(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) **EP 2 767 312 A2**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
20.08.2014 Bulletin 2014/34

(51) Int Cl.:
A62C 13/76 *(2006.01)*

(21) Application number: **14445002.0**

(22) Date of filing: **22.01.2014**

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA ME

(30) Priority: **15.02.2013 SE 1350180**

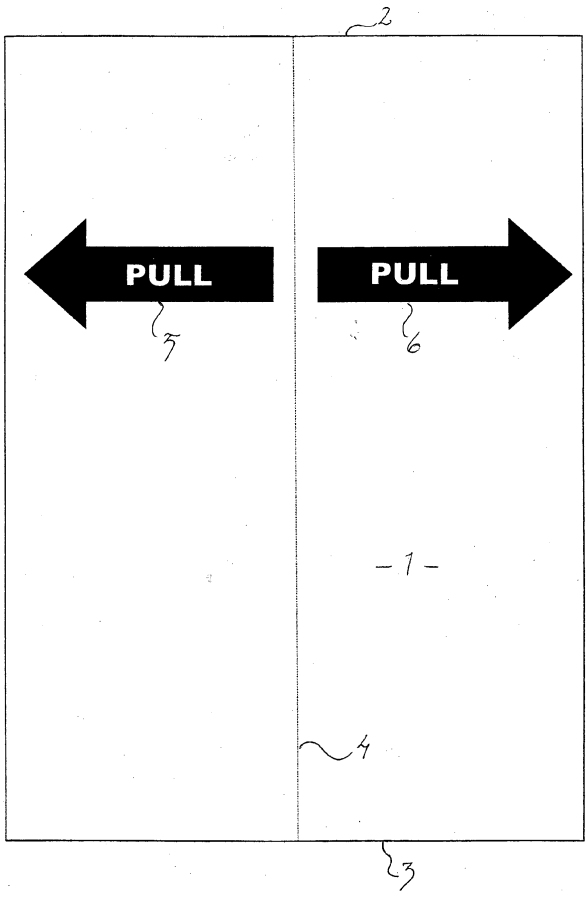
(71) Applicant: **PS Din Brandskyddsleverantör**
590 49 Vikingstad (SE)

(72) Inventor: **Selmosson, Peter**
S-590 49 Vikingstad (SE)

(74) Representative: **Berglund, Erik Wilhelm**
Berglunds Patentbyrå AB
Aspebråten
590 55 Sturefors (SE)

(54) **Protection for fire extinguisher**

(57) Protective bag for extinguisher that is constituted by a plastic bag (1) with a bottom (2) facing upwards and an opening (3) downwards and provided with a perforation line (4) on the front side and corresponding one on the back side. Two markings (5 and 6) indicate where the bag is to griped in order to tear apart the perforations with a rapid jerk to free a fire extinguisher over which the bag has been pulled down in order to protect this against pollution.



EP 2 767 312 A2

Description

[0001] Fire extinguishers are very important since they enable a stopping of fires in an early state, fires that otherwise can not only lead to great material damages but also to people being injured or even die. It is therefor important that fire extinguishers are at hand in the locations were fire easily can be expected to occur. It is also important that the fire extinguishers are functioning and they must therefor be controlled regularly. The control that is made of the fire extinguishers is a so called yearly control/service that is made bye companies that work with service of fire extinguishers. An extensive control is carried out in accordance with *standard for maintenance of fire extinguishers* SS 3656. At this one looks at a couple of control points, among others that the fire extinguisher has a pressure, that it has not started to rust and that plastic/rubber details have not become dry. In many places with a more tough environment, were perhaps at the same time the risk of fire is larger, for instance carpentry shops, saw mills and industrial environment generally and were there is combustible material for instance in the shape of dust, oil etcetera were the risk is great for a fire extinguisher to become coated with so much dust that it may reduce the functionality of the fire extinguisher. In environments were water may come in contact with a fire extinguisher (out doors moving vehicles, food environment, farming etcetera) The pin that has to be withdrawn in order to use the fire extinguisher may get rusted in the handle, which may lead to delayed time of use or in very worse case that it becomes impossible to remove the pin and therefor impossible put out the fire at all. In these places fire extinguishers should continuously be cleaned by employed personal, which is not done.

[0002] As is apparent from the above keeping the fire extinguisher clean is a problem. The object of the invention is to solve this problem. In accordance of the invention it is suggested to use a plastic bag that is pulled over the fire extinguisher. Advantageously the plastic bag is transparent, herewith the fire extinguisher remain visible and normal cleaning can be reduced to a change of bag.

[0003] Many fire extinguishers are heavy, are perhaps mounted to the wall and the bag could be considered to become and hindrance in connection with a fire when you quickly want the fire extinguisher in a usable stage, that is the bag must be removable instantaneously and should not really require any tutoring of how you remove the bag.

