ABSTRACT

The present invention aims to provide a blood purification column with a reduced blood capacity of 10 mL or less, which has a low risk of clogging of a blood flow tube and allows manual winding of an adsorbent carrier. The invention provides a blood purification column comprising a cylindrical body, a first header having a first blood channel, a second header having a second blood channel, an adsorbent carrier, a first end plate, a second end plate, and a blood flow tube with openings, wherein: one end of the blood flow tube communicates with the first blood channel and the other end is closed; the first end plate is installed such that its outer circumferential surface closely contacts with the inner circumferential surface of the cylindrical body; a gap is provided between the outer circumferential surface of the second end plate and the inner circumferential surface of the cylindrical body; the ratio of the outer diameter of the blood flow tube in the cross-section vertical to the longitudinal direction, D1, to the inner diameter of the cylindrical body in the cross-section vertical to the longitudinal direction, D2, is 0.35 to 0.50; and the blood capacity is 6 to 10 mL.

LITHIUM-ION BATTERY PRECURSOR INCLUDING A SACRIFICIAL LITHIUM ELECTRODE AND A NEGATIVE TEXTILE CONVERSION ELECTRODE

ABSTRACT

The invention relates to a lithium-ion accumulator precursor comprising

- one or more electrode modules each formed by

(a) at least one textile negative electrode precursor, composed of a textile metallic structure, oxidized at the surface, based on one or more transition metals from groups 4 to 12 of the Periodic Table of the Elements,

(b) a polymeric separator, impregnated with a solution of a lithium salt in an aprotic organic solvent, said separator covering the surface of the negative electrode precursor,

(c) a positive electrode forming a solid, preferably continuous, matrix which encloses the structure formed by (a) and (b), and

- at least one metallic lithium electrode, separated from the electrode module or modules by a polymeric separator impregnated with a solution of a lithium salt in an aprotic organic solvent,

characterized in that the ratio of the geometric surface area of the lithium strip to the cumulative geometric surface area of all of the textile negative electrode precursors is within the range from 0.05 to 0.33, preferably from 0.1 to 0.25.

The invention also relates to a method for producing an accumulator from such a precursor.