

Title (en)

METHOD FOR PRODUCING POWDERS FROM ALKALI SALTS OF SILANOLS

Title (de)

VERFAHREN ZUR HERSTELLUNG VON PULVERN AUS ALKALISALZEN VON SILANOLEN

Title (fr)

PROCÉDÉ DE PRÉPARATION DE POUDRES CONSTITUÉES DE SELS ALCALINS DE SILANOLS

Publication

EP 3119788 A1 20170125 (DE)

Application

EP 15709939 A 20150313

Priority

- DE 102014205258 A 20140320
- EP 2015055325 W 20150313

Abstract (en)

[origin: WO2015140075A1] The invention relates to a method for producing powder (P) from salts of silanols, from the hydrolysis/condensation products thereof, or from silanols together with the hydrolysis/condensation products thereof and cations which are selected from alkali cations, the molar ratio of cation to silicon being 0.1 to 3. In a first step organoalkoxysilanes, the hydrolysis/condensation products thereof, or organoalkoxysilanes together with the hydrolysis/condensation products thereof, the alkoxy group being selected from methoxy, ethoxy, 1-propoxy and 2-propoxy groups, are reacted with a basic alkali salt and optionally water to produce a hydrolysate having an alcohol content from 2 to 38 percent by weight. In a second step a powder having an alcohol content of 0.5 to 5 percent by weight is produced by drying from the hydrolysate produced in the first step, and in a third step the alcohol content is reduced by an aftertreatment of the powder, the powder (P) being obtained with an alcohol content of at most 1 percent by weight. The invention further relates to a powder (P) which can be produced by the above method, the hydrolysate produced in the first step being spray-dried in the second step. The invention further relates to mixtures of construction materials containing the powder (P) which can be produced in this way, and to structural parts or to moulded bodies, which can be produced from the mixtures of construction materials.

IPC 8 full level

C07F 7/08 (2006.01); **C04B 24/42** (2006.01); **C07F 7/18** (2006.01)

CPC (source: CN EP US)

C04B 24/42 (2013.01 - CN EP US); **C04B 28/14** (2013.01 - CN EP US); **C07F 7/0836** (2013.01 - CN EP US); **C07F 7/1804** (2013.01 - EP US); **C04B 2103/30** (2013.01 - US); **C04B 2111/00482** (2013.01 - US); **C04B 2111/00517** (2013.01 - CN EP US); **C04B 2111/00663** (2013.01 - US); **C04B 2111/62** (2013.01 - CN EP US)

C-Set (source: CN EP US)

C04B 28/14 + **C04B 24/42** + **C04B 40/0608**

Citation (search report)

See references of WO 2015140075A1

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 2015140075 A1 20150924; CN 106164012 A 20161123; DE 102014205258 A1 20150924; EP 3119788 A1 20170125; US 2017137445 A1 20170518

DOCDB simple family (application)

EP 2015055325 W 20150313; CN 201580015002 A 20150313; DE 102014205258 A 20140320; EP 15709939 A 20150313; US 201515127538 A 20150313