

Title (en)
NOSETIP DESIGN FOR HIGH-PERFORMANCE CONTINUOUS CASTING

Title (de)
NASENSPITZENENTWURF FÜR HOCHLEISTUNGSSTRANGGIESSEN

Title (fr)
CONCEPTION D'EMBOUT POUR COULÉE CONTINUE À HAUTE PERFORMANCE

Publication
EP 4347155 A1 20240410 (EN)

Application
EP 22738826 A 20220601

Priority
• US 202163195731 P 20210602
• US 2022072689 W 20220601

Abstract (en)
[origin: WO2022256805A1] Described are nosetips for continuous casting of a metal alloy. The nosetip may include a first portion having a first surface parallel to a second surface opposite the first surface. The nosetip may include a second portion having a third surface directed toward an extended first surface. The extended first surface may be in a common plane with the first surface. The nosetip may include a third portion having an arcuate surface connecting the third surface to the extended first surface. The arcuate surface may include a point of curvature at a vertical distance from the extended first surface. The vertical distance may be configured to limit a maximum meniscus height for liquid metal, cast using the nosetip, between the nosetip and a continuous casting surface. Also described are methods of continuous casting a metal alloy at a casting speed of greater than 12 m/min.

IPC 8 full level
B22D 11/06 (2006.01)

CPC (source: EP KR US)
B22D 11/0605 (2013.01 - EP KR US); **B22D 11/0622** (2013.01 - EP KR); **B22D 11/064** (2013.01 - US); **B22D 11/0642** (2013.01 - EP KR); **B22D 11/115** (2013.01 - US)

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

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
WO 2022256805 A1 20221208; BR 112023018173 A2 20240116; CA 3219626 A1 20221208; CN 117412825 A 20240116; EP 4347155 A1 20240410; JP 2024515132 A 20240404; KR 20230156840 A 20231114; MX 2023014303 A 20240118; US 2024198413 A1 20240620

DOCDB simple family (application)
US 2022072689 W 20220601; BR 112023018173 A 20220601; CA 3219626 A 20220601; CN 202280039843 A 20220601; EP 22738826 A 20220601; JP 2023565389 A 20220601; KR 20237035031 A 20220601; MX 2023014303 A 20220601; US 202218555401 A 20220601