

Title (en)
MAGNESIUM ALLOY SHEET PRODUCED BY TWIN ROLL CASTING

Title (de)
MITTELS DOPPELWALZENGIESSEN HERGESTELLTES MAGNESIUMLEGIERUNGSBLECH

Title (fr)
FEUILLE EN ALLIAGE DE MAGNÉSIUM OBTENUE PAR COULÉE ENTRE CYLINDRES

Publication
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Application
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Abstract (en)
The invention refers to a method of manufacturing a sheet metal product (28) including the steps of: a) providing a molten magnesium alloy (10, 10') consisting of - 0.4 wt% to 2 wt% Zn, - 0.4 wt% to 1 wt% Ca, - 0.00 wt% to 1.0 wt% rare earth elements and/or Sr, - unavoidable impurities and - the balance being Mg b) forming a strip (10, 10") in a twin roll casting process, c) performing a warm rolling process on the strip (10, 10") and d) performing a subsequent heat treatment on the strip (10, 10") at 300°C to 450°C for 0,5 min to 60 min. The invention further refers to a sheet metal product (28), obtained or obtainable by the method of the invention.

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CPC (source: EP)
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Citation (applicant)
• DE 10052423 C1 20020103 - THYSSENKRUPP STAHL AG [DE]
• DE 102006013607 A1 20071115 - THYSSENKRUPP STEEL AG [DE]
• WO 2013156523 A1 20131024 - HELMHOLTZ ZENTRUM GEESTHACHT [DE]

Citation (search report)
• [X] EP 2644728 A2 20131002 - POSTECH ACAD IND FOUND [KR]
• [A] DE 112014002336 T5 20160121 - BAOSHAN IRON & STEEL CO [CN]
• [A] JP 2006028548 A 20060202 - TOYOTA CENTRAL RES & DEV

Cited by
EP3741880A1; WO2020234655A1; CN114214551A; CN104438422A; JP2018080363A; CN113840939A; DE102022200537A1

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