Title (en)

AN INORGANIC BINDER SYSTEM FOR FOUNDRIES

Title (de)

ANORGANISCHES BINDEMITTELSYSTEM FÜR GIESSEREIEN

Title (fr)

SYSTÈME DE LIANT INORGANIQUE POUR FONDERIES

Publication

EP 3225327 A1 20171004 (EN)

Application

EP 17163617 A 20170329

Priority

IT UA20162227 A 20160401

Abstract (en)

The present invention relates to a powder composition that acts as an activator in foundry binder systems comprising an aqueous solution of sodium silicate. The powder composition of the invention comprises sodium silicate having CAS Registry Number 1344-09-8 and a SiO 2 /Na 2 O molar ratio comprised between 3.0 and 3.6, preferably between 3.2 and 3.5, sodium aluminosilicate having CAS Registry Number 1344-00-9, and, optionally, additives. The invention furthermore claims binder systems comprising the powder composition of the invention and aqueous solutions of sodium silicate, optionally comprising additives, the use of said binder systems for the production of foundry moulds, such as cores and/or moulds, and likewise the moulding material mixtures for the production of foundry cores and/or moulds comprising the binder systems of the invention and silica sand and/or other granular refractory material. Furthermore, objects of the invention are a process for the production of said foundry cores and/or moulds, comprising a production step of the moulding material mixtures comprising the binder systems of the invention, together with silica sand and/or other granular refractory material, and a heating step of said moulding material mixtures, and the cores and/or moulds obtainable with said process.

IPC 8 full level (invention and additional information)

B22C 1/18 (2006.01); **B22C 9/00** (2006.01)

CPC (invention and additional information)

B22C 1/188 (2013.01)

Citation (applicant)

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Designated extension state (EPC)

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- Kind Code of Ref Document : A1

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2017-10-04 [AV] REQUEST FOR VALIDATION OF THE EUROPEAN PATENT IN:
- Countries : MA MD

2017-10-04 [AX] REQUEST FOR EXTENSION OF THE EUROPEAN PATENT TO:
- Countries : BA ME