

Title (en)
LOW-ALLOY STEEL SHEET HAVING EXCELLENT STRENGTH AND DUCTILITY AND MANUFACTURING METHOD THEREFOR

Title (de)
NIEDRIG LEGIERTES STAHLBLECH MIT AUSGEZEICHNETER FESTIGKEIT UND DUKTILITÄT UND VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)
TÔLE D'ACIER FAIBLEMENT ALLIÉ POSSÉDANT UNE RÉSISTANCE ET UNE DUCTILITÉ EXCELLENTE ET PROCÉDÉ DE FABRICATION S'Y RAPPORTANT

Publication
EP 3674435 A4 20200701 (EN)

Application
EP 18857908 A 20180920

Priority
• KR 20170123412 A 20170925
• KR 2018011097 W 20180920

Abstract (en)
[origin: EP3674435A1] The disclosure is to provide a low alloy steel sheet with high strength, high yield strength and high ductility by minimizing the addition of alloying elements, and manufacturing method thereof. In accordance with an aspect of the disclosure, a low alloy steel sheet with excellent strength and ductility, includes: by weight percent, C: 0.05-0.15%, Si: 0.7-2.5%, Mn: 8-9.9%, Cr: 13-15.0%, Cu: more than 0 and 1.0% or less, N: 0.1-0.2%, Al: more than 0 and 0.25% or less, Sn: more than 0 and 0.05% or less, the remainder of iron (Fe) and other inevitable impurities, and the microstructure of the low alloy steel sheet includes martensite phase at a volume fraction of 20% or less, and the remainder includes an austenite phase.

IPC 8 full level
C21D 8/02 (2006.01); **C21D 9/46** (2006.01); **C22C 38/00** (2006.01); **C22C 38/06** (2006.01); **C22C 38/34** (2006.01); **C22C 38/42** (2006.01); **C22C 38/44** (2006.01); **C22C 38/58** (2006.01); **C22C 38/60** (2006.01)

CPC (source: EP KR)
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Citation (search report)
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• [A] GB 1323919 A 19730718 - NISSHIN STEEL CO LTD
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• [A] JP S4827920 A 19730413
• See references of WO 2019059660A1

Designated contracting state (EPC)
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