

ABSTRACT

POUCH PACKAGED LITHIUM-ION BATTERY WITH TOOTH-SHAPED SEALING EDGE

A pouch packaged lithium-ion battery with a tooth-shaped sealing edge is provided in the present disclosure, including a main body, which includes an aluminum-plastic film arranged with a jelly roll disposed therein. The jelly roll includes a cathode, an anode and a film separating the two. The cathode, the film and the anode are winded and overlaid to form a cylinder. A cathode tab and an anode tab are respectively arranged on both sides of the jelly roll. A middle part of the aluminum-plastic film extends toward an outside of the lithium-ion battery to form a sealing edge. The cathode tab and the anode tab extend downward and penetrate the sealing edge horizontally. A joint between the cathode/anode and the sealing edge is covered with a tab sealant. The sealing edge, the cathode tab and the anode tab are bent upward to attach to a surface of the main body. The surface of the sealing edge is arranged with tooth-shaped grooves and distributed in an annular array. The lithium-ion battery has a compact structure and the sealing edge is regular and beautiful, so that the energy density of the battery may be improved and the lithium-ion battery may be convenient to be assembled.

Figure 1