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(54) Title (EN): LIQUID-CATHODE BATTERY WITH SPECIFIC ARCHITECTURE

(54) Title (FR): PILE A CATHODE LIQUIDE A ARCHITECTURE SPECIFIQUE

(57) Abstract:

(EN): The invention relates to a battery comprising a calcium anode, a cathode consisting of a carbon matrix impregnated with an active liquid material, which is a sulfur and/or phosphorus oxidising solvent, the anode and the cathode being separated from each other by an inter-electrode space containing an electrolyte comprising at least one salt and a solvent identical to that constituting the active liquid material and the cathode being disposed around the anode, characterised in that the anode is in the form of a solid calcium cylinder, while the cathode is in the form of a cylindrical shell made from a carbon material.

(FR): L'invention a trait à une pile comprenant une anode en calcium, une cathode constituée d'une matrice carbonée imprégnée par un matériau actif liquide, qui est un solvant oxydant soufré et/ou phosphoré, l'anode et la cathode étant séparées l'une de l'autre par un espace inter-électrodes comprenant un électrolyte comprenant au moins un sel et un solvant identique à celui constituant le matériau actif liquide et la cathode étant disposée autour de l'anode, caractérisée en ce que l'anode se présente sous forme d'un cylindre plein de calcium, tandis que la cathode se présente sous forme d'une enveloppe cylindrique en un matériau carboné.

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