

Title (en)  
SUBMERGED ENTRY NOZZLE

Title (de)  
EINTAUCHAUSGUSS

Title (fr)  
BUSE D'ENTRÉE SUBMERGÉE

Publication  
**EP 3488949 A1 20190529 (EN)**

Application  
**EP 17203004 A 20171122**

Priority  
EP 17203004 A 20171122

Abstract (en)  
The present invention relates to a submerged entry nozzle in particularly to a submerged entry nozzle through which molten steel can be poured from a tundish into a mould.

IPC 8 full level  
**B22D 41/50** (2006.01); **B05B 1/14** (2006.01); **B05B 1/34** (2006.01)

CPC (source: EP)  
**B22D 41/507** (2013.01); **B05B 1/14** (2013.01); **B05B 1/3405** (2013.01)

Citation (applicant)  
• EP 1671721 B1 20090715 - KROSAKI HARIMA CORP [JP]  
• EP 2769786 B1 20170419 - REFRACTORY INTELLECTUAL PROPERTY GMBH & CO KG [AT]

Citation (search report)  
• [YD] EP 2769786 B1 20170419 - REFRACTORY INTELLECTUAL PROPERTY GMBH & CO KG [AT]  
• [Y] US 5227078 A 19930713 - AUGUSTINE III ROBERT B [US]  
• [Y] JP 2008000810 A 20080110 - KOBE STEEL LTD  
• [A] CN 2770832 Y 20060412 - LUOYANG REFRACTORY MATERIAL IN [CN]

Cited by  
CN113846202A; EP3900855A1; WO2021214070A2

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)  
**EP 3488949 A1 20190529**; WO 2019101389 A1 20190531

DOCDB simple family (application)  
**EP 17203004 A 20171122**; EP 2018075048 W 20180917