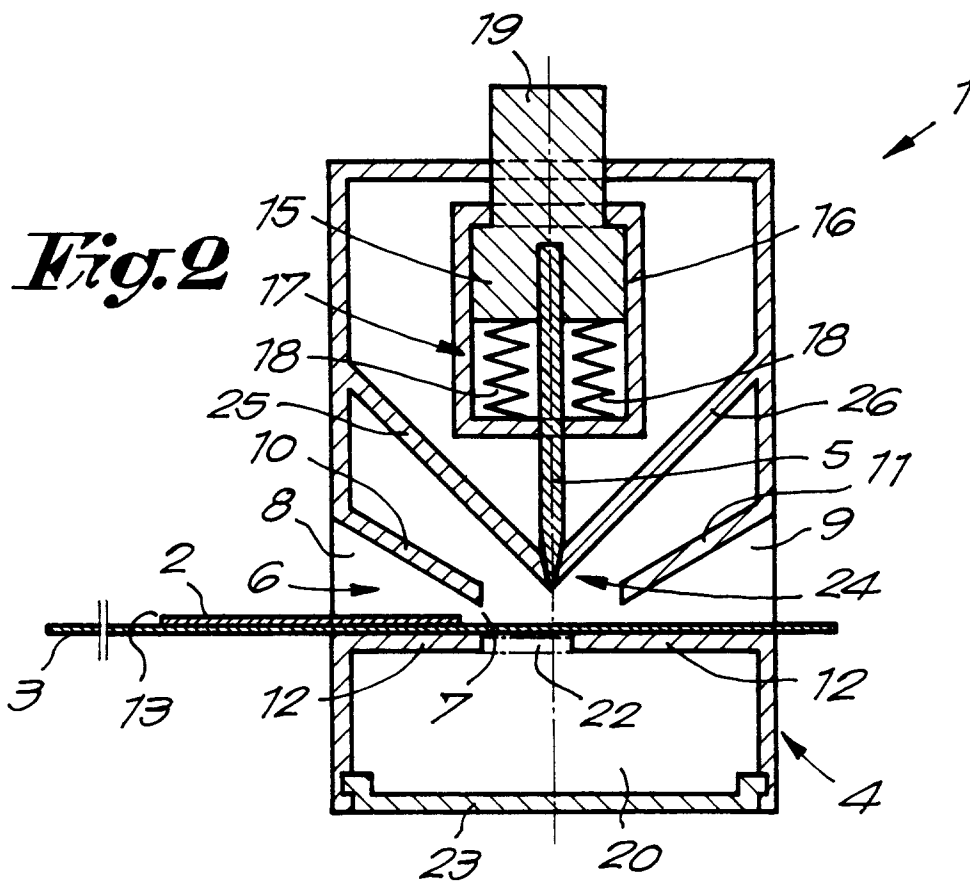
Finally, it should be noted that the thickness of the top layer 2 is represented extremely thick in the figures 2 and 3, but that it can be a very thin layer in reality.

Claims

1. Device for removing a top layer from lottery tickets and such, characterized in that it consists of a frame (4) which is provided with at least one scraping element (5), as well as with guide means (6) which allow for a mutual movement between the scraping element (5) and a lottery ticket (3) to be scraped off.
2. Device according to claim 1, characterized in that the scraping element (5) is mounted in a fixed place and in that the guide means (6) consist of a guide provided on the frame (4), which makes it possible to shift the lottery ticket (3) along the scraping element (5).
3. Device according to claim 2, characterized in that the guide means (6) consist of a continuous groove (7).

4. Device according to claim 1, characterized in that it is provided with a scraping element (5) which can be moved in relation to the frame (4) in the scraping direction. 5
5. Device according to claim 4, characterized in that the device (1) has a supporting surface (27) upon which can be placed a lottery ticket (3) or such; in that the scraping element (5) is fixed to a carriage (28); and in that the guide means (6) consist of guides (29-30) which make it possible to move the carriage (28), together with the scraping element (5), over the above-mentioned supporting surface (27). 10
6. Device according to claim 5, characterized in that the carriage (28) is provided with readjusting means (31-32) which force the carriage (28) in the starting position. 15
7. Device according to claim 4, 5 or 6, characterized in that it is provided with means (33) to hold the lottery ticket (3) or such. 20
8. Device according to any of the preceding claims, characterized in that the scraping element (5) can move in relation to a lottery ticket (3) or such provided in the device (1) between a position in which it is situated at a distance above the surface (13) to be scraped off and a position in which it has contact with the surface (13) to be scraped off. 25
30
9. Device according to claim 8, characterized in that it is provided with readjusting means (17) which force the scraping element (5) in a lifted position in relation to a lottery ticket (3). 35
10. Device according to claim 8 or 9, characterized in that it is provided with a push button (19) with which the scraping element (5) can be pushed on the lottery ticket (3). 40
11. Device according to any of the preceding claims, characterized in that the scraping element (5) consists of a knife extending over at least the width (B1) of the surface (13) to be scraped off. 45
12. Device according to any of the preceding claims, characterized in that the frame (4) has a seating for the lottery ticket (3) of a certain width (B2) and in that the scraping element (5) extends over only a certain part of this width (B2). 50
13. Device according to any of the preceding claims, characterized in that it is provided with a waste receiver (20). 55
14. Device according to any of the preceding claims, characterized in that it can be folded up.
15. Device according to any of the preceding claims, characterized in that it is provided with a mechanism (24) to clean the scraping element (5).





