

Title (en)

STRUCTURAL ELEMENT FOR AIRCRAFT ENGINEERING EXHIBITING A VARIATION OF PERFORMANCE CHARACTERISTICS

Title (de)

KONSTRUKTIONSELEMENT FÜR DIE LUFTFAHRT MIT VARIATION DER ANWENDUNGSTECHNISCHEN EIGENSCHAFTEN

Title (fr)

ELEMENT DE STRUCTURE POUR CONSTRUCTION AERONAUTIQUE PRESENTANT UNE VARIATION DES PROPRIETES D'EMPLOI

Publication

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Application

EP 05743083 A 20050321

Priority

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- FR 0402971 A 20040323

Abstract (en)

[origin: WO2005098072A2] The invention relates to a method for producing a part made of aluminium alloy with structural hardening consisting a) in melting a semifinished extruded or forged rolled stock followed by water quenching, b) in optionally carrying out a controlled drawing with a permanent stretching which is equal to or greater than 5 % and c) in tempering. Said invention is characterised in that at least one tempering operation is carried out in a controlled thermal gradient linear furnace comprising at least two areas or groups of areas (Z1, Z2) at initial temperatures (T1, T2) in which the variation of each temperature (T1, T2) around a specified temperature is equal or less than <5 DEG C through the length of said areas of the groups of areas, the difference between the specified temperatures of the initial temperatures (T1, T2) is equal or greater than 5 DEG C and said areas or the groups of areas are separable by a transition area or group of areas (Z1,2) inside of which the initial temperature varies from T1 to T2 and a length which is parallel to the axis of the linear furnace of each at least two areas or the groups of areas is equal to or greater than 1 meter.

IPC 8 full level

C22F 1/053 (2006.01); **C22F 1/04** (2006.01); **F27B 9/40** (2006.01); **F27B 17/00** (2006.01); **F27D 19/00** (2006.01)

CPC (source: EP)

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Citation (search report)

See references of WO 2005098072A2

Cited by

US11220729B2; US11242587B2; US11180839B2; WO2019084320A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

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