Title (en)

STEEL PART AND MANUFACTURING METHOD OF STEEL PART

Title (de)

STAHLTEIL UND HERSTELLUNGSVERFAHREN FÜR EIN STAHLTEIL

Title (fr)

PIÈCE EN ACIER ET PROCÉDÉ DE FABRICATION DE PIÈCE EN ACIER

Publication

EP 4324953 A1 20240221 (EN)

Application

EP 22824938 A 20220610

Priority

- JP 2021102030 A 20210618
- JP 2022023540 W 20220610

Abstract (en)

A steel component having excellent wear resistance is provided. The steel component has a defined chemical composition. The average grain size of prior austenite grains is 25 μm or less. Carbides containing at least one of Nb, Ti, of V are included. Among the carbides, the average particle size of particles having a grain size of 0.1 μm or more is 0.15 μm to 2.5 μm, and the average particle size of particles having a particle size less than 0.1 μm is 0.005 μm to 0.05 μm.

IPC 8 full level

C22C 38/00 (2006.01); **C21D 9/00** (2006.01); **C21D 9/46** (2006.01); **C22C 38/38** (2006.01); **C22C 38/60** (2006.01)

CPC (source: EP)

C21D 6/002 (2013.01); **C21D 6/005** (2013.01); **C21D 6/008** (2013.01); **C21D 9/00** (2013.01); **C21D 9/46** (2013.01); **C22C 38/005** (2013.01); **C22C 38/008** (2013.01); **C22C 38/02** (2013.01); **C22C 38/04** (2013.01); **C22C 38/06** (2013.01); **C22C 38/22** (2013.01); **C22C 38/24** (2013.01); **C22C 38/26** (2013.01); **C22C 38/28** (2013.01); **C22C 38/32** (2013.01); **C22C 38/38** (2013.01); **C22C 38/42** (2013.01); **C22C 38/46** (2013.01); **C22C 38/60** (2013.01)

Citation (search report)

See references of WO 2022264948A1

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4324953 A1 20240221; CN 117413081 A 20240116; JP 2023116800 A 20230822; JP 7334868 B2 20230829; JP WO2022264948 A1 20221222; TW 202302876 A 20230116; TW I794118 B 20230221; WO 2022264948 A1 20221222

DOCDB simple family (application)

EP 22824938 A 20220610; CN 202280038848 A 20220610; JP 2022023540 W 20220610; JP 2022566277 A 20220610; JP 2023102653 A 20230622; TW 111122349 A 20220616