Title (en)

SINTERED ALLOY AND METHOD FOR PRODUCING SAME

Title (de)

SINTERLEGIERUNG UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)

ALLIAGE FRITTÉ ET PROCÉDÉ DE PRODUCTION

Publication

EP 3822379 A1 20210519 (EN)

Application

EP 19834991 A 20190710

Priority

- JP 2018131364 A 20180711
- JP 2019027344 W 20190710

Abstract (en)

Provided is a sintered alloy, including, by mass, 13.86 to 27.72 % of Cr; 6.47 to 20.33 % of Ni; 0.85 to 11.05 % of Cu; 0.46 to 2.77 % of Si; 0.15 to 1.95 % of P; 0.2 to 1.0 % of C; and a remainder of Fe and an unavoidable elements as an overall composition; having a density of 6.8 to 7.4 Mg/m³; and having a metal structure containing an iron alloy matrix with a pore dispersed within the iron alloy matrix and a carbide dispersed in the iron alloy matrix, the iron alloy matrix having crystal grains with an average crystal particle size of 10 to 50 μm.

IPC 8 full level

C22C 33/02 (2006.01); **B22F 3/10** (2006.01); **C22C 9/00** (2006.01); **C22C 38/00** (2006.01); **C22C 38/42** (2006.01); **C22C 38/50** (2006.01)

CPC (source: EP US)

B22F 3/1103 (2013.01 - EP); **C22C 9/00** (2013.01 - EP); **C22C 33/0285** (2013.01 - EP US); **C22C 38/002** (2013.01 - EP); **C22C 38/02** (2013.01 - EP); **C22C 38/40** (2013.01 - EP); **C22C 38/42** (2013.01 - EP); **C22C 38/44** (2013.01 - EP); **C22C 38/50** (2013.01 - EP); B22F 2998/10 (2013.01 - EP); B22F 2999/00 (2013.01 - EP)

C-Set (source: EP US)

EP

1. B22F 2999/00 + B22F 3/10 + B22F 2201/013 + B22F 2201/02
2. B22F 2998/10 + B22F 1/09 + B22F 3/02 + B22F 3/10

US

B22F 2998/10 + B22F 1/09 + B22F 3/02 + B22F 3/10

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3822379 A1 20210519; **EP 3822379 A4 20210825**; **EP 3822379 B1 20220706**; CN 112368409 A 20210212; CN 112368409 B 20220726; JP 7248027 B2 20230329; JP WO2020013227 A1 20210802; WO 2020013227 A1 20200116

DOCDB simple family (application)

EP 19834991 A 20190710; CN 201980045440 A 20190710; JP 2019027344 W 20190710; JP 2020530226 A 20190710