

Title (en)  
**MELTING TROUGH FOR METAL**

Publication  
**EP 0377076 A3 19901122 (DE)**

Application  
**EP 89110772 A 19890614**

Priority  
**DE 3837960 A 19881109**

Abstract (en)  
[origin: JPH02130388A] PURPOSE: To measure the temperature of melt accurately by locating both an opening and a thermosensor below the mirror surface of the melt when the thermosensor provided with a protective coating part plunges into the wall part of a melting trough through the opening. CONSTITUTION: A protective pipe 3 is disposed directly above the opening of a capillary cast passage 2 in a melt trough 1 while plunging into the wall part thereof through an opening 8. A thermosensor 3 is separated, at most 2 mm, from the passage 2 or the inner wall of the tunnel type melt trough 1. Consequently, gravity acts in addition to the pressure of gaseous atmosphere at the time of casting process. Since a capillary casting passage is employed, a material melted by surface tension is prevented, by gas pressure, from entering through the passage 2 during a melting process. Since the forward end part of the thermosensor 3 plunges into the melt, temperature of the melt can be measured accurately.

IPC 1-7  
**B22D 23/06**

IPC 8 full level  
**B22D 2/00** (2006.01); **F27B 17/02** (2006.01); **F27D 3/10** (2006.01); **F27D 3/14** (2006.01)

CPC (source: EP US)  
**F27B 17/02** (2013.01 - EP US); **F27D 3/14** (2013.01 - EP US)

Citation (search report)

- [A] DE 3011098 A1 19811001 - HERBST BREMER GOLDSCHLAEGEREI [DE]
- [AD] DE 1262521 B 19680307 - KIND & CO FA
- [AD] DE 1054735 B 19590409 - HERAEUS GMBH W C
- [A] DD 262490 A1 19881130 - FREIBERG BERGAKADEMIE [DD]

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

DOCDB simple family (publication)  
**DE 3837960 A1 19900510; DE 3837960 C2 19940901**; DK 556389 A 19900510; DK 556389 D0 19891108; EP 0377076 A2 19900711; EP 0377076 A3 19901122; JP H02130388 A 19900518; JP H0718659 B2 19950306; US 4934664 A 19900619

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