

Title (en)  
TRANSITION-METAL SUBSTITUTED TUNGSTOALUMINATE COMPLEXES FOR DELIGNIFICATION AND WASTE MINERALIZATION

Title (de)  
MIT ÜBERGANGSMETALLEN SUBSTITUIERTE WOLFRAMALUMINAT-KOMPLEXE FÜR DELIGNIFIZIERUNG UND ABFALLMINERALISIERUNG

Title (fr)  
COMPLEXES DE TUNGSTOALUMINATE SUBSTITUES PAR DES METAUX DE TRANSITION DESTINES A UNE DELIGNIFICATION ET UNE MINERALISATION DE DECHETS

Publication  
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Application  
**EP 98944749 A 19980904**

Priority

- US 9818462 W 19980904
- US 5800097 P 19970905
- US 14550498 A 19980902

Abstract (en)  
[origin: WO9911857A1] A method of delignifying lignocellulosic fibers is disclosed. In one embodiment, the method comprises the steps of combining a polyoxometalate complex with aluminum heteroatom of the formula  $[Al_1V_mMonWoNb_pTa_q(TM)rOs]_{<x>}$  where 1 is 1-6, m is 0-18, n is 0-40, o is 0-40, p is 0-10, q is 0-10, r is 0-9, and TM is a d-electron-containing transition metal ion, where  $l+m+n+o+p+q \geq 4$ , and s is sufficiently large that  $x > 0$ , with a lignocellulosic pulp, wherein the pH of the combination is between 6 and 11 and the consistency of the combination is 1-20 %; and heating the combination in a temperature-controlled and pressure-controlled vessel under conditions of temperature and time wherein the polyoxometalate is reduced and delignification occurs.

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IPC 8 full level  
**D21C 9/10** (2006.01)

CPC (source: EP)  
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Citation (search report)

- [Y] US 5169495 A 19921208 - LACHENAL DOMINIQUE [FR]
- [YD] US 5549789 A 19960827 - ATALLA RAJAI H [US], et al
- See references of WO 9911857A1

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