

Title (en)

REINFORCEMENT OF THE EFFECT OF OPTICAL BRIGHTENERS BY MEANS OF POLYMERS

Title (de)

VERSTÄRKUNG DER WIRKUNG VON OPTISCHEN AUFHELLERN MIT HILFE VON POLYMEREN

Title (fr)

RENFORCEMENT DE L'EFFET D'AGENTS DE BLANCHIMENT OPTIQUES A L'AIDE DE POLYMERES

Publication

EP 1448690 A1 20040825 (DE)

Application

EP 02774537 A 20020828

Priority

- DE 10142887 A 20010903
- DE 10144131 A 20010907
- DE 10150895 A 20011018
- DE 10161157 A 20011212
- EP 0209579 W 20020828

Abstract (en)

[origin: WO03020808A1] Pigment-free mixtures, containing a) at least one optical brightener and b) at least one (co)polymer, with at least one N-vinylcarboxamide incorporated in the polymer and/or at least one nitrogen-containing heterocyclic ring and/or which may form a nitrogen-containing heterocyclic ring.

IPC 1-7

C08K 5/00; C08L 39/06; C11D 3/00

IPC 8 full level

C08K 5/00 (2006.01); **C11D 3/37** (2006.01); **C11D 3/42** (2006.01); **D06L 3/12** (2006.01); **D06L 4/60** (2017.01); **D06L 4/643** (2017.01);
D06L 4/664 (2017.01); **D06L 4/671** (2017.01)

CPC (source: EP US)

C08K 5/0041 (2013.01 - EP US); **C11D 3/3769** (2013.01 - EP US); **C11D 3/3776** (2013.01 - EP US); **C11D 3/42** (2013.01 - EP US);
D06L 4/60 (2016.12 - EP US); **D06L 4/643** (2016.12 - EP US); **D06L 4/664** (2016.12 - EP US); **D06L 4/671** (2016.12 - EP US)

Citation (search report)

See references of WO 03020808A1

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 03020808 A1 20030313; EP 1448690 A1 20040825; US 2004238791 A1 20041202

DOCDB simple family (application)

EP 0209579 W 20020828; EP 02774537 A 20020828; US 48777504 A 20040226