

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

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- 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 ⁹⁹Mo 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)

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Citation (search report)

See references of WO 2019190791A1

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