

Title (en)

PREPARATION OF CHITOSAN-BASED MICROPOROUS COMPOSITE MATERIAL AND ITS APPLICATIONS

Title (de)

HERSTELLUNG EINES MIKROPORÖSEN VERBUNDSTOFFS AUF CHITOSANBASIS UND DESSEN ANWENDUNGEN

Title (fr)

PRÉPARATION DE MATIÈRE COMPOSITE MICROPOREUSE À BASE DE CHITOSANE ET SES APPLICATIONS

Publication

**EP 3774024 A1 20210217 (EN)**

Application

**EP 19718201 A 20190318**

Priority

- US 201815935398 A 20180326
- US 2019022666 W 20190318

Abstract (en)

[origin: WO2019190791A1] Microporous glutaraldehyde/crosslinked chitosan sorbents include a plurality of nanoparticles of a high Z element. The nanoparticles are disposed in the cross-linked chitosan-glutaraldehyde composite matrix and integrated with the cross-linked chitosan-glutaraldehyde composite matrix to reduce primary impact of high radiation flux and minimize radiolytic effect on said cross-linked chitosan-glutaraldehyde composite matrix. The plurality of nanoparticles is made from the high Z element such as hafnium (Hf). Methods of making and using the microporous glutaraldehyde/crosslinked chitosan sorbents, and a generator for the radioisotope <sup>99</sup>Mo containing the sorbents.

IPC 8 full level

**B01J 20/02** (2006.01); **B01J 20/06** (2006.01); **B01J 20/24** (2006.01); **B01J 20/28** (2006.01); **B01J 20/30** (2006.01); **B01J 20/32** (2006.01); **G21F 9/12** (2006.01)

CPC (source: EP)

**B01J 20/02** (2013.01); **B01J 20/06** (2013.01); **B01J 20/24** (2013.01); **B01J 20/28007** (2013.01); **B01J 20/28026** (2013.01); **B01J 20/3085** (2013.01); **B01J 20/3212** (2013.01); **G21F 9/12** (2013.01); **G21F 9/16** (2013.01)

Citation (search report)

See references of WO 2019190791A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**WO 2019190791 A1 20191003**; CA 3095151 A1 20191003; EP 3774024 A1 20210217

DOCDB simple family (application)

**US 2019022666 W 20190318**; CA 3095151 A 20190318; EP 19718201 A 20190318