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(54) Title (EN): HALOGEN-BASED ELECTROLYTE CONTAINING CARBON

(54) Title (FR): ÉLECTROLYTE À BASE D'HALOGÈNE CONTENANT DU CARBONE

(57) Abstract:

(EN): The present invention provides an electrolyte including a zinc halide salt, water, and carbon powder. The zinc halide salt is selected from ZnBr₂, ZnCl₂, ZnI₂, or any combination thereof. The electrolyte may include from about 25 wt% to about 50 wt% of the zinc halide salt. The electrolyte may include from about 25 wt% to about 50 wt% of the carbon powder. The zinc halide salt preferably includes ZnBr₂. The electrolyte may include 28 wt% to about 37 wt% of ZnBr₂. The electrolyte may be used in zinc-halide rechargeable electrochemical cells (e.g. storage batteries).

(FR): La présente invention concerne un électrolyte comprenant un sel d'halogénure de zinc, de l'eau et une poudre de carbone. Le sel d'halogénure de zinc est choisi parmi ZnBr₂, ZnCl₂, ZnI₂, ou toute combinaison de ces derniers. L'électrolyte peut comprendre d'environ 25 à environ 50 % en poids du sel d'halogénure de zinc. L'électrolyte peut comprendre d'environ 25 à environ 50 % en poids de la poudre de carbone. Le sel d'halogénure de zinc est de préférence ZnBr₂. L'électrolyte peut comprendre de 28 % en poids à environ 37 % en poids de ZnBr₂. L'électrolyte peut être utilisé dans des piles électrochimiques rechargeables zinc-halogénure (par exemple, des accumulateurs).

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