

Title (en)

COMPOSITION FOR AN ORGANIC GEL AND THE PYROLYSATE THEREOF, PRODUCTION METHOD THEREOF, ELECTRODE FORMED BY THE PYROLYSATE AND SUPERCAPACITOR CONTAINING SAME

Title (de)

ZUSAMMENSETZUNG FÜR EIN ORGANISCHES GEL UND DAS PYROLYSAT DAVON, HERSTELLUNGSVERFAHREN DAFÜR, AUS DEM PYROLYSAT HERGESTELLTE ELEKTRODE UND SUPERKONDENSATOR DAMIT

Title (fr)

COMPOSITION POUR GEL ORGANIQUE ET SON PYROLYSAT, SON PROCEDE DE PREPARATION, ELECTRODE CONSTITUEE DU PYROLYSAT ET SUPERCONDENSATEUR L'INCORPORANT.

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Application

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Abstract (en)

[origin: CA2888484A1] The invention relates to a non-crosslinked, gelled carbonaceous composition and a pyrolysed composition respectively forming an aqueous polymer gel and the pyrolysate thereof in the form of porous carbon. The invention also relates to the production method thereof, to a porous carbon electrode formed by the pyrolysed composition, and to a supercapacitor containing said electrodes. The gelled, non-crosslinked composition (G2) is based on a resin created at least partly from polyhydroxybenzene(s) R and formaldehyde(s) F and comprises at least one hydrosoluble cationic polyelectrolyte P. According to the invention, the composition forms a rheofluidifying physical gel. A pyrolysed carbonaceous composition according to the invention, consisting of a carbon monolith, is the product of coating, crosslinking, drying then pyrolysis of the non-crosslinked gelled composition, the carbon monolith being predominantly microporous and able to form a supercapacitor electrode having a thickness of less than 1 mm.

IPC 8 full level

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