

Title (en)
METHOD FOR PRODUCING TANNING AGENTS CONTAINING SULPHONE

Title (de)
VERFAHREN ZUR HERSTELLUNG SULFONHALTIGER GERBSTOFFE

Title (fr)
PROCEDE DE PRODUCTION D'AGENTS DE TANNAGE CONTENANT DU SULFONE

Publication
EP 1421223 A1 20040526 (DE)

Application
EP 02794798 A 20020816

Priority
• DE 10140551 A 20010817
• EP 0209186 W 20020816

Abstract (en)
[origin: WO03016578A1] The invention relates to a method for producing a solution of tanning agents containing sulphone. In said method, a) a component A is produced as follows: a1) phenol is reacted with concentrated sulphuric acid or with oleum with an SO₃ content of between 20 and 65 wt. %, or with a mixture of sulphuric acid and oleum with an SO₃ content of between 20 and 65 wt. %, whereby the molar ratio of total sulphuric acid, calculated in the form of SO₃ to phenol is between 0.7: 1 and 1.5: 1, at a temperature of between 100 and 180 DEG C to obtain a mixture containing phenolsulphonic acid, dihydroxydiphenyl sulphone and sulphuric acid, or the individual components are blended to produce a corresponding mixture; a2) said mixture is subsequently condensed at between 40 and 90 DEG C per mol of phenol units present with between 0.25 and 4 mol of urea and between 0.5 and 4 mol of an aliphatic aldehyde comprising between 1 and 6 C atoms, a3) optionally a pH value of between 4 and 5 is set by adding a base; b) a component B is produced as follows: b1) dihydroxydiphenyl sulphone is reacted with between 0.5 and 5 mol of an aliphatic aldehyde comprising between 1 and 6 C atoms and between 0.4 and 2 mol of sodium sulphite per mol of dihydroxydiphenyl sulphone, at a temperature of between 90 and 180 DEG C; b2) optionally a pH value of between 3.5 and 5.5 is set by adding an acid. c) Between 10 and 90 wt. % of component A is mixed with between 90 and 10 wt. % of component B, (the sum of A and B amounting to 100 wt. %) and if not already accomplished in steps a3) and b2), the pH value of the mixture is set at between 3.5 and 5.5.

IPC 1-7
C14C 3/20; **C08L 61/00**

IPC 8 full level
C08G 8/28 (2006.01); **C08L 61/14** (2006.01); **C14C 3/20** (2006.01)

CPC (source: EP US)
C08G 8/28 (2013.01 - EP US); **C08L 61/14** (2013.01 - EP US); **C14C 3/20** (2013.01 - EP US)

Citation (search report)
See references of WO 03016578A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)
WO 03016578 A1 20030227; BR 0211707 A 20040921; CN 1220781 C 20050928; CN 1543511 A 20041103; DE 10140551 A1 20030227; EP 1421223 A1 20040526; US 2004250353 A1 20041216; US 6881356 B2 20050419

DOCDB simple family (application)
EP 0209186 W 20020816; BR 0211707 A 20020816; CN 02815977 A 20020816; DE 10140551 A 20010817; EP 02794798 A 20020816; US 48620804 A 20040217