

Title (en)

6XXX-SERIES ALUMINIUM ALLOY FORGING STOCK MATERIAL AND METHOD OF MANUFACTURING THEREOF

Title (de)

6XXX-SERIEN-ALUMINIUMLEGIERUNGSSCHMIEDEROHMATERIAL UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)

MATÉRIAU DE STOCKAGE FORGÉ EN ALLIAGE D'ALUMINIUM DE LA SÉRIE 6XXX ET SON PROCÉDÉ DE FABRICATION

Publication

**EP 3464659 B2 20230712 (EN)**

Application

**EP 17725993 A 20170531**

Priority

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Abstract (en)

[origin: WO2017207603A1] The invention relates to hot-rolled semi-finished 6xxx-series aluminium alloy forging stock material having a thickness in the range of 2 mm to 30 mm, and having a composition comprising of, in wt.%, Si 0.65-1.4%, Mg 0.60-0.95%, Mn 0.40-0.80%, Cu 0.04-0.28%, Fe up to 0.5%, Cr up to 0.18%, Zr up to 0.20%, Ti up to 0.15%, Zn up to 0.25%, impurities each <0.05%, total <0.2%, balance aluminium, and wherein it has a substantially unrecrystallized microstructure. The invention relates also to a method of manufacturing such 6xxx-series hot-rolled aluminium alloy forging stock material. Furthermore, the invention relates to a method of forging a shaped product from the 6xxx-series aluminium alloy forging stock material.

IPC 8 full level

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Citation (opposition)

Opponent :

- JP 2006274415 A 20061012 - KOBE STEEL LTD
- EP 2811042 A1 20141210 - KOBE STEEL LTD [JP]
- P. SHERSTNEV, I. FLITTA , C. SOMMITSCH, M. HACKSTEINER , T. EBNER: "The effect of the initial rolling temperature on the microstructure evolution during and after hot rolling of AA6082", INT J MATER FORM, 2008, pages 395 - 398

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