

Title (en)
HOT PRESS MEMBER AND METHOD FOR PRODUCING SAME

Title (de)
HEISSPRESSELEMENT UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)
ÉLÉMENT DE PRESSE À CHAUD ET SON PROCÉDÉ DE PRODUCTION

Publication
EP 3366798 B1 20201125 (EN)

Application
EP 16857080 A 20161003

Priority

- JP 2015205752 A 20151019
- JP 2016004459 W 20161003

Abstract (en)
[origin: EP3366798A1] A hot pressed member including: a first region having a tensile property of 1500 MPa or more in tensile strength TS and 6.0 % or more in uniform elongation uEl; and a second region having a tensile property of 780 MPa or more in tensile strength TS and 15.0 % or more in uniform elongation uEl is provided. The hot pressed member comprises: a predetermined chemical composition (in particular, low C of 0.090 % or more and less than 0.30 % and high Mn of 3.5 % or more and less than 11.0 %); a first region having: a microstructure including a martensite phase of 80.0 % or more in volume fraction and a retained austenite phase of 3.0 % or more and 20.0 % or less in volume fraction; and a dislocation density of 1.0×10^{16} /m² or more; and a second region having a microstructure including a ferrite phase of 30.0 % or more and 60.0 % or less in volume fraction, a retained austenite phase of 10.0 % or more and 70.0 % or less in volume fraction, and a martensite phase of 30.0 % or less in volume fraction.

IPC 8 full level
C22C 38/00 (2006.01); **B21D 22/02** (2006.01); **B21D 22/20** (2006.01); **B21D 24/00** (2006.01); **C21D 1/18** (2006.01); **C21D 9/00** (2006.01); **C21D 9/46** (2006.01); **C22C 38/60** (2006.01)

CPC (source: EP KR US)
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Cited by
EP4116003A4; EP3492618A4; EP3438316A4; US10858718B2; US11293075B2; EP3564401B1

Designated contracting state (EPC)
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DOCDB simple family (publication)
EP 3366798 A1 20180829; **EP 3366798 A4 20180829**; **EP 3366798 B1 20201125**; CN 108138290 A 20180608; JP 2017078189 A 20170427; JP 6168118 B2 20170726; KR 20180063304 A 20180611; MX 2018004771 A 20180530; US 2018305785 A1 20181025; WO 2017068757 A1 20170427

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EP 16857080 A 20161003; CN 201680061023 A 20161003; JP 2015205752 A 20151019; JP 2016004459 W 20161003; KR 20187013033 A 20161003; MX 2018004771 A 20161003; US 201615768905 A 20161003