

Title (en)
STORAGE STRUCTURE

Title (de)
SPEICHERSTRUKTUR

Title (fr)
STRUCTURE ACCUMULATRICE

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Application
EP 14724738 A 20140516

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Abstract (en)
[origin: WO2014195111A1] The invention relates to a storage structure comprising a storage medium and an inert material that is integrated into the storage medium or exists as a separate phase in the storage medium, said inert material at least partially containing or comprising a polymorphous inert material. The polymorphous inert material has at least one polymorphous phase transition in the range between ambient temperature and maximum operating temperature of the solid electrolyte battery. The polymorphous phase transition induces a distortion of the lattice structure of the inert material, thus causing a change in the specific volume and acting on the surrounding grains of the storage medium. A mechanical coupling of the stresses triggered by the phase transition of the inert material causes the neighbouring grains of the storage medium to break apart, such that new reactive zones become available in the storage medium. According to the invention, a regeneration of the solid electrolyte battery is achieved in this way.

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Citation (search report)
See references of WO 2014195111A1

Citation (examination)
J.P. OUWELTJES: "Development of 2nd Generation, Supported Electrolyte, Flat Plate SOFC Components at ECN", PROCEEDINGS - ELECTROCHEMICAL SOCIETY, vol. 1999-19, no. 1, 1 January 1999 (1999-01-01), US, pages 803 - 811, XP055719510, ISSN: 0161-6374, DOI: 10.1149/199919.0803PV

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