

Title (en)

ULTRA-FAST SETTING CEMENT BASED ON AMORPHOUS CALCIUM ALUMINATE COMPRISING A SURFACE TREATMENT

Title (de)

ULTRASCHNELL ABBINDENDER ZEMENT AUF DER BASIS VON AMORPHEM CALCIUMALUMINAT MIT EINER OBERFLÄCHENBEHANDLUNG

Title (fr)

CIMENT À PRISE ULTRA-RAPIDE À BASE D'ALUMINATE DE CALCIUM AMORPHE COMPRENANT UN TRAITEMENT DE SURFACE

Publication

EP 3142986 A1 20170322 (FR)

Application

EP 15732769 A 20150513

Priority

- FR 1454423 A 20140516
- FR 2015051276 W 20150513

Abstract (en)

[origin: WO2015173526A1] The invention relates to an ultra-fast setting cement composition comprising at least amorphous calcium aluminate comprising by weight relative to the total weight of the amorphous calcium aluminate: (a) 35 to 55 % calcium oxide CaO (C); and (b) 19 to 55 % alumina Al₂O₃ (A), the molar ratio C/A being greater than or equal to 1.5, and preferably greater than or equal to 1.7. The invention is characterized in that the amorphous calcium aluminate is coated with a surface treatment comprising an organic compound comprising at least two hydrophilic functions and a hydrophobic chain. The invention also relates to a method for producing the cement composition and to its uses.

IPC 8 full level

C04B 28/14 (2006.01); **C04B 20/10** (2006.01); **C04B 28/06** (2006.01); **C04B 103/12** (2006.01)

CPC (source: CN EP KR US)

C04B 7/32 (2013.01 - KR); **C04B 7/47** (2013.01 - KR); **C04B 7/52** (2013.01 - KR); **C04B 14/06** (2013.01 - KR); **C04B 14/303** (2013.01 - KR); **C04B 14/308** (2013.01 - KR); **C04B 20/1022** (2013.01 - CN EP KR US); **C04B 22/064** (2013.01 - KR); **C04B 28/06** (2013.01 - CN EP US); **C04B 28/065** (2013.01 - KR); **C04B 28/14** (2013.01 - CN EP KR US); **C04B 40/0046** (2013.01 - US); **C04B 2103/12** (2013.01 - CN EP KR US)

Citation (search report)

See references of WO 2015173526A1

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)

WO 2015173526 A1 20151119; **WO 2015173526 A8 20160107**; BR 112016026688 A2 20170815; CN 106660879 A 20170510; EP 3142986 A1 20170322; FR 3021046 A1 20151120; FR 3021046 B1 20160610; JP 2017515788 A 20170615; JP 6598849 B2 20191030; KR 20170007302 A 20170118; US 10221098 B2 20190305; US 2017113970 A1 20170427

DOCDB simple family (application)

FR 2015051276 W 20150513; BR 112016026688 A 20150513; CN 201580034538 A 20150513; EP 15732769 A 20150513; FR 1454423 A 20140516; JP 2017512449 A 20150513; KR 20167032040 A 20150513; US 201515311315 A 20150513