

Title (en)  
MACHINE FOR FORMING ALUMINIUM WEBS

Title (de)  
VORRICHTUNG ZUR HERSTELLUNG VON ALUMINIUM-STEGBLECHEN

Title (fr)  
DISPOSITIF POUR LA FABRICATION DES AMES EN ALUMINIUM

Publication  
**EP 3326736 A1 20180530 (EN)**

Application  
**EP 17203855 A 20171127**

Priority  
IT 201600120426 A 20161128

Abstract (en)  
Described is a machine for making webs (1) made of aluminium, comprising: a unit (2) for feeding aluminium in the liquid state along a feed line (A) having a feed direction (V); an injector (3) of the aluminium in the liquid state, positioned downstream of the feed unit (2) relative to the feed direction (V) having an inlet opening (4) to receive the aluminium in the liquid state from the feed unit (2) and an outlet opening (5) for feeding a calculated quantity of aluminium in the liquid state towards a solidification zone; an upper roller (6) and a lower roller (7) with parallel axes (X6, X7), rotating relative to each other according to opposite directions (V6, V7), spaced from each other to form an opening or channel (8) having a first dimension (L8) and defining the solidification zone; the upper roller (6) and the lower roller (7) are configured for receiving aluminium in the liquid state from the outlet opening (5) of the injector (3) and forming, at the outlet, a continuous, solid web (1) of aluminium, having at least a thickness (S1) equivalent to the first dimension (L8) and at least an upper surface (1a) and a lower surface (1b); one between the upper roller (6) and the lower roller (7) has at least one recess (9, 10, 11) made on the relative surface (6a, 7a) of contact with the aluminium, in such a way as to form on the corresponding upper surface (1a) or lower surface (1b) of the web (1) being formed a corresponding zone (12, 13, 14), at least repeated cyclically, having a thickness (S12, S13, S14) greater than the thickness (S1) of the remaining web (1) being formed.

IPC 8 full level  
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CPC (source: EP)  
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Citation (search report)  
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• [Y] WO 2006013654 A1 20060209 - CENTRAL MOTOR WHEEL CO LTD [JP], et al  
• [A] MARKUS DAAMEN, DANIEL DÁVALOS JULCA, GERHARD HIRT: "Tailored strips by welding, strip profile rolling and twin roll casting", ADVANCED MATERIALS RESEARCH, vol. 907, 2014, Switzerland, XP002772203, ISSN: 1662-8985  
• [A] MICHELE VIDONI, ARNE MENDEL, GERHARD HIRT: "Profile Strip Casting with Inline Hot Rolling: Numerical Simulations for the Process Chain Design", KEY ENGINEERING MATERIALS, vol. 611-612, 2014, Switzerland, XP002772204, ISSN: 1662-9795  
• [A] T. HAGA, K. HIROOKA, H. WATARI, S. KUMAI: "Grooved roll for high speed twin roll caster", ARCHIVES OF MATERIALS SCIENCE AND ENGINEERING, vol. 30, no. 2, April 2008 (2008-04-01), XP002772205

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