

Title (en)

A NEW BAINITIC STEEL

Title (de)

BAINITISCHER STAHL

Title (fr)

NOUVEL ACIER BAINITIQUE

Publication

EP 4146838 A1 20230315 (EN)

Application

EP 21724278 A 20210506

Priority

- EP 20173354 A 20200506
- EP 2021062067 W 20210506

Abstract (en)

[origin: WO2021224423A1] The present disclosure relates to a new bainitic steel to be used for manufacturing a drill component, such as a drill rod, or in any other components wherein such steels are useful. The present disclosure further relates to a drill component comprising the bainitic steel. The bainitic steel comprises the following composition in weight %: C 0.33 to 0.40; Si 0.60 to 1.45; Mn 0.25 to ≤ 0.80; P ≤ 0.03; S ≤ 0.03; Cr 1.00 to 1.50; Ni 0.10 to 0.60; Mo 0.40 to 0.80; N ≤ 0.020; Al ≤ 0.05; balance Fe and unavoidable impurities.

IPC 8 full level

C21D 6/00 (2006.01); **C21D 8/06** (2006.01); **C21D 9/22** (2006.01); **C22C 38/00** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01);
C22C 38/06 (2006.01); **C22C 38/42** (2006.01); **C22C 38/44** (2006.01); **C22C 38/52** (2006.01); **E21B 17/00** (2006.01)

CPC (source: EP)

C21D 6/00 (2013.01); **C21D 6/004** (2013.01); **C21D 8/06** (2013.01); **C21D 8/065** (2013.01); **C21D 9/22** (2013.01); **C22C 38/00** (2013.01);
C22C 38/001 (2013.01); **C22C 38/02** (2013.01); **C22C 38/04** (2013.01); **C22C 38/06** (2013.01); **C22C 38/42** (2013.01); **C22C 38/44** (2013.01);
C22C 38/52 (2013.01)

Citation (search report)

See references of WO 2021224423A1

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)

WO 2021224423 A1 20211111; BR 112022022553 A2 20221213; CN 115552051 A 20221230; EP 4146838 A1 20230315;
JP 2023525516 A 20230616

DOCDB simple family (application)

EP 2021062067 W 20210506; BR 112022022553 A 20210506; CN 202180033253 A 20210506; EP 21724278 A 20210506;
JP 2022567260 A 20210506