

Title (en)
PROCESS AND APPARATUS FOR CONTINUOUS CASTING

Publication
EP 0145811 B1 19891004 (EN)

Application
EP 83112849 A 19831220

Priority
EP 83112849 A 19831220

Abstract (en)
[origin: EP0145811A1] Process and apparatus for continuous casting in a twinbelt casting machine in which the moving side (12, 13) dams are guided along opposite sides of the moulding cavity by guide means extending along beside the respective moving side dams, and the moving side dams are cooled by cooling fluid circulated in at least a part of said guide means and applied directly to the moving side dams. The moving side dams are cooled by cooling fluid sprayed through orifices in said guide means directly onto the moving side dams along at least a part of the downstream zone of the moulding cavity. During movement of the side dams along the moulding cavity from its entrance to its exit, they pass successively through a first (or upstream) zone (A) in which they face molten metal and through a second (or downstream) zone (B) in which they face solidified metal. The cooling fluid is sprayed directly onto the moving side dams only in this second zone. The first zone occupies from approximately 3/10ths to approximately 1/2 of the overall length of the moulding cavity, and the second zone occupies the remainder. The cooling fluid is advantageously sprayed directly toward the side dam for providing very effective cooling action, and this cooling fluid is aimed in a downstream direction that forms an acute angle with the moving direction of the side dam. Preferably this acute angle is in the range from approximately 20 DEG to approximately 50 DEG for propelling the cooling fluid downstream away from the first zone, and preferably the cooling fluid is water.

IPC 1-7
B22D 11/06

IPC 8 full level
B22D 11/06 (2006.01)

CPC (source: EP)
B22D 11/0691 (2013.01)

Cited by
DE19511493A1; DE19511493C2; GB2366531A; GB2366531B; US6471796B1; DE102011078654A1

Designated contracting state (EPC)
BE DE FR GB IT

DOCDB simple family (publication)
EP 0145811 A1 19850626; EP 0145811 B1 19891004; DE 145811 T1 19860522; DE 3380661 D1 19891109

DOCDB simple family (application)
EP 83112849 A 19831220; DE 3380661 T 19831220; DE 83112849 T 19831220