

Title (en)

INFRARED-REFLECTING PIGMENT BASED ON TITANIUM DIOXIDE, AND METHOD FOR PRODUCING IT

Title (de)

INFRAROT-REFLEKTIERENDES PIGMENT AUF BASIS TITANDIOXID SOWIE VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)

PIGMENT À BASE D'OXYDE DE TITANE RÉFLÉCHISSANT LE RAYONNEMENT INFRAROUGE ET PROCÉDÉ DE PRÉPARATION DUDIT PIGMENT

Publication

EP 2892851 A1 20150715 (DE)

Application

EP 13759136 A 20130827

Priority

- DE 102012017854 A 20120908
- EP 2013002576 W 20130827

Abstract (en)

[origin: US2014073729A1] The invention relates to rutile titanium dioxide pigment particles that are capable of reflecting infrared radiation to a high degree and also display pigmenting properties, as well as a method for their manufacture. The particles have a mean particle size of 0.4 to 1.0 µm and are doped with zinc and potassium, but not with aluminium. Preferably, the particles have a compact particle form with a preferred height:width ratio of 1.5:1. The particles are preferably manufactured by the familiar sulphate process for manufacturing titanium dioxide, and are optionally subjected to inorganic and/or organic post-treatment following calcining. Preferably, the rutile titanium dioxide particles are suitable for manufacturing heat-insulating paints, coatings or plastics as well as for instance plasters or paving stones.

IPC 8 full level

C01G 23/053 (2006.01); **C09C 1/36** (2006.01)

CPC (source: EP US)

C01G 23/0534 (2013.01 - EP US); **C09C 1/3607** (2013.01 - US); **C09C 1/3653** (2013.01 - EP US); **C09C 1/3661** (2013.01 - EP US); **C01P 2002/52** (2013.01 - EP US); **C01P 2002/84** (2013.01 - EP US); **C01P 2004/51** (2013.01 - EP US); **C01P 2004/62** (2013.01 - EP US); **C01P 2006/12** (2013.01 - EP US); **C22B 23/043** (2013.01 - US); **C22B 34/125** (2013.01 - US)

Citation (search report)

See references of WO 2014037083A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

US 2014073729 A1 20140313; AU 2013312028 A1 20150226; AU 2013312028 B2 20170316; BR 112015004120 A2 20170704; CN 104640813 A 20150520; DE 102012017854 A1 20140528; EP 2892851 A1 20150715; JP 2015533758 A 20151126; KR 20150054799 A 20150520; RU 2015112861 A 20161027; WO 2014037083 A1 20140313

DOCDB simple family (application)

US 201314017474 A 20130904; AU 2013312028 A 20130827; BR 112015004120 A 20130827; CN 201380046691 A 20130827; DE 102012017854 A 20120908; EP 13759136 A 20130827; EP 2013002576 W 20130827; JP 2015530312 A 20130827; KR 20157005930 A 20130827; RU 2015112861 A 20130827