

Title (en)

PROCESS FOR SURFACE MODIFICATION OF METAL OXIDE PARTICLES

Title (de)

VERFAHREN ZUR OBERFLÄCHENMODIFIZIERUNG VON METALLOXIDPARTIKELN

Title (fr)

PROCÉDÉ DE MODIFICATION DE SURFACE DE PARTICULES D'OXYDE MÉTALLIQUE

Publication

EP 2480500 A1 20120801 (EN)

Application

EP 10745643 A 20100826

Priority

- DE 102009029640 A 20090921
- EP 2010062440 W 20100826

Abstract (en)

[origin: WO2011032814A1] Process for producing surface-modified metal oxide particles, characterized in that a) in a first reaction step, a surface modifier is introduced into a gas stream comprising metal oxide particles, and the resulting reaction mixture is exposed to a temperature of 130 to 250° C for a minimum residence time in the range from 1 to 60 s, and b) in an immediately subsequent, second reaction step, the solid reaction products are removed from the flowing reaction mixture by means of a filter apparatus and the reaction mixture present at the filter is treated at a temperature of 110 to 230° C for a minimum residence time in the range from 1 min to 1 hour.

IPC 8 full level

C01G 9/03 (2006.01); **B01J 8/00** (2006.01); **C01F 17/218** (2020.01); **C01F 17/235** (2020.01); **C01G 23/07** (2006.01); **C09C 1/00** (2006.01); **C09C 1/04** (2006.01); **C09C 1/30** (2006.01); **C09C 1/36** (2006.01); **C09C 3/08** (2006.01); **C09C 3/12** (2006.01)

CPC (source: EP US)

C01B 33/18 (2013.01 - EP); **C01B 33/183** (2013.01 - EP); **C01F 17/218** (2020.01 - EP US); **C01F 17/235** (2020.01 - EP US); **C01G 9/03** (2013.01 - EP); **C01G 23/07** (2013.01 - EP); **C09C 1/0096** (2013.01 - EP); **C09C 1/043** (2013.01 - EP); **C09C 1/3081** (2013.01 - EP); **C09C 1/3684** (2013.01 - EP); **C09C 3/08** (2013.01 - EP US); **C09C 3/12** (2013.01 - EP)

Citation (search report)

See references of WO 2011032814A1

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 SE SI SK SM TR

DOCDB simple family (publication)

WO 2011032814 A1 20110324; DE 102009029640 A1 20110407; EP 2480500 A1 20120801

DOCDB simple family (application)

EP 2010062440 W 20100826; DE 102009029640 A 20090921; EP 10745643 A 20100826