

Title (en)  
SUBMERGED NOZZLE FOR SLAB CONTINUOUS CASTING MOULDS

Title (de)  
TAUCHAUSGUSS FÜR BRAMMEN-STRANGGIESSKOKILLE

Title (fr)  
BUSETTE DE COULEE PAR IMMERSION POUR COQUILLE DE COULEE CONTINUE DE BRAMES

Publication  
**EP 0984838 B1 20040915 (DE)**

Application  
**EP 98934799 A 19980520**

Priority  
• DE 9801438 W 19980520  
• DE 19722890 A 19970528

Abstract (en)  
[origin: DE19722890A1] The invention relates to a submerged nozzle of a metallurgic vessel, said vessel being situated upstream of a continuous casting mould. Said submerged nozzle is configured as a single-piece unit and has a slit-shaped discharge opening in the mouth area, the length of said opening being several times longer than it is wide. The submerged nozzle (21) has a cylindrical form with a circular (R), oval (r or c) or bone-shaped (p or q) cross-section, and the slit-shaped discharge opening (22) is configured as a through slit (23) which extends in the base (28) and into the side wall (29) of the cylindrical part of the submerged nozzle (21). The invention also relates to a method for producing a submerged nozzle of this type.

IPC 1-7  
**B22D 41/50**; **B22D 41/52**

IPC 8 full level  
**B22D 41/50** (2006.01); **B22D 41/52** (2006.01)

CPC (source: EP KR US)  
**B22D 41/50** (2013.01 - EP KR US); **B22D 41/52** (2013.01 - EP US)

Designated contracting state (EPC)  
BE DE FR GB IT LU NL

DOCDB simple family (publication)  
**DE 19722890 A1 19981203**; AU 8431598 A 19981230; BR 9810736 A 20000912; DE 59811952 D1 20041021; EP 0984838 A1 20000315; EP 0984838 B1 20040915; KR 100537467 B1 20051216; KR 20010013067 A 20010226; TW 370477 B 19990921; US 6336575 B1 20020108; WO 9853938 A1 19981203; ZA 984536 B 19981203

DOCDB simple family (application)  
**DE 19722890 A 19970528**; AU 8431598 A 19980520; BR 9810736 A 19980520; DE 59811952 T 19980520; DE 9801438 W 19980520; EP 98934799 A 19980520; KR 19997011046 A 19980520; TW 87108176 A 19980526; US 42468099 A 19991129; ZA 984536 A 19980527