

Title (en)  
MOULDING MATERIAL MIXTURE CONTAINING CARBOHYDRATES

Title (de)  
KOHLENHYDRATHALTIGE FORMSTOFFMISCHUNG MIT EIN ANTEIL EINES TEILCHENFÖRMIGEN METALLOXIDS ZUM AUF WASSERGLAS BASIERENDEM BINDEMITTEL ZUGESETZ

Title (fr)  
MÉLANGE DE MATIÈRES DE MOULAGE À BASE D'HYDRATES DE CARBONE

Publication  
**EP 2104580 A1 20090930 (DE)**

Application  
**EP 07819173 A 20071019**

Priority

- DE 102006049379 A 20061019
- DE 102006061876 A 20061228
- EP 2007009108 W 20071019

Abstract (en)  
[origin: WO2008046651A1] The invention relates to a moulding material mixture for producing casting moulds for machining metal, to a method for producing casting moulds, to casting moulds obtained according to said method and to the use thereof. A fire-resistant moulding base material and a binding agent based on water glass are used in the production of casting moulds. A fraction of the particulate metal oxide is added to the binding agent, said metal oxide being selected from the group comprising silicon dioxide, aluminium oxide, titanium oxide and zinc oxide. Synthetic amorphous silicon dioxide is preferably used. Said moulding material mixture contains a carbohydrate as an additional component. The mechanical resistance of casting moulds and the quality of the surface of the casting piece can be improved by adding carbohydrates.

IPC 8 full level  
**B22C 1/18** (2006.01); **B22C 1/26** (2006.01)

CPC (source: EP KR US)  
**B22C 1/18** (2013.01 - KR); **B22C 1/188** (2013.01 - EP US); **B22C 1/26** (2013.01 - EP KR US)

Citation (search report)  
See references of WO 2008046651A1

Cited by  
DE102017114628A1; CN111253150A; WO2021023493A1; WO2019002452A1; DE102020119013A1; WO2022013129A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA HR MK RS

DOCDB simple family (publication)  
**WO 2008046651 A1 20080424**; AU 2007312540 A1 20080424; AU 2007312540 B2 20110922; BR PI0718281 A2 20131119; BR PI0718281 B1 20150915; CA 2666760 A1 20080424; CA 2666760 C 20141028; DE 202007019192 U1 20110203; EA 015239 B1 20110630; EA 200970391 A1 20100226; EP 2104580 A1 20090930; EP 2104580 B1 20160803; EP 2104580 B2 20220223; ES 2593078 T3 20161205; ES 2593078 T5 20220531; HU E029506 T2 20170228; JP 2010506730 A 20100304; JP 5170813 B2 20130327; KR 101420891 B1 20140730; KR 20090076979 A 20090713; MX 2009004130 A 20090603; PL 2104580 T3 20170228; PL 2104580 T5 20230220; US 2010224756 A1 20100909

DOCDB simple family (application)  
**EP 2007009108 W 20071019**; AU 2007312540 A 20071019; BR PI0718281 A 20071019; CA 2666760 A 20071019; DE 202007019192 U 20071019; EA 200970391 A 20071019; EP 07819173 A 20071019; ES 07819173 T 20071019; HU E07819173 A 20071019; JP 2009532734 A 20071019; KR 20097010261 A 20071019; MX 2009004130 A 20071019; PL 07819173 T 20071019; US 44595607 A 20071019