

Title (en)
INDUCTION POWERED LADLE BOTTOM NOZZLE

Title (de)
INDUKTIONSGETRIEBENE PFANNENUNTERSEITENDÜSE

Title (fr)
BUSE DE BASE DE POCHE A INDUCTION

Publication
EP 1920074 A4 20090225 (EN)

Application
EP 06801873 A 20060818

Priority
• US 2006032361 W 20060818
• US 70944205 P 20050819

Abstract (en)
[origin: WO2007024703A1] A ladle (2) or other container for molten metal (5) is provided with an outlet nozzle (4) that allows a stream of molten metal to flow by heating the nozzle (4) to the melting temperature of the metal (5). The nozzle (4) is, for example, tubular and made of Al₂O₃ or SiO₂ and is surrounded by a graphite tube (8) in thermal contact with the nozzle (4). The nozzle (4) is heated by heating the surrounding graphite tube (8) inductively. Once the temperature of the nozzle (4) exceeds the liquidus temperature of the metal (5) in the ladle (2), the metal (5) will flow out of the ladle (2) through the nozzle (4).

IPC 8 full level
C21B 7/12 (2006.01)

CPC (source: EP US)
B22D 41/14 (2013.01 - EP US); **B22D 41/60** (2013.01 - EP US); **C21B 7/12** (2013.01 - EP US); **F27D 3/1518** (2013.01 - EP US); **C21C 5/4653** (2013.01 - EP US)

Citation (search report)
• [X] WO 9807536 A1 19980226 - MOLTEN METAL TECH INC [US]
• [X] US 6358466 B1 20020319 - BESSER MATTHEW F [US], et al
• [X] US 6072166 A 20000606 - BRUECKNER RAIMUND [DE], et al
• [X] GB 962924 A 19640708 - BBC BROWN BOVERI & CIE
• [X] US 6210629 B1 20010403 - BRUECKNER RAIMUND [DE], et al
• [X] US 3604598 A 19710914 - KAPPMAYER KEITH K, et al
• See references of WO 2007024703A1

Designated contracting state (EPC)
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