

Title (en)  
SUBSTITUTED CELLULOSE ACETATES AND USES THEREOF

Title (de)  
SUBSTITUIERTE CELLULOSEACETATE UND VERWENDUNGEN DAVON

Title (fr)  
ACÉTATES DE CELLULOSE SUBSTITUÉS ET LEURS UTILISATIONS

Publication  
**EP 2811852 A4 20151223 (EN)**

Application  
**EP 13741010 A 20130123**

Priority

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Abstract (en)  
[origin: US2013192613A1] The present invention relates to substituted cellulose acetates and methods of use thereof. One embodiment of the present invention provides a cigarette filter material having a filter having a substituted cellulose acetate having a polar substituent that has an oxygen atom covalently bonded to a nonmetal selected from the group of sulfur, phosphorus, boron, and chlorine; wherein the nonmetal is present in at least 0.01% by weight of the substituted cellulose acetate.

IPC 8 full level  
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Citation (search report)

- [X] DE 2607208 A1 19770825 - HOECHST AG
- [A] EP 0716117 A1 19960612 - DAICEL CHEM [JP], et al
- [A] JP H06199901 A 19940719 - TEIJIN LTD
- [A] DE 9309937 U1 19930826 - HOECHST AG [DE]
- [A] EP 0706766 A2 19960417 - DAICEL CHEM [JP]
- [A] EP 0987276 A1 20000322 - JAPAN TOBACCO INC [JP]
- [A] US 3897782 A 19750805 - TUNC DEGER C
- [A] D. D. GRINSHPAN ET AL: "Cellulose Acetate Sulfate as a Lyotropic Liquid Crystalline Polyelectrolyte: Synthesis, Properties, and Application", INTERNATIONAL JOURNAL OF POLYMER SCIENCE, vol. 29, no. 3, 1 January 2010 (2010-01-01), pages 490 - 17, XP055160620, ISSN: 1687-9422, DOI: 10.1016/S0008-6215(03)00010-7
- See references of WO 2013112502A1

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