Title (en)

METHOD FOR PRODUCING A HYDRAULIC BINDING AGENT

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES HYDRAULISCHEN BINDEMITTELS

Title (fr)

PROCÉDÉ DE FABRICATION D'UN LIANT HYDRAULIQUE

Publication

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Application

EP 13786669 A 20131106

Priority

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- EP 2013073159 W 20131106

Abstract (en)

[origin: WO2014072337A1] The method according to the invention for producing a hydraulic binding agent by processing a silicate-containing component with components containing calcium silicate hydrate and/or larnite is characterized by the combination of the following two method steps: in the first method step, the silicate-containing component is comminuted in at least one comminution device to particle sizes of <100 µm, wherein Si-O-Si bonds and/or hydrogen bridges in the structure of the surface layer of the silicate-containing component are broken, at least in part, for surface activation; and in the second method step, the silicate-containing component activated in the first step is brought into contact as the silicate-containing carrier material with components containing calcium silicate hydrate and/or larnite in a coating device, wherein the components containing calcium silicate hydrate and/or larnite are enriched on at least 50% of the surface of the silicate-containing carrier material.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2014072337A1

Citation (examination)

- EP 2243754 A1 20101027 - KARLSRUHER INST TECHNOLOGIE [DE]
- US 6037019 A 20000314 - KOOYER RICHARD L [US], et al
- US 3501323 A 19700317 - MOOREHEAD DAVID R
- JP H08325077 A 19961210 - NGK INSULATORS LTD
- JP H1129349 A 19990202 - TAKENAKA KOMUTEN CO, et al
- KUMAR S ET AL: "Mechanical activation of granulated blast furnace slag and its effect on the properties and structure of portland slag cement", CEMENT AND CONCRETE COMPOSITES, ELSEVIER APPLIED SCIENCE, BARKING, GB, vol. 30, no. 8, 1 September 2008 (2008-09-01), pages 679 - 685, XP023315927, ISSN: 0958-9465, [retrieved on 20080528], DOI: 10.1016/J.CEMCONCOMP.2008.05.005

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