SUMMARY OF THE INVENTION

Therefore, the present invention relates to an assembly which comprises a container at least one electrical energy storage unit stored inside said container, characterized by the fact that at least one of the walls of said container is provided with at least one vent hatch that is movable between a closed so-called normal position in which it closes said wall, and an open so-called safety position in which it places the inner space of said container in communication with the outside, and by the fact that it comprises:

- at least one smoke detector which, when actuated, is configured to trigger automatic movement of said hatch from said normal position to said safety position;

- and/or management means configured to measure an operating parameter of said storage unit and to trigger automatic movement of said hatch from said normal position to said safety position when the performed measurement reaches a predetermined set value.

Under these conditions, as soon as the detector is actuated, the vent hatches therefore open automatically and position themselves in the safety position so that smoke and gases are able to be evacuated towards the outside, thereby preventing any risk of overpressure.

In addition, when said management means are present, damage caused by an imminent fire can be prevented or limited.

According to other nonlimiting and advantageous characteristics of the invention, taken alone or in combination:

- the assembly is in the form of a rectangular or square parallelepiped and said hatch is arranged on a vertical peripheral side thereof;

- the assembly is in the form of a rectangular or square parallelepiped and said hatch is arranged on a roof thereof;

- said hatch is mounted pivotably relative to said wall;

- said hatch is integrated in an access door to said inner space or is merged with this door;

- said hatch is provided with return means which tend to hold it in safety position when said return means are not restrained;

- said return means are selected from the group formed by: a hinge with reverse action springs, one or more actuators in particular pneumatic or electric, an elastomer material, at least one spring such as a torsion spring or compression spring, or a combination of at least two thereof;

- the assembly comprises means to retain said hatch in normal position, these means becoming inoperative as soon as they receive information relating to smoke detection, via said detector, or information relating to the operation of said at least one storage unit via said management means;

- said retaining means are selected from the group formed by at least one electromagnetic suction pad, at least one remote-controlled pneumatic kit, at least one electromagnetic or electropneumatic bolt, at least one electromagnetic or electropneumatic striker plate;

- the assembly comprises at least one position sensor of said hatch;

- the assembly comprises several hatches and several detectors, these detectors being configured to trigger said hatches selectively or simultaneously;

- the assembly comprises several hatches and said management means are configured to trigger the opening of said hatches selectively or simultaneously.

BRIEF DESCRIPTION OF THE DRAWINGS

Other characteristics and advantages of the invention will become apparent on reading the following description of one preferred embodiment of the invention. This description is given with reference to the appended drawings in which:

- Figure 1 is a perspective view of one example of embodiment of a storage container according to the invention;
- Figure 2 is a detailed view of the front wall of the container in Figure 1, one of the hatches being open providing a view of the electrical energy storage units stored therein;
- Figure 3 is a detailed view of one of the doors of the container in Figure 1 in which a vent hatch can be seen that is illustrated in closed position, called normal position;
- Figure 4 is a similar view to Figure 3 showing the hatch in open position called safety position;
- Figure 5 is a perspective view of a hatch and of the frame on which it is mounted pivotably;
- Figures 6 and 7 are partial, perspective cross-sectional views of a hatch and of the door on which it is mounted, these views showing means allowing retaining of the hatch in closed position and means providing the user with information on the position of the hatch;

CLAIMS

1. An assembly which comprises a container and at least one electrical energy storage unit stored inside said container, characterized by the fact that at least one of the walls of said container is provided with at least one vent hatch that is movable between a closed so–called normal position in which it closes said wall, and an open so–called safety position in which it places the inner space of said container in communication with the outside, and by the fact that it comprises:

- at at least one smoke detector which, when actuated, is configured to trigger automatic movement of said hatch from said normal position to said safety position;
- and/or management means configured to measure at least one operating parameter of said at least one storage unit and to trigger automatic movement of said hatch from said normal position to said safety position when said performed measurement reaches a predetermined set value.

2. The assembly according to claim 1, characterized by the fact that said container is in the form of a rectangular or square parallelepiped and in that said hatch is arranged on a vertical peripheral side thereof.

3. The assembly according to one of claims 1 and 2, characterized by said container is in the form of a rectangular or square parallelepiped and in that said hatch is arranged on a roof thereof.

4. The assembly according to one of claims 1 to 3, characterized by the fact that said hatch is–mounted pivotably relative to said wall.

5. The assembly according to one of the preceding claims, characterized by the fact that said hatch is integrated in an access door to said inner space or is merged with this door.

6. The assembly according to one of the preceding claims, characterized by the fact that said hatch is provided with return means which tend to hold it in safety position when these return means are not restrained.

7. The assembly according to claim 6, characterized by the fact that said return means are selected from the group formed by: a hinge with reverse action springs, one or more actuators in particular pneumatic or electric, an elastomer material, at least one spring such as a torsion spring or compression spring, or a combination of at least two thereof.

8. The assembly according to one of the preceding claims, characterized by the fact that it comprises means to retain said hatch in normal position which become inoperative as soon as they receive information relating to smoke detection, via said detector, or information relating to the operation of said at least one storage unit, via said management means.

9. The assembly according to claim 8, characterized by the fact that said retaining means are selected from the group formed by at least one electromagnetic suction cup, at least one remote–controlled pneumatic kit, at least one electromagnetic or electropneumatic bolt, at least one electromagnetic or electropneumatic striker plate.

10. The assembly according to one of the preceding claims, characterized by the fact that it comprises at least one position sensor of said hatch.

11. The assembly according to one of the preceding claims, characterized by the fact that it comprises several hatches and several detectors, these detectors being configured to trigger the opening of said hatches selectively or simultaneously.

12. The assembly according to one of the preceding claims, characterized by the fact that it comprises several hatches and in that said management means are configured to trigger the opening of said hatches selectively or simultaneously.

13. The assembly according to one of the preceding claims, characterized in that said operating parameter of said at least one storage unit is temperature, intensity or voltage.