

Title (en)

NI-BASED ALLOY SOFTENED POWDER, AND METHOD FOR PRODUCING SAID SOFTENED POWDER

Title (de)

ERWEICHTES PULVER AUS LEGIERUNG AUF NI-BASIS UND VERFAHREN ZUR HERSTELLUNG DES ERWEICHTEN PULVERS

Title (fr)

POUDRE RAMOLLIE D'ALLIAGE À BASE DE NI ET PROCÉDÉ DE PRODUCTION DE LADITE POUDRE RAMOLLIE

Publication

EP 3685942 A1 20200729 (EN)

Application

EP 19817113 A 20190204

Priority

- JP 2018224833 A 20181130
- JP 2019003833 W 20190204

Abstract (en)

An objective of the invention is to provide an Ni-based alloy softened powder that is formed of a high precipitation-strengthened Ni-based alloy material, has better forming/molding processability than ever before, and is suitable for powder metallurgy. The Ni-based alloy softened powder has a chemical composition allowing γ' phase precipitated in γ phase as a matrix to have an equilibrium precipitation amount of 30-80 volume % at 700°C, has an average particle size of 5-500 μm , and includes particles comprising a polycrystalline body of fine crystals of the γ phase. The γ' phase is precipitated on grain boundaries of the γ phase fine crystals in an amount of 20 volume % or more. And, the particles have a Vickers hardness of 370 Hv or less at room temperature.

IPC 8 full level

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CPC (source: EP KR US)

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Cited by

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Designated contracting state (EPC)

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DOCDB simple family (publication)

EP 3685942 A1 20200729; **EP 3685942 A4 20210324**; CN 111629852 A 20200904; CN 111629852 B 20230331; JP 6826235 B2 20210203; JP WO2020110326 A1 20210215; KR 102443966 B1 20220919; KR 20210024119 A 20210304; SG 11202012579Y A 20210629; US 2021340644 A1 20211104; WO 2020110326 A1 20200604

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