

Title (en)

Process for manufacturing aluminium alloy material with excellent formability, shape fixability and bake hardenability.

Title (de)

Verfahren zur Herstellung eines Werkstoffes aus eines Aluminiumlegierung mit ausgezeichneter Pressverformbarkeit und Einbrennhärtbarkeit.

Title (fr)

Procédé de fabrication de matériau en alliage d'aluminium présentant une aptitude excellente au formage et durcissable lors de la cuisson du vernis.

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Application

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Priority

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- JP 26950890 A 19901009

Abstract (en)

[origin: EP0480402A1] The present invention provides a process for manufacturing an aluminum alloy material which has excellent formability in press working, shape fixability and bake hardenability and is especially suitable for the manufacture of transport machinery, such as the body sheet material of automobiles. The process comprises conducting semi-continuous casting an alloy comprising, in weight percentage, from 0.4% to less than 1.5% of Si, from 0.3% to less than 0.5% of Mg and optionally further comprising at least one member selected from the group consisting of up to 0.20% of Cu, up to 0.20% of Mn and up to 0.20% of Cr with the balance consisting of Al and unavoidable impurities to prepare an ingot, rolling the ingot to a final sheet thickness, subjecting the heated sheet to solution heat treatment under specified conditions, allowing the sheet to hold still at room temperature, and heat-treating the sheet. The addition of 0.02% to 0.2% of V imparts a less anisotropy to the resulting alloy.

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CPC (source: EP)

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Cited by

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