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(54) **WINDPROOF COVER FOR LIGHTERS**

(57) The utility model relates to a case for common lighters with a mechanical windproof function.

The case consists of a fixed part where the lighter is inserted and a movable part that provides wind protection to the lighter flame, solving the problem of the lighter flame being extinguished in windy conditions.

The fixed component and the movable component are joined by a simple sliding system.

The utility model is aimed at the lighter industry and can be applied to industrial sectors related to the production of covers and custodies.

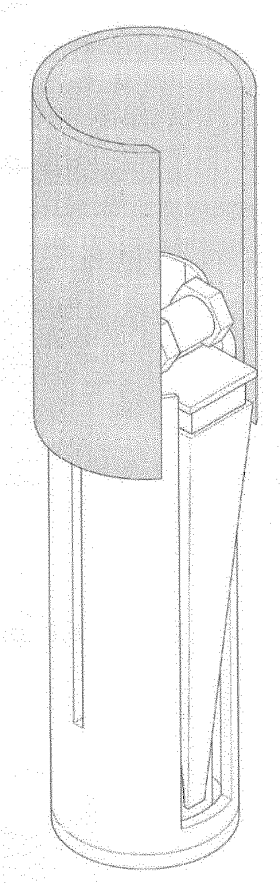

Fig. 2.2

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Description

[0001] This utility model concerns a lighter cover with a windproof function.

[0002] The cover consists of a fixed part in which to insert the lighter and a movable part that provides windproof protection for the flame.

[0003] The two cover components are joined by a simple sliding system.

[0004] At the time of use of the lighter in windy conditions, the movable part is slid in such a way as to lengthen the cover and ensure the windproof coverage to the flame, but leaving one side open to allow normal cigarette ignition, cigar, mosquito coils, or any other material that may be subject to the burning of a normal flame of portable lighters.

[0005] Once used and the flame of the lighter has been extinguished, the movable part of the cover can be easily put back down, eliminating any unnecessary clutter.

[0006] This utility model offers a safe solution to the difficulty of using an ordinary lighter when it is windy, without the risk of causing a burn.

Field of industrial application

[0007] The utility model concerns a cover to prevent the extinguishing and/or flame deflection of common portable lighters in windy environmental conditions. The utility model is aimed at the lighter industry and can be applied to industrial sectors involving the production of covers and custodies.

State of the art

[0008] There are no known covers or custodies or lighter holders that have the function of the utility model, as it is not known any model that provides for the possibility of preventing the flame of a common lighter to turn off through the protective mechanical functionality guaranteed by the same cover/ custody/lighter holder.

[0009] With a normal lighter, in windy conditions, it is difficult to light the flame and prevent it from going out, without creating some sort of barrier with the other hand, running the risk of causing a burn.

Presentation of the utility model

[0010] The proposed windproof cover for lighters is a solution that allows you to use for the necessary time, even when there is wind, the flame of a common lighter, in conditions of absolute safety and with the use of only one hand. The windproof cover for lighters, object of the utility model, produces the following important advantages:

- allows a common, inexpensive lighter to be used profitably, even in windy conditions;
- the lighter inserted in the windproof cover can be used with unchanged effectiveness both indoors and outdoors, with or without wind;
- has a shape that allows the handle and operation with one hand;
- in windless conditions, since the mobile component does not need to be used, it can be retracted without any encumbrance;
- once the lighter's gas has run out, the windproof cover allows the gas to be recharged by having an opening in the bottom, or a new lighter can be easily inserted into the windproof cover, over and over again.

Description of the drawings

[0011] The features and advantages of the utility model will be most evident from the drawings of the four attached tables, which represent one of the most common models of portable lighters for illustrative purposes.

[0012] Table No. 1/4 shows an exploded view with, in order from bottom to top, Fig.1.1 the component A of the windproof cover, Fig.1.2 an ordinary lighter (drawn here for explanatory clarity) and Fig.1.3 the component B (drawn in grey for explanatory clarity).

[0013] Table No. 2/4 shows the windproof cover assembly according to the utility model, (again with the lighter inserted and drawn for explanatory clarity) Fig.2.1 on the left in the unused condition and Fig.2.2 on the right with part B (drawn in grey for explanatory clarity) elevated to protect the flame from the wind.

