

Title (en)
ALUMINUM ALLOY, IN PARTICULAR FOR THE PRODUCTION OF MOULD SEGMENT CASTINGS FOR FORMING TYRES, AND THE METHOD OF HEAT TREATMENT OF MOULD SEGMENT CASTINGS.

Title (de)
ALUMINIUMLEGIERUNG INSBESONDERE FÜR DAS GIESSEN VON TÜBBINGSCHALUNGEN FÜR REIFEN UND EIN VERFAHREN ZUR WÄRMEBEHANDLUNG EINER GIESSFORM SEGMENTE

Title (fr)
L'ALLIAGE D'ALUMINIUM EN PARTICULIER POUR DES MOULES DE COULÉE DE CHAQUE SEGMENT POUR PNEUMATIQUES ET UN PROCÉDÉ POUR LE TRAITEMENT THERMIQUE D'UNE PIECE COULÉE SEGMENTS DE MOULE

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Application
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Abstract (en)
The essence of the invention of an aluminium alloy which contains 85.55 to 89.00 % by mass of Al, 8.5 to 10.00 % by mass of Si, 0.6 to 1.2 % by mass of Cu, 0.6 to 1.0 % by mass of Ni, 0.4 to 0.8% by mass of Mn, 0.03 to 0.05 % by mass of Sr, max. 0.4% by mass of Mg, max. 0.6 % by mass of Fe, max. 0.1 % by mass of Ti, max. 0.1 % by mass of Zn and max. 0.05 % by mass of other additives separately, with the total share of other additives being 0.15 % by mass at the maximum. Another essence of the invention is a method of heat treatment of mould segment castings, wherein the mould segment castings are heated to an annealing temperature of 520 °C and annealed for 0.5 to 8 hours, after which they are cooled in water at a temperature of 50 to 60 °C and then subjected to ageing at a temperature of 170 °C for 6 to 8 hours.

IPC 8 full level
C22C 21/04 (2006.01); **C22F 1/043** (2006.01)

CPC (source: EP)
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Citation (search report)
• [A] EP 1972697 A1 20080924 - BRIDGESTONE CORP [JP]
• [A] EP 1443122 A1 20040804 - RHEINFELDEN ALUMINIUM GMBH [DE]
• [A] DE 102006032699 A1 20080117 - BDW TECHNOLOGIES GMBH & CO KG [DE]
• [A] EP 2471967 A1 20120704 - CASA MARISTAS AZTERLAN [ES], et al
• [A] US 2012273154 A1 20121101 - WILLIAMSON WARREN G [US]

Cited by
CN108486426A

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