

Title (en)
GAS PURGED NOZZLE

Title (de)
GASGESPÜLTE AUSGUSSDÜSE

Title (fr)
BUSE A GAZ PURGE

Publication
EP 1536902 A1 20050608 (EN)

Application
EP 03749254 A 20030902

Priority
• US 0327209 W 20030902
• US 40781502 P 20020903

Abstract (en)
[origin: WO2004022267A1] A nozzle (1) is described for delivering a flow of liquid metal from a metallurgical vessel. In combination with inert gas, the nozzle can shield the flow of liquid metal from oxygen and, additionally, can be used to purge liquid metal residing in the metallurgical vessel. The nozzle includes a substantially gas-impermeable liner (9) surrounded by a permeable composition (10). The gas-impermeable liner may comprise a resin-bonded material, and the permeable liner is preferably a carbon-bonded or castable refractory. A metal housing (14) may surround the nozzle.

IPC 1-7
B22D 41/54; B22D 41/58

IPC 8 full level
B22D 41/54 (2006.01); **B22D 41/58** (2006.01)

CPC (source: EP KR US)
B22D 41/54 (2013.01 - EP KR US); **B22D 41/58** (2013.01 - EP KR US)

Citation (search report)
See references of WO 2004022267A1

Cited by
CN113560559A

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

DOCDB simple family (publication)
WO 2004022267 A1 20040318; AU 2003268298 A1 20040329; BR 0313972 A 20050719; CA 2497298 A1 20040318; CN 1694774 A 20051109;
EP 1536902 A1 20050608; KR 20050057141 A 20050616; MX PA05002446 A 20050527; PL 375692 A1 20051212; RU 2005109547 A 20050910;
US 2006071041 A1 20060406

DOCDB simple family (application)
US 0327209 W 20030902; AU 2003268298 A 20030902; BR 0313972 A 20030902; CA 2497298 A 20030902; CN 03824804 A 20030902;
EP 03749254 A 20030902; KR 20057003695 A 20050303; MX PA05002446 A 20030902; PL 37569203 A 20030902;
RU 2005109547 A 20030902; US 53009205 A 20050503