

[Document Title] ABSTRACT

[Object] The object of the present invention is to provide a closed battery capable of rapidly releasing the internal pressure thereof and at the same time disconnecting the current to effectively prevent itself from temperature rising and explosion so that it may assure the safety and reliability thereof, when the internal pressure is elevated due to short circuit, overcharge, reverse charge, or the like in such a completely closed battery.

[Means of Solution] The formation of a valve element 5 whose center is eccentric to the center of a metal substrate 1 produces a slit 3 having a large width portion around the circumference of a valve element 5. When the internal pressure of a battery is elevated, the valve element 5 is smoothly raised up together with a metal foil 2 from the bending fulcrum portion 4 to thereby cut a lead wire 6 or permit a braze portion 8 to detach from the lead wire 6, thus reliably disconnecting the current. Then, the metal foil is allowed to burst stably and accurately at a prescribed pressure to thereby form a valve opening portion 7 so that the internal gas of the battery can be discharged. Thus, the battery can previously be prevented from exploding.

[Elected Drawing] Fig. 2