[0014] The morphology of the two parts of the windproof cover is highlighted by the figures in Table No. 3/4 (where the device is shown in a non-use condition, without the lighter and with part B drawn in grey for explanatory clarity):

- top, on the left (Fig.3.1) in top view and on the right (Fig.3.2) in bottom view;
- in the middle, on the left (Fig.3.3) in front view and on the right (Fig.3.4) in side view;
- bottom (Fig.3.5 and Fig.3.6) in double axonometric view.

[0015] Table No. 4/4 shows the device in the position of use, i.e. extended by moving part (B) longitudinally (but without the lighter and with part B drawn in grey for explanatory clarity):

- top, on the left (Fig.4.1) in front view and on the right (Fig.4.2) in side view;
- bottom, (Fig.4.3 and Fig.4.4) in double axonometric view.

[0016] The drawings show that the lighter inserted inside part A fits inside the cover.

[0017] Both components of the windproof case have a large front opening to accommodate the lighter button, and part A also has a lower hole to allow the lighter inserted inside the case to be recharged.

[0018] Part B is constrained to part A by a sliding system consisting of: one or more "channels" in part A (two are shown in the drawing) into each of which runs one (or more) internally "protrusion" at the bottom of part B.

[0019] The pressure generated by the presence of a rigid body (lighter) inside part A creates the ideal stability of the cover, making the sliding system between part A and part B more than optimal.

Claims

1. Windproof cover for lighters according to claim No.1 **characterised in that** it comprises:

   - a first part (A), designed to act as a handle and to house, in a reversible and functional manner, an ordinary lighter, guaranteeing its ignition/deactivation, recharging and replacement functions;
   - a second part (B), designed to protect the flame of the lighter from the action of the wind;
   - a sliding system of part B on part A, designed to extend the cover longitudinally whenever the wind protection is required and then to close it again when no longer needed.

2. Windproof cover for lighters according to claim No.1, **characterised by** the fact that it can be made in different shapes and sizes according to the shapes and sizes of the lighters to be housed inside, in particular with the two parts of the windproof cover having a cross-sectional area reproducing that of the section of the lighter, except for the size increments necessary to ensure the housing of the lighter and the sliding of the movable part.

3. Windproof cover for lighters according to claim No.1, **characterised in that** the sliding of the movable part is made possible by the insertion of one or more internal protrusion of the movable part (B) into one or more channels of the fixed part (A).

4. Windproof cover for lighters according to claim No.1, **characterised in that** both parts of the windproof cover have an opening for the ignition button of the lighter to be inserted.

5. A windproof cover for lighters according to claim No.1, **characterised in that** the fixed part (A) of the cover has a hole at the bottom to allow the lighter to be refilled.

