

Title (en)  
Immersion discharge nozzle with bottom orifices for the introduction of molten metal in a mould for continuous casting of metallic products

Title (de)  
Tauchguss mit Bodenöffnungen zum Einbringen von Metallschmelze in eine Kokille für das Stranggiessen metallischer Produkte

Title (fr)  
Busette pour l'introduction d'un métal liquide dans une lingotière de coulée continue de produits métalliques, dont le fond comporte des orifices

Publication  
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Application  
**EP 96402025 A 19960925**

Priority  
FR 9512764 A 19951030

Abstract (en)  
The nozzle (15) for the introduction of liquid metal (5) into a continuous casting mould for flat metal products comprises two larger sides (2, 2') and two smaller sides (3, 3'), of the type that incorporates at its lower end two holes (10, 10') cut in its lateral wall opposite each other and designed to feed the liquid metal (5) each in the direction of a smaller side (3, 3') of the mould and at least two orifices (16, 16') cut in the bottom of this lower end. A first group (16) of these orifices is arranged at one side of a plane of longitudinal symmetry of the nozzle including the axes of the holes (10, 10') and a second group (16') of these orifices is arranged on the other side of this plane of longitudinal symmetry. The configuration of the nozzle and its various outlets provokes a number of currents of circulation (12, 14, 15, 16, etc.) for the liquid metal in the casting space of the mould. The lower end of the nozzle may consist of a hollow element in the form of an inverted "T" and may incorporate a number of obstacles in its interior placed in the course of the flow of liquid metal.

Abstract (fr)  
L'invention a pour objet une busette (15, 19) pour l'introduction de métal liquide (5) dans une lingotière de coulée continue de produits métalliques plats comportant deux grands côtés (2, 2') et deux petits côtés (3, 3'), du type comportant à son extrémité inférieure deux ouïes (10, 10') ménagées sur sa paroi latérale à l'opposé l'une de l'autre et destinées à envoyer le métal liquide (5) chacune en direction d'un petit côté (3, 3') de ladite lingotière, et au moins deux orifices (16, 16', 18, 18', 29-35, 29'-35') ménagés dans le fond de ladite extrémité inférieure, caractérisée en ce qu'un premier groupe (16, 18, 29-35) desdits orifices est disposé d'un côté d'un plan de symétrie longitudinal de la busette (IIa-IIa, IIIa, IIIa, IVa, IVa) incluant les axes des ouïes, et en ce qu'un deuxième groupe (16', 18', 29'-35') desdits orifices est disposé de l'autre côté dudit plan de symétrie (IIa-IIa, IIIa-IIIa, IVa-IVa). <IMAGE> <IMAGE>

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