Title (en)

HOT EXTRUSION-MOLDING METHOD FOR Ni-BASED SUPER HEAT-RESISTANT ALLOY AND PRODUCTION METHOD FOR Ni-BASED SUPER HEAT-RESISTANT ALLOY EXTRUSION MATERIAL

Title (de)

WARMSTRANGPRESSVERFAHREN FÜR EINE SUPERWÄRMEBESTÄNDIGE LEGIERUNG AUF NI-BASIS UND HERSTELLUNGSVERFAHREN FÜR SUPERWÄRMEBESTÄNDIGES STRANGPRESSLEGIERUNGSMATERIAL AUF NI-BASIS

Title (fr)

PROCÉDÉ DE MOULAGE PAR EXTRUSION À CHAUD POUR ALLIAGE À BASE DE NI TRÈS RÉSISTANT À LA CHALEUR ET PROCÉDÉ DE PRODUCTION D'UN MATÉRIAU D'EXTRUSION D'ALLIAGE À BASE DE NI TRÈS RÉSISTANT À LA CHALEUR

Publication

EP 3520916 A4 20200527 (EN)

Application

EP 17855498 A 20170823

Priority

- JP 2016190801 A 20160929
- JP 2017030079 W 20170823

Abstract (en)

[origin: EP3520916A1] Provided are: a hot extrusion-molding method for a precipitation strengthened-type Ni-based super heat-resistant alloy; and a production method for a Ni-based super heat-resistant alloy extrusion material. The hot extrusion-molding method is for a Ni-based super heat-resistant alloy, wherein: a billet has a component composition for a precipitation strengthened-type Ni-based super heat-resistant alloy which has a gamma prime phase equilibrium precipitation amount of 40 mol% or more at 700°C; a lubrication glass pad is installed between a die and the billet; and an adjustment is made such that the relationship between the outer diameter DB (mm) of the billet at the time of being inserted in a container and the inner diameter DC (mm) of the container satisfies the condition, (DC-DB): 2-8 mm, or an adjustment is made such that the relationship between the outer diameter DB' (mm) of the billet prior to being heated to a hot processing temperature and the inner diameter DC' (mm) of the container prior to being heated to a preheating temperature satisfies the condition, (DC'-DB'): 3-9 mm. The production method for a Ni-based super heat-resistant alloy extrusion material is performed using the hot extrusion-molding method mentioned above.

IPC 8 full level

B21C 23/00 (2006.01); **B21C 23/32** (2006.01); **B21C 29/00** (2006.01); **B21C 37/04** (2006.01); **C22C 19/05** (2006.01); **C22F 1/00** (2006.01); **C22F 1/10** (2006.01)

CPC (source: EP US)

B21C 23/002 (2013.01 - EP US); **B21C 23/08** (2013.01 - US); **B21C 23/32** (2013.01 - US); **C22C 19/05** (2013.01 - EP); **C22C 19/055** (2013.01 - US); **C22C 19/056** (2013.01 - US); **C22C 19/057** (2013.01 - US); **C22F 1/00** (2013.01 - EP); **C22F 1/10** (2013.01 - EP); B21C 23/32 (2013.01 - EP)

Citation (search report)

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- [Y] JP H07136710 A 19950530 - SUMITOMO METAL IND
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- See references of WO 2018061540A1

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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