

Title (en)

A MATERIAL, A SYSTEM AND A METHOD FOR COLLECTING METALS FROM AN AQUEOUS SOLUTION

Title (de)

MATERIAL, SYSTEM UND VERFAHREN ZUM SAMMELN VON METALLEN AUS EINER WÄSSRIGEN LÖSUNG

Title (fr)

MATÉRIAU, SYSTÈME ET PROCÉDÉ DE COLLECTE DE MÉTAUX À PARTIR D'UNE SOLUTION AQUEUSE

Publication

EP 3897965 A4 20220112 (EN)

Application

EP 18943560 A 20181220

Priority

FI 2018050950 W 20181220

Abstract (en)

[origin: WO2020128139A1] The disclosure relates to a material, a system and a method for collecting metals from an aqueous solution. The material comprises porous silicon structure and a metal binding ligand covalently bonded to a surface of the porous silicon structure. The system comprises material disclosed. In the method, the material or the system is contacted with an aqueous solution that contains metals, and the metal binding ligands of the material or the system interact with at least part of the metals contained in the aqueous solution, thus causing at least part of the metals to be collected by the material or the system. Metals collected by the material or the system may be qualified and/or quantified using an analytical process or instrument. Quantification of the metals collected may be used for analysis of the metal concentrations of the aqueous solution contacted with the material or the system.

IPC 8 full level

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Citation (search report)

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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

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