

Title (en)  
DEVICE FOR USE IN THE DEGASSING OF MOLTEN METAL

Publication  
**EP 0169290 A3 19870114 (DE)**

Application  
**EP 84810534 A 19841105**

Priority  
US 55234083 A 19831116

Abstract (en)  
[origin: US4494735A] A gas injection nozzle design for use in a swirling tank reactor used in the degassing of molten metal with a fluxing gas. The nozzle design eliminates metal leakage from the reactor around the nozzle tip and gas leakage within the fluxing gas delivery line. The nozzle tip is provided with an orifice profile consisting of a straight hole opening of constant diameter or consisting of a converging-diverging profile.

IPC 1-7  
**F27D 3/16**

IPC 8 full level  
**C21C 7/072** (2006.01); **B22D 1/00** (2006.01); **C22B 9/05** (2006.01); **F27D 3/16** (2006.01)

CPC (source: EP US)  
**B22D 1/005** (2013.01 - EP US)

Citation (search report)

- [A] EP 0070799 A2 19830126 - ALUSUISSE [CH]
- [A] DE 336995 C 19210520 - HERBERT BONDY
- [A] US 3695603 A 19721003 - WALK GEORGE A, et al
- [A] FR 2498946 A1 19820806 - EUROP PROPULSION [FR]

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GB2215825A; EP0252684A1; US4789141A; WO8800247A1; WO8705382A1

Designated contracting state (EPC)  
AT BE CH DE FR GB IT LI NL SE

DOCDB simple family (publication)  
**US 4494735 A 19850122**; AT E51067 T1 19900315; AU 3470684 A 19850523; AU 567194 B2 19871112; CA 1239791 A 19880802; DE 3481640 D1 19900419; EP 0169290 A2 19860129; EP 0169290 A3 19870114; EP 0169290 B1 19900314; ES 537232 A0 19850816; ES 8506811 A1 19850816; JP H0229733 B2 19900702; JP H0363493 A 19910319; JP S60116731 A 19850624; NO 162866 B 19891120; NO 162866 C 19900228; NO 844534 L 19850520; NZ 210030 A 19870331; ZA 848580 B 19850626

DOCDB simple family (application)  
**US 55234083 A 19831116**; AT 84810534 T 19841105; AU 3470684 A 19841026; CA 467954 A 19841115; DE 3481640 T 19841105; EP 84810534 A 19841105; ES 537232 A 19841030; JP 24086184 A 19841116; JP 25690889 A 19890929; NO 844534 A 19841114; NZ 21003084 A 19841030; ZA 848580 A 19841102