

Title (en)  
COOLING OF A METAL STRAND PORTION

Title (de)  
KÜHLUNG EINES METALLISCHEN STRANGABSCHNITTS

Title (fr)  
REFROIDISSEMENT D'UN SEGMENT DE CHAÎNE MÉTALLIQUE

Publication  
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Application  
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Abstract (en)  
[origin: WO2016012471A1] The invention relates to a method for cooling a strand portion (4) of a metal strand in a cooling zone (6) of a continuous casting machine by means of a cooling device (2), comprising a plurality of respective switching valves (8) and cooling nozzles (10), wherein for cooling the strand section (4) is conveyed through the cooling zone (6) and the switching valves (8) are controlled by binary pulse width modulated control signals (38-46, 52), such that coolant flows (q) through the cooling nozzles (10) are alternately enabled or interrupted, such that for cooling a coolant (12) is applied intermittently to the strand portion (4) in the cooling zone (6). The invention further relates to a cooling device (2). A uniform supply of coolant can be achieved if the binary pulse width modulated control signals (38-46, 52) are defined in such a way that at least one of the control signals (38-46, 52) has a phase shift ( $\phi$ ,  $\phi_1$ ,  $\phi_2$ ,  $\Delta\phi$ ) to a further one of the control signals (38-46, 52).

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