

Title (en)
USE OF ARYL- OR ALKYOXY-SUBSTITUTED PHTHALOCYANINES AS MARKING SUBSTANCES FOR LIQUIDS

Title (de)
VERWENDUNG VON ARYL- ODER ALKYOXY-SUBSTITUIERTEN PHTHALOCYANINEN ALS MARKIERUNGSSOFFE FÜR FLÜSSIGKEITEN

Title (fr)
UTILISATION DE PHTALOCYANINES SUBSTITUEES PAR DE L'ARYLE OU DE L'ALKYOXY EN TANT QUE MATERIAU DE MARQUAGE POUR LIQUIDES

Publication
EP 1996549 A1 20081203 (DE)

Application
EP 07726680 A 20070307

Priority

- EP 2007052122 W 20070307
- EP 06111161 A 20060315
- EP 07726680 A 20070307

Abstract (en)
[origin: WO2007104685A1] Phthalocyanines of the formula (I) in which the symbols and indices have the meanings given in the description are suitable as marking substances for liquids, in particular mineral oils.

IPC 8 full level
C07D 209/44 (2006.01); **C07C 255/51** (2006.01); **C07D 487/22** (2006.01); **C07F 19/00** (2006.01); **C09B 47/08** (2006.01); **C10L 1/00** (2006.01); **C10M 171/00** (2006.01); **G01N 33/28** (2006.01)

CPC (source: EP KR US)
C07C 255/51 (2013.01 - KR); **C07C 255/54** (2013.01 - EP US); **C07D 209/44** (2013.01 - EP KR US); **C07D 487/22** (2013.01 - KR); **C09B 47/0675** (2013.01 - EP US); **C10L 1/003** (2013.01 - EP US); **C10M 133/58** (2013.01 - EP US); **C10M 159/18** (2013.01 - EP US); **C10M 171/007** (2013.01 - EP US); **C07C 2603/74** (2017.04 - EP US); **C10M 2215/227** (2013.01 - EP US); **C10M 2227/09** (2013.01 - EP US); **C10N 2040/42** (2020.05 - EP US)

Citation (search report)
See references of WO 2007104685A1

Citation (examination)

- JP H0977731 A 19970325 - YAMAMOTO CHEMICALS INC, et al
- C.C. LEZNOFF ET AL.: "Phthalocyanines properties and applications", VCH

Cited by
US10564320B2

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 MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2007104685 A1 20070920; AR 059897 A1 20080507; AU 2007224512 A1 20070920; BR PI0708886 A2 20110614; CA 2646205 A1 20070920; CN 101421236 A 20090429; EA 200801986 A1 20090227; EP 1996549 A1 20081203; JP 2009530427 A 20090827; KR 20090008228 A 20090121; MX 2008011631 A 20080922; NO 20083763 L 20081014; PE 20071287 A1 20080211; TW 200745131 A 20071216; UA 88747 C2 20091110; US 2009189086 A1 20090730; ZA 200808721 B 20091230

DOCDB simple family (application)
EP 2007052122 W 20070307; AR P070101035 A 20070314; AU 2007224512 A 20070307; BR PI0708886 A 20070307; CA 2646205 A 20070307; CN 200780013532 A 20070307; EA 200801986 A 20070307; EP 07726680 A 20070307; JP 2008558781 A 20070307; KR 20087025098 A 20081014; MX 2008011631 A 20070307; NO 20083763 A 20080901; PE 2007000279 A 20070314; TW 96108411 A 20070312; UA A200812190 A 20070307; US 28298507 A 20070307; ZA 200808721 A 20081013