

Title (en)  
SLIDE PLATE AND FIXED PLATE OF MOLTEN METAL DISCHARGING APPARATUS AND METHODS OF RECYCLING ASSOCIATED

Title (de)  
SCHIEBERPLATTE ODER FESTPLATTE EINER ABGABEVORRICHTUNG FÜR METALLSCHMELZE UND ZUGEHÖRIGE RECYCLINGMETHODEN

Title (fr)  
PLAQUE COULISSANTE OU PLAQUE FIXE D'UN APPAREIL DE DÉCHARGE DE MÉTAL EN FUSION ET PROCÉDÉS DE RECYCLAGE ASSOCIÉS

Publication  
**EP 3825034 A1 20210526 (EN)**

Application  
**EP 20203558 A 20201023**

Priority  
JP 2019212239 A 20191125

Abstract (en)  
To provide a slide plate that can be reused even if a gas supply hole is clogged. A slide plate (2) is provided with a pouring hole (2a) configured to be capable of communicating with a molten metal pouring hole (3a) of a fixed plate (3), and a gas supply hole (11) configured to be capable of communicating with the pouring hole (3a) of the fixed plate (3) for blowing gas into molten metal. The gas supply hole (11) of the slide plate (2) includes a secondary supply hole (11b) at a position of an initial supply hole (11a) clogged by solidification of the molten metal, or made anew at a position different from the position of the initial supply hole (11a).

IPC 8 full level  
**B22D 11/117** (2006.01); **B22D 11/16** (2006.01); **B22D 11/18** (2006.01); **B22D 41/24** (2006.01); **B22D 41/28** (2006.01); **B22D 41/42** (2006.01); **B22D 41/58** (2006.01)

CPC (source: EP)  
**B22D 11/117** (2013.01); **B22D 41/24** (2013.01); **B22D 41/28** (2013.01); **B22D 41/30** (2013.01); **B22D 41/42** (2013.01); **B22D 41/58** (2013.01)

Citation (applicant)  
JP H0433772 A 19920205 - SHINAGAWA REFRACTORIES CO

Citation (search report)  

- [X] JP H11138244 A 19990525 - NIPPON KOKAN KK, et al
- [X] JP 2000158126 A 20000613 - TOSHIBA CERAMICS CO
- [X] US 4632283 A 19861230 - ARAKAWA KAZUMI [JP], et al
- [A] US 5730892 A 19980324 - NIWA SHIGEKI [JP], et al

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 3825034 A1 20210526**; **EP 3825034 B1 20230104**; JP 2021084112 A 20210603; JP 7165116 B2 20221102

DOCDB simple family (application)  
**EP 20203558 A 20201023**; JP 2019212239 A 20191125