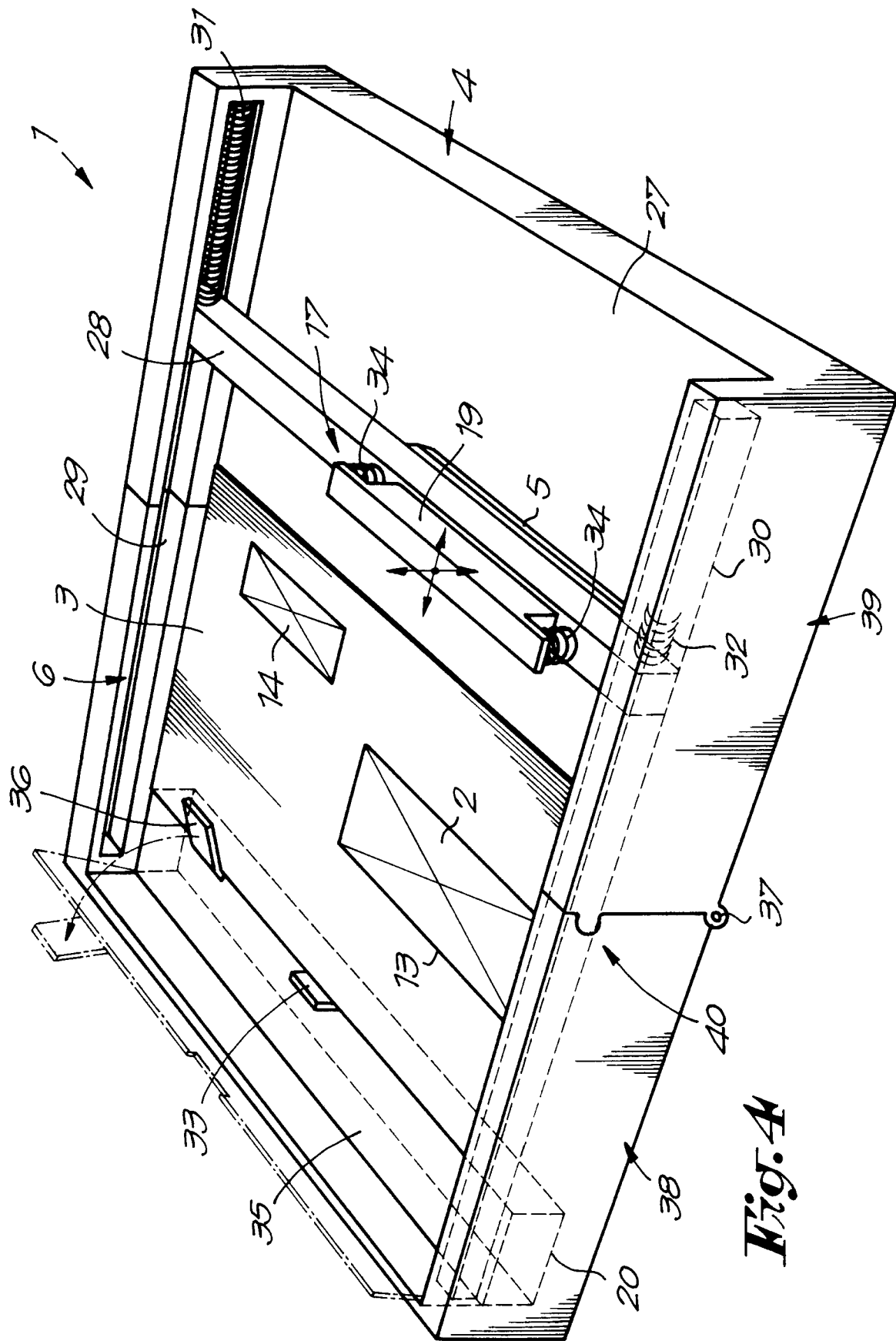


Fig. 4



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EUROPEAN SEARCH REPORT

Application Number
EP 95 20 3223

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	US-A-5 419 004 (G. FOX) * column 3, line 10 - column 6, line 55 * ---	1-3, 8-13,15	A63F3/06 B44D3/16
X	US-A-4 646 382 (R. C. SMITH) * column 2, line 63 - column 5, line 12 * ---	1-3,8-13	
X	US-A-4 777 693 (K. T. DIBA ET AL) * column 4, line 39 - column 5, line 27 * ---	1,4,5,7, 11-14	
X	US-A-4 793 061 (J. A. RIZZO JR.) * column 1, line 30 - column 3, line 33 * ---	1-3,8, 11,12	
X	US-A-5 355 543 (M. R. CAMERON ET AL) * column 3, line 1 - column 4, line 6 * ---	1,4,5,7, 11-13	
X	US-A-4 654 923 (G. R. FACIANE ET AL) * column 1, line 25 - column 14, line 345 * ---	1,4,7, 11,12	TECHNICAL FIELDS SEARCHED (Int.Cl.6)
X	US-A-5 253 383 (R. D. CLARK) * column 1, line 39 - column 2, line 67 * -----	1,4,5, 7-10,13, 15	B44D A63F
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 29 August 1996	Examiner Doolan, G
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			

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