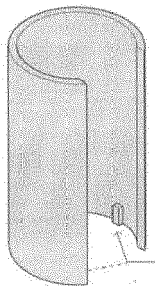

Fig. 1.3

Fig. 1.2

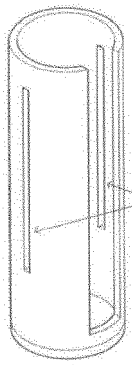

Fig. 1.1

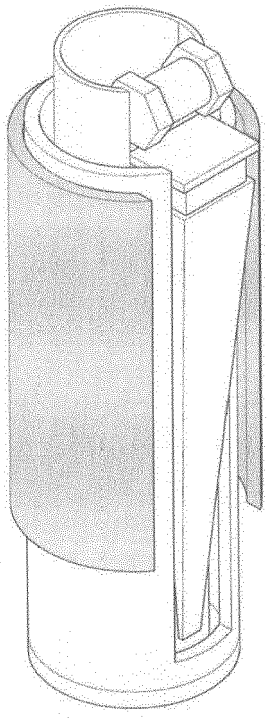

Fig. 2.1

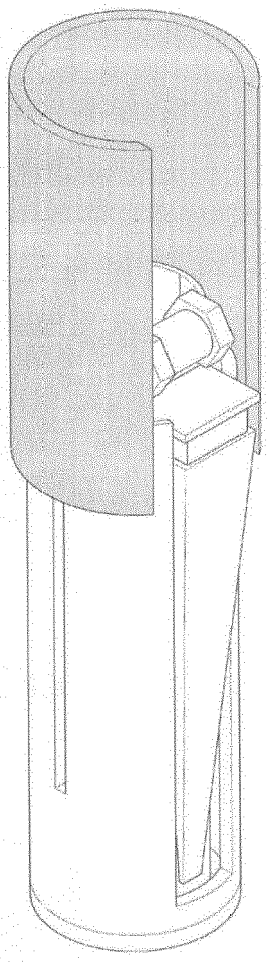

Fig. 2.2

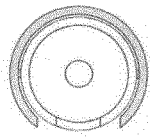

Fig. 3.1

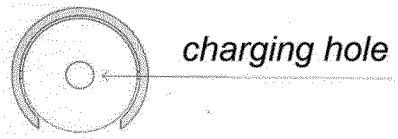

Fig. 3.2

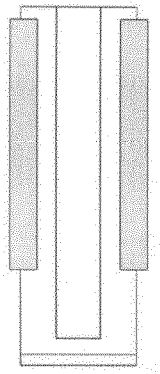

Fig. 3.3

Fig. 3.4

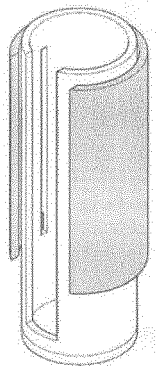

Fig. 3.5

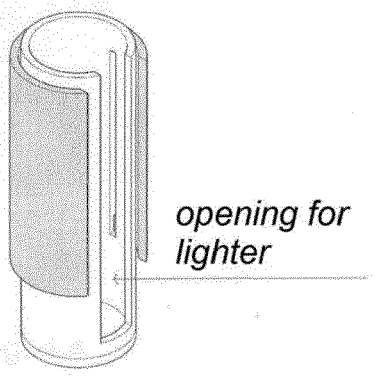

Fig. 3.6

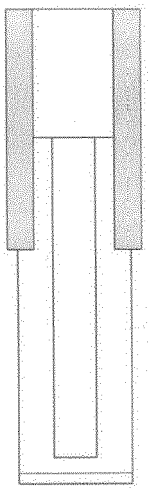

Fig. 4.1

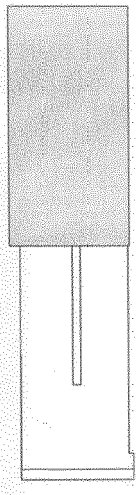

Fig. 4.2

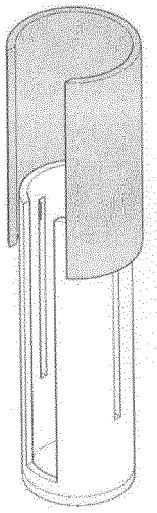

Fig. 4.3

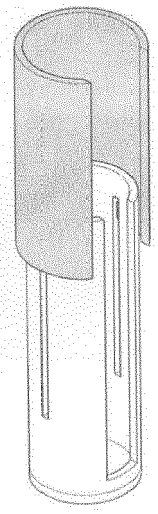

Fig. 4.4

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EUROPEAN SEARCH REPORT

Application Number
EP 23 02 0128

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X Y	JP 3 601670 B2 (S S SHII KK) 15 December 2004 (2004-12-15) * paragraphs [0010] - [0012]; figures 1-4 * -----	1-4 5	INV. F23Q2/50 F23Q2/36
Y	JP H09 68312 A (ITO SHIGENOBU) 11 March 1997 (1997-03-11) * figure 2 * -----	5	
X	CN 212 456 961 U (CHEN LONG) 2 February 2021 (2021-02-02) * figures 8,9 * -----	1	
A	GB 2 170 891 A (YU HONG CHI) 13 August 1986 (1986-08-13) * the whole document * -----	1	
A	KR 2008 0050167 A (LEE HYO BYOUNG [KR]; KIM DAE JOONG [KR] ET AL.) 5 June 2008 (2008-06-05) * the whole document * -----	1	

TECHNICAL FIELDS SEARCHED (IPC)

F23Q

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	1 September 2023	Rodriguez, Alexander

CATEGORY OF CITED DOCUMENTS

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01-09-2023

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