

ABSTRACT

To provide a method which allows a battery with a flat base to be produced in a cylindrical battery manufacturing method in which a metallic casing with a larger outside diameter than the outside diameter of the metallic casing in the finished battery is used, a battery element is housed in the said metallic casing, then the outside diameter of the metallic casing reduced; to reduce the occurrence of defective batteries due to deficient electric conduction between the metallic casing and the electrode lead; and to improve the safety of the said cylindrical battery in the event of an outside short circuit.

In the making of a battery in which the outside diameter of the metallic casing in the finished battery is A , the outside diameter of the metallic casing used is made to satisfy the relationship $L2 > A \geq L3$. The battery element, made by winding in a coil shape, is wound so that when winding is completed the end of electrode or electrode current collector of either the negative electrode or the positive electrode is positioned at the outermost periphery of the battery element, then the said battery element is housed in a cylindrical metallic casing, after which the outside diameter of the said metallic casing is reduced to strengthen the contact between the end of electrode or electrode current collector positioned at the outermost periphery of the battery element and the internal wall of the metallic casing, and make the resistance electric of contact between the electrode and metallic casing sufficiently small.

Figure 1

