

Title (en)
OXIDIZED LIGNIN-CONTAINING MATERIAL, USE THEREOF AND METHOD OF PURIFYING CONTAMINATED FLUIDS

Title (de)
OXIDIERTES LIGNINHALTIGES MATERIAL, VERWENDUNG DAVON UND VERFAHREN ZUR REINIGUNG KONTAMINierter FLÜSSIGKEITEN

Title (fr)
SUBSTANCE CONTENANT DE LA LIGNINE OXYDÉE, UTILISATION DE CETTE SUBSTANCE, ET PROCÉDÉ DE PURIFICATION DE FLUIDES CONTAMINÉS

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Abstract (en)
[origin: WO2011061399A1] The present invention relates to oxidized lignin-containing materials and derivatives thereof and their uses. In particular, the invention relates to oxidized lignin-containing materials capable of sorbing positively charged components, such as metal ions, from aqueous fluids, such as industrial effluents. The present invention further provides a method for purifying an aqueous fluid containing charged components and a method for purifying solids permeable to aqueous fluid, said solids containing charged components.

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Citation (search report)
• [X] DD 133788 A1 19790124 - ALBER WOLFGANG, et al
• [X] WO 02092669 A1 20021121 - AVENA OY [FI], et al
• [X] VILLAR J C ET AL: "Oxidation of hardwood kraft-lignin to phenolic derivatives with oxygen as oxidant", WOOD SCIENCE AND TECHNOLOGY, SPRINGER VERLAG, BERLIN, DE, vol. 35, no. 3, 1 June 2001 (2001-06-01), pages 245 - 255, XP008150846, ISSN: 0043-7719
• See references of WO 2011061399A1

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