

Title (en)
ENZYMATIC MODIFICATIONS OF A CELLULAR MONOLITHIC CARBON AND USES THEREOF

Title (de)
ENZYMATISCHE MODIFIKATIONEN EINES ZELLULÄREN MONOLITHISCHEN KOHLENSTOFFS UND VERWENDUNGEN DAVON

Title (fr)
MODIFICATIONS ENZYMATIQUES D'UN CARBONE MONOLITHIQUE ALVEOLAIRE ET APPLICATIONS

Publication
EP 2526584 A1 20121128 (FR)

Application
EP 11705640 A 20110119

Priority
• FR 1050361 A 20100120
• FR 2011050093 W 20110119

Abstract (en)
[origin: WO2011089356A1] The present invention relates to a porous electrochemical electrode made up of a solid cellular material provided in the form of a semi-graphitised carbon monolith comprising a hierarchised porous network free of mesopores and including macropores with a mean dimension d_A of 1 μm to 100 μm , and micropores with a mean dimension d_l of 0.5 nm to 2 nm, said macropores and micropores being interconnected. In said electrode, the macropores contain at least one electroactive species in direct contact with the semi-graphitised carbon that makes up the surface of the macropores. The invention also relates to a method for preparing such an electrode as well as to the use thereof as a biosensor or for manufacturing a biopile.

IPC 8 full level
H01M 4/86 (2006.01); **H01M 4/90** (2006.01); **H01M 8/16** (2006.01)

CPC (source: EP US)
B05D 5/00 (2013.01 - US); **C04B 35/521** (2013.01 - EP US); **C04B 38/0032** (2013.01 - EP US); **C12M 23/00** (2013.01 - US); **C12Q 1/26** (2013.01 - EP US); **H01M 4/8605** (2013.01 - EP US); **H01M 4/90** (2013.01 - EP US); **H01M 8/16** (2013.01 - EP US); **C04B 2111/00853** (2013.01 - EP US); **C04B 2235/422** (2013.01 - EP US); **C04B 2235/425** (2013.01 - EP US); **Y02E 60/50** (2013.01 - EP US); **Y02P 70/50** (2015.11 - EP US)

C-Set (source: EP US)
C04B 38/0032 + C04B 35/521 + C04B 38/0054 + C04B 38/0074

Citation (search report)
See references of WO 2011089356A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
FR 2955429 A1 20110722; FR 2955429 B1 20120302; EP 2526584 A1 20121128; JP 2013517492 A 20130516; JP 5624160 B2 20141112; US 2013101905 A1 20130425; US 9121002 B2 20150901; WO 2011089356 A1 20110728

DOCDB simple family (application)
FR 1050361 A 20100120; EP 11705640 A 20110119; FR 2011050093 W 20110119; JP 2012549401 A 20110119; US 201113521835 A 20110119