

Title (en)

GAS DIFFUSION ELECTRODE AND PREPARATION METHOD THEREOF

Title (de)

GASDIFFUSIONSELEKTRODE UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

ÉLECTRODE DE DIFFUSION DE GAZ ET PROCÉDÉ DE PRÉPARATION CORRESPONDANT

Publication

**EP 2937449 B1 20170712 (EN)**

Application

**EP 12891307 A 20121224**

Priority

CN 2012001722 W 20121224

Abstract (en)

[origin: EP2937449A1] Provided are a gas diffusion electrode and a preparation method thereof. The gas diffusion electrode comprises a current collector 1, a gas diffusion layer 2, a gas catalysis layer 3 coated on the gas diffusion layer, and a liquid guide layer 4 located on the gas catalysis layer. The gas diffusion layer comprises highly-graphitized carbon black and polytetrafluoroethylene, and the gas catalysis layer comprises a catalyst, acidified highly-graphitized carbon black and polytetrafluoroethylene; the highly-graphitized carbon black has a peak intensity ratio I D / I G between 0.3 and 1.0 in the Raman spectrum, and the degrees of graphitization in the gas diffusion layer and the gas catalysis layer may be the same or different. The gas diffusion electrode has good corrosion resistance and excellent and stable electrochemical performance in alkali solutions, thus it is suitable for electrolytic reactions in the chlor-alkali industry.

IPC 8 full level

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CPC (source: EP)

**C25B 1/46** (2013.01); **C25B 11/031** (2021.01); **C25B 11/043** (2021.01)

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