

Polymer Battery and Method of Manufacture

ABSTRACT

A polymer battery which includes a cell assembly
5 having a positive electrode, a negative electrode, and a
separator composed primarily of a fluoropolymer is
manufactured by impregnating the cell assembly with an
electrolyte composition containing (A) an ion-conductive
salt, (B) a solvent in which the ion-conductive salt is
10 soluble and (C) a compound having at least two reactive
double bonds per molecule, then reacting the component C
compound to form a three-dimensional network structure. The
polymer battery has a high safety, a good thermal cycling
resistance and robust characteristics even when held at an
15 elevated temperature, making it particularly suitable for
use as a lithium secondary cell or a lithium ion secondary
cell.

Fig. 8