[0004] In order to enable an easy removal of the bag one could consider to use slotting to make the bag weaker. This however, as is realized, has the drawback that the slot easily can become more or less opened in connection with the mounting or hanging up of the fire extinguisher. The advantage of the bag will then be lost since contamination may take place. In other words a simple plastic bag is not entirely satisfactory, even if it is appealing from the prize view. It is important that the protection of the fire extinguisher becomes really low cost in order to be used.

[0005] In view of the above mentioned added problems a further development of the invention has as its object to provide a protection against dust and dirt and other contaminations for fire extinguishers, that its easy to mount, and that instantaneously can be removed when fire extinguisher has to be used and this with little risk that the bag breaks at normal mounting.

[0006] The solution of the above additional problems are apparent from the sub claims as well as following description of advantageous developments of the invention.

[0007] By also choose a plastic material that at fast events is shocked the above mentioned draw back with perforated fracture indications can be eliminated. The force required for tearing apart in this way becomes different depending on how fast or sudden the force is applied. If the force is applied slowly the plastic material adapts and directs its force take up in the direction of the force in order to counteract this. If however the applied force is applied very fast the plastic material will not be able to adapt but is torn or stripped off more easily. Examples of such plastics are PP, PE and PLA. When the bag is applied or handled together with the fire extinguisher this is of course slow and calm, or should at least be the case, and the bag is therefor not torn. However at an immediate need of the fire extinguisher the handling of the bag will of course be fast not to say brutal and the bag simply has no time to adapt when there comes a jerk that tears the bag along one or several perforations. Then the fire extinguisher can be gripped and used.

[0008] Below an embodiment of a fire extinguisher protection according to the invention is described in connection with the enclosed drawing.

[0009] The protection device for fire extinguishers shown in the drawing comprise a sea through plastic bag 1 that is sufficiently wide to extend with a margin around the fire extinguisher and with a length that is sufficient to reach down to the bottom of the fire extinguisher and possibly below this, making it possible for a bag to be folded in below the fire extinguisher. The bottom 2 is facing upwards and the opening 3 is facing downwards. On the front and rear side of the bag in the length direction of this bag weakening lines 4 (perforations) are arranged which weakenings comprise short slots between remaining bridges. Furthermore, as is apparent, two arrows 5 and 6 are applied with text (PULL) indicating that the bag advantageously should be gripped on each side of the fire extinguisher when this shall be ripped apart in order quickly to get to the fire extinguisher. The bag is wider than the fire extinguisher to give place for a good grip on one or both sides of the fire extinguisher. When you grip the plastic to the right and left of the center perforation the force in the jerk will be at its largest were the hands are so that the intermediate part of the weakening line is subjected to a larger part of the tearing force and the line will burst there whereafter the continued movement in the jerk or force in the jerk runs upwards and downwards

so that the fire extinguisher become entirely free and can be lifted from its bracket.

[0010] At the removal of a polluted protection for a fire extinguisher for control and protection exchange one can proceed in the same way but it is also possible to remove it in its entirety without tearing it apart if you wish to avoid that accumulated dirt, dust, oil, wood chips, paper fibers falling down on the fire extinguisher. After function checking and control of pressure has taken place a new cover is applied. The bag is low cost compared to the time required for an average cleaning and also guarantee a greater of degree of cleanness for fire extinguisher than if it should be cleaned by a controller, since it is almost impossible to clean a severely polluted fire extinguisher.

[0011] The perforations can also be arranged in other ways than has been described above. For instance it is possible to consider a perforation line that runs crosswise around the bag, that is when it is located on a vertical fire extinguisher in a line around the bag. Here instead forceful jerk upwards is required to tear the perforation. Possibly one can consider the perforation not being arranged on the same horizontal height all the way around the bag when its on the fire extinguisher. This in order to place the tearing of the bag parts just as at the longitudinally running perforation to be initiated at one place so that you do not have to tear off all connection in one time but can have these after each other. The perforation places being closest to the place where the tearing force is applied can not yield as much and will reasonably give way first. One can also consider to have the gripping area for tearing apart at an upper corner in the mounted position. One can also consider to have perforations lengthwise as well crosswise so that the bag can be torn apart in two different ways alternatively by the applying of several perforation lines.

[0012] If the fastening of the fire extinguisher is in the center one can instead of heaving centered slots on the front and rear side as showed in the drawing, displace these to one side in order to further to minimize the risk that the bracket will puncture the bag prematurely.

Claims

1. Protective bag for fire extinguisher, **characterized in that** it comprise plastic bag.

2. Protective bag according to claim 1, **characterized in that** it is provided with one or several perforations on front and/or rear side relative the fire extinguisher.

3. Protective bag according to claim 2, **characterized in that** the bag has one or several essentially vertically perforation lines on the front and/or rear side.

4. Protective bag according to claim 2 or 3, **characterized in that** grip location for the tearing apart are marked essentially opposite each other on each side of the perforation lines.

5. Protective bag according to claim 4, **characterized in that** the connection line between the gripping locations are perpendicular to the slots.

6. Protective bag according to claim 4 or 5, **characterized in that** the bag is so much wider than the fire extinguisher that the protection bag at the tearing away can be gripped well at the sides of the fire extinguisher.

