

Title (en)
Process for tanning of leather

Title (de)
Verfahren zur Gerbung von Leder

Title (fr)
Procédé de tannage du cuir

Publication
EP 0814168 A1 19971229 (DE)

Application
EP 97109282 A 19970609

Priority
DE 19624821 A 19960621

Abstract (en)
A tanning process comprises (1) treatment with a compound containing carbamoyl sulphonate groups and (2) treatment at a pH greater than 4 with a mineral tanning agent chosen from chromium (III), iron (II) or (III), aluminium (III), titanium (IV) or zirconium (IV) compounds, without the use of a pickling agent. The compound used in step (1) is a reaction product of the following components : (A) an organic polyisocyanate ; (B) 0.01-0.4 equivalents per isocyanate group in (A) of a polyether alcohol containing polyalkylene oxide groups, of which 40-100 mol.% are polyethylene oxide units with a sequence length of 5-70 (the equivalents are based on the hydroxyl groups in the alcohol) ; (C) optional further components which can react with isocyanate groups ; and (D) ammonium or alkali bi- or di-sulphites.

Abstract (de)
Bisulfit-blockierte Polyether-modifizierte Polyisocyanate eignen sich in Kombination mit mineralischen Gerbstoffen hervorragend für die Ledergerbung.

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IPC 8 full level
C14C 3/04 (2006.01); **C14C 3/18** (2006.01); **C14C 3/28** (2006.01)

CPC (source: EP US)
C14C 3/18 (2013.01 - EP US); **C14C 3/28** (2013.01 - EP US)

Citation (search report)
• [AD] EP 0690135 A1 19960103 - BAYER AG [DE]
• [AD] US 4413997 A 19831108 - MILLIGAN BRIAN [AU], et al
• [A] EP 0001067 A1 19790321 - BAYER AG [DE]
• [A] EP 0290143 A1 19881109 - ICI FRANCOLOR [FR]
• [A] US 5417723 A 19950523 - TRAEUBEL HARRO [DE], et al

Cited by
EP2508627A1; EP2508626A1; EP2415879A1; WO2012136559A1; WO2012136565A1; WO2012016907A1; CN102321771A; CN102242228A; CN104046707A; CN102168154A; CN103060484A; CN103502477A; CN103080341A; US2013288066A1; KR101439070B1; US9376729B2; WO2013001077A1; EP2540753A1; EP1647563A2; EP2557181A1; WO2013023980A1; EP2557224A1; WO2013023979A1

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