

Title (en)  
SUBMERGED CASTING PIPE AND ITS MANUFACTURING PROCESS

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**EP 0256217 A3 19881130 (DE)**

Application  
**EP 87106688 A 19870508**

Priority  
DE 3627337 A 19860812

Abstract (en)  
[origin: EP0256217A2] The submerged casting pipe is for the casting of liquid metals, in particular liquid iron or steel, containing zirconium oxide, carbonaceous material, boron nitride and usual additives. The submerged casting pipe according to the invention is characterised in that at least the submerged region of the pipe consists of: a) 5 to 15 % by weight carbonaceous material b) 2 to 12 % by weight boron nitride c) 0 to 6 % by weight usual additives d) made up to 100 % by weight of sintered, porous partially stabilised zirconium oxide. The submerged casting pipe according to the invention has the advantage of high resistance to wear and adequate resistance to thermal shocks at the same time as a low tendency to smearing, so that in particular thin-walled submerged casting pipes of small inside diameter can also be produced.

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**B22D 41/54** (2013.01)

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• [X] GB 2067985 A 19810805 - MANNESMANN AG  
• [Y] FR 2292542 A1 19760625 - NIPPON CRUCIBLE CO [JP]  
• [A] DE 3505422 C1 19860717 - DIDIER WERKE AG  
• [A] DE 1806939 A1 19690717 - DRESSER IND  
• [A] EP 0126560 A2 19841128 - AKECHI TAIKARENGA KK [JP]

Cited by  
FR2642687A1

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