

**CLAIMS**

1. Electrochemical cell with absorption and emission controlled by electrodeposition under the action of a control voltage, characterised in that it comprises the following flexible elements, superimposed and respectively in intimate contact:

- a first electrode (11) intended to be connected to a first potential of the control voltage,
- 10 - a first porous layer (12), formed of a mixture of PVDF-HFP, PEO and an activated carbon powder,
- a porous separator (13), formed of a mixture of PVDF-HFP and PEO,
- 15 - a second electrode (14) formed of a grid and connected to a second potential of the control voltage,
- a second porous layer (15), formed of a mixture of PVDF-HFP, PEO and carbon powder,
- 20 an aqueous electrolytic solution containing a copper salt being contained in the first flexible layer (12), in the separator (13) and in the second flexible layer (15).

25 2. Electrochemical cell according to claim 1, characterised in that the first electrode is formed of a metallic leaf or by a metallic grid.

30 3. Electrochemical cell according to claim 2, characterised in that the first electrode is formed of a stainless steel leaf.



4. Electrochemical cell according to claim 2, characterised in that the first electrode is formed of a copper grid.

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5. Electrochemical cell according to claim 1, characterised in that the second electrode is a grid in copper or in stainless steel.

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6. Electrochemical cell according to claim 1, characterised in that the copper salt of the electrolytic solution is copper sulphate.