

IRON-AIR ACCUMULATOR WITH LITHIUM MEDIATOR

Abstract

5 The invention relates to a semi-accumulator that includes: (a) an electrode formed by an electron collector (3) comprising one or more transition metals from Groups 4 to 12 of the periodic table, and by an electrochemically active material (4) provided at the
10 surface of the electron collector and in the form of a nanostructured conversion layer containing nanoparticles having a mean diameter of 1 to 1000 nm, said electrochemically active material containing at least one compound of the transition metal(s) provided in the
15 electron collector; and (b) a continuous layer of a solid electrolyte (5) capable of conducting lithium ions, impervious to water and air and totally covering the surface of the nanostructured active material of the electrode (a). The invention also relates to an
20 electrochemical generator comprising such a semi-accumulator as a negative electrode, preferably in the presence of an aqueous electrolyte containing LiOH.

Figure 1