7. Protective bag according to claim 1, **characterized in that** a vertical perforation is applied at the front side as well as on the rear side, that are vertical when the protective bag is mounted on a vertical fire extinguisher.

8. Protective bag according to any of the claim 2 to 7, **characterized in that** the perforation on front and rear side coincide so that they can be made with same tool.

9. Protective bag according to any of the claims 2 to 8, **characterized in that** the perforation dimensions are slot 2-5 mm and bridges 1-3 mm.

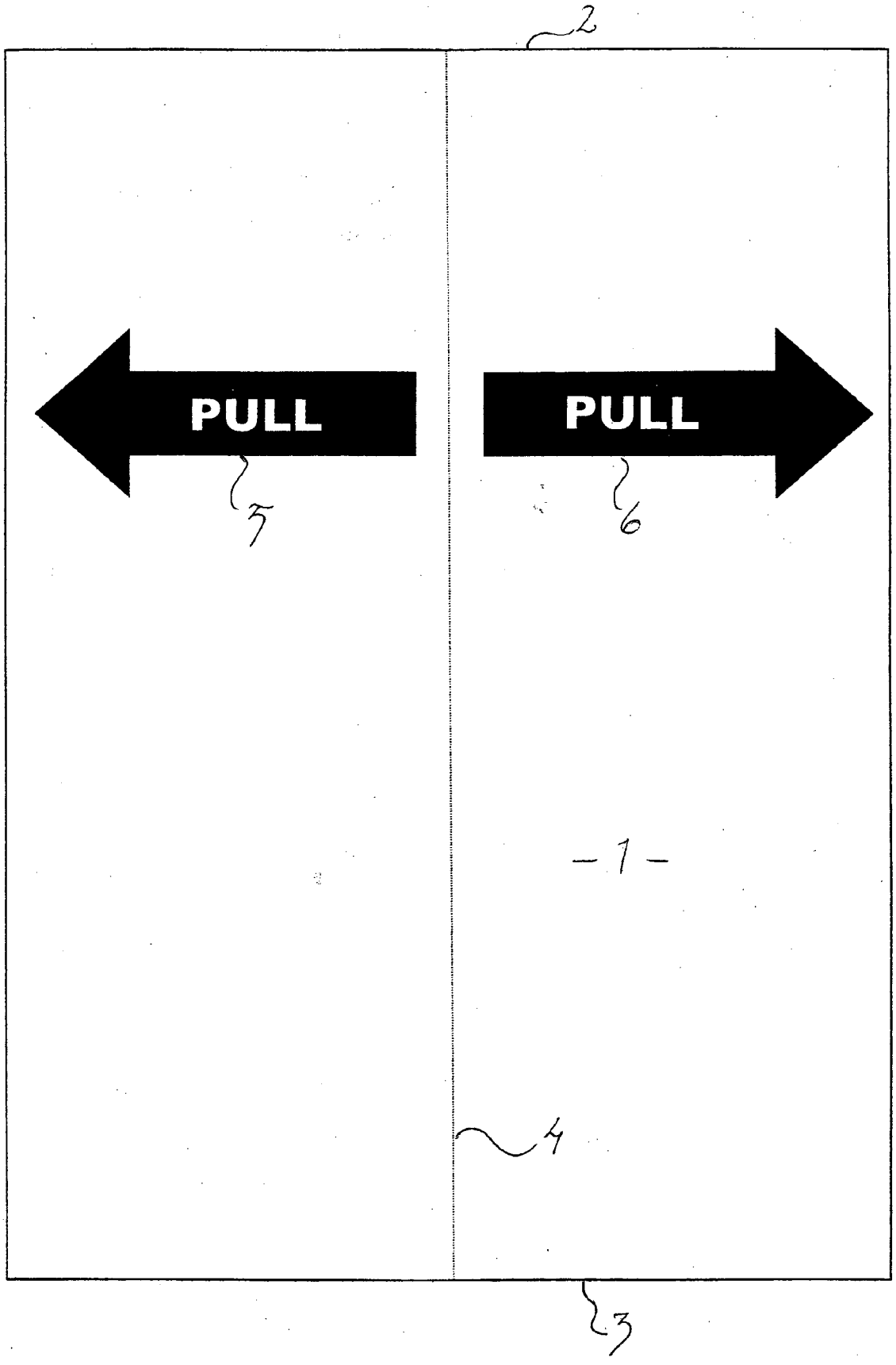
10. Protective bag according to any of the preceding claims, **characterized in that** the bag is transparent.

11. Protective bag according to any of the preceding claims, **characterized in that** it is fabricated of a plastic material that becomes more fragile at faster events (shockable plastic material).

12. Protective bag according to claim 11, **characterized in that** the plastic material is PP, PE or PLA.

13. Method for the opening of a protective bag according to claim 12, **characterized in that** the opening takes place fast or with a jerk.

14. Method according to any of the preceding claims, **characterized in that** the protective bag and the fire extinguisher are arranged with coinciding length extensions.


2
PULL
PULL
5
6
1
4
3