

POLYMERIC SECONDARY BATTERY

ABSTRACT

A method for manufacturing a polymeric secondary battery comprises the steps of: (a) forming a positive electrode, a negative electrode, and a separator membrane each containing plasticizer; (b) combining the positive electrode, the negative electrode, and the separator membrane to form a unitary cell; (c) placing the unitary cell into a chamber; (d) introducing a gaseous solvent into the chamber and contacting the gaseous solvent with the unitary cell so that the plasticizer dissolves in the gaseous solvent and is removed from the unitary cell thus, during which the gaseous solvent condenses into liquid; (e) collecting a mixture of the solvent and the plasticizer; (f) distilling the mixture for separating the solvent and the plasticizer, which are recyclable after the separation; and (g) activating the plasticizer-free unitary cell by making it absorb an electrolyte solution.

Figure : 2