

Title (en)

GEOPOLYMERS PRODUCED FROM MINERAL PROCESSING BY-PRODUCTS

Title (de)

AUS MINERALVERARBEITUNGSNEBENPRODUKTEN HERGESTELLTE GEOPOLYMERE

Title (fr)

GÉOPOLYMÈRES PRODUITS À PARTIR DE SOUS-PRODUITS DE TRAITEMENT DE MINÉRAUX

Publication

EP 3880625 A4 20220810 (EN)

Application

EP 19883847 A 20191115

Priority

- AU 2018904386 A 20181116
- AU 2019051262 W 20191115

Abstract (en)

[origin: WO2020097693A1] A geopolymer composition comprising the reaction product of red mud; a source of calcium; water; and an alkali activator.

IPC 8 full level

C04B 12/00 (2006.01); **C04B 18/04** (2006.01); **C04B 20/00** (2006.01); **C04B 28/00** (2006.01); **C04B 28/04** (2006.01); **C04B 28/26** (2006.01)

CPC (source: AU EP)

C04B 12/005 (2013.01 - AU EP); **C04B 18/0409** (2013.01 - AU); **C04B 28/006** (2013.01 - AU EP); **C04B 28/04** (2013.01 - EP); **C04B 28/26** (2013.01 - EP); **C04B 2201/50** (2013.01 - AU); **Y02P 40/10** (2015.11 - EP); **Y02W 30/91** (2015.05 - EP)

Citation (search report)

- [A] US 2005087107 A1 20050428 - JAQUAYS CHARLES D [US]
- [A] CN 105585261 B 20171024
- [XAI] ZHANG GUOPING ET AL: "Synthesis, Characterization, and Mechanical Properties of Red Mud-Based Geopolymers", TRANSPORTATION RESEARCH RECORD., vol. 2167, no. 1, 1 January 2010 (2010-01-01), US, pages 1 - 9, XP055937283, ISSN: 0361-1981, Retrieved from the Internet <URL:http://journals.sagepub.com/doi/pdf/10.3141/2167-01> [retrieved on 20220630], DOI: 10.3141/2167-01
- [XII] NAN YE ET AL: "Synthesis and Characterization of Geopolymer from Bayer Red Mud with Thermal Pretreatment", JOURNAL OF THE AMERICAN CERAMIC SOCIETY, vol. 97, no. 5, 4 May 2014 (2014-05-04), US, pages 1652 - 1660, XP055306507, ISSN: 0002-7820, DOI: 10.1111/jace.12840
- [XII] LEMOUGNA PATRICK N ET AL: "Study on the development of inorganic polymers from red mud and slag system: Application in mortar and lightweight materials", CONSTRUCTION AND BUILDING MATERIALS, vol. 156, 26 September 2017 (2017-09-26), pages 486 - 495, XP085226837, ISSN: 0950-0618, DOI: 10.1016/J.CONBUILDMAT.2017.09.015
- See references of WO 2020097693A1

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

DOCDB simple family (publication)

WO 2020097693 A1 20200522; AU 2019379427 A1 20210624; BR 112021009551 A2 20210817; EP 3880625 A1 20210922; EP 3880625 A4 20220810

DOCDB simple family (application)

AU 2019051262 W 20191115; AU 2019379427 A 20191115; BR 112021009551 A 20191115; EP 19883847 A 20191115