

Title (en)

Alkanol-ammonia containing triazinylflavonat brightener

Title (de)

Alkanolammoniumhaltige Triazinylflavonataufheller

Title (fr)

Agent blanchissant à base de dérivés flavonates triazinylés contenant des ammoniums-alkanols

Publication

**EP 1624105 B1 20090325 (DE)**

Application

**EP 05016038 A 20050723**

Priority

DE 102004038578 A 20040806

Abstract (en)

[origin: EP1624105A1] Method for whitening paper in the size press comprises a size press fleet containing an alkanolammonium containing triazinyl flavone compound (I) as the optical whitener. Method for whitening paper in the size press comprises a size press fleet containing an alkanolammonium containing triazinyl flavone compound of formula (I) as the optical whitener. X : alkyl compounds of formula (a) or (b); either R 1>, R-1a : 1-6C alkyl; and R 2>, R-2a : H; or R 3>, R-3a : H, CH 3, CH 2CH 3, CH 2CH 2OH or CH 2CH 2OCH 3; R 4>H or 1-4C alkyl; M : an equivalent inorganic cation (preferably Li, Na, K, Ca, Mg or ammonium) or a substituted ammonium of formula (II) (where at least 10 mol.% of all cation corresponds to formula (II)); R 5>-R 7>H, 1-4C alkyl or optionally substituted 2-4C hydroxyalkyl; and R 8>optionally further substituted 2-4C hydroxy alkyl. Independent claims are also included for: (1) an optical whitener preparation comprising more than 50 (preferably more than 95) wt. % of (I); and (2) a size press fleet comprising (I) or an optical whitener preparation and at least a surface sizing agent (preferably starch). [Image] [Image].

IPC 8 full level

**D21H 21/30** (2006.01)

CPC (source: EP US)

**D21H 21/30** (2013.01 - EP US); **D21H 17/28** (2013.01 - EP US); **D21H 21/16** (2013.01 - EP US)

Cited by

EP2192230B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

**EP 1624105 A1 20060208**; **EP 1624105 B1 20090325**; AT E426705 T1 20090415; BR PI0503370 A 20060321; BR PI0503370 B1 20160105; CN 1730816 A 20060208; CN 1730816 B 20110413; DE 102004038578 A1 20060316; DE 502005006927 D1 20090507; ES 2325164 T3 20090827; JP 2006045761 A 20060216; JP 4768349 B2 20110907; PT 1624105 E 20090630; US 2006065381 A1 20060330; US 7608168 B2 20091027

DOCDB simple family (application)

**EP 05016038 A 20050723**; AT 05016038 T 20050723; BR PI0503370 A 20050805; CN 200510091692 A 20050805; DE 102004038578 A 20040806; DE 502005006927 T 20050723; ES 05016038 T 20050723; JP 2005227116 A 20050804; PT 05016038 T 20050723; US 18773505 A 20050722