

Title (en)

A COLD ROLLED MARTENSITIC STEEL AND A METHOD OF MARTENSITIC STEEL THEREOF

Title (de)

KALTGEWALTZTER MARTENSITISCHER STAHL UND VERFAHREN FÜR MARTENSITISCHEN STAHL

Title (fr)

ACIER MARTENSITIQUE LAMINÉ À FROID ET PROCÉDÉ D'ACIER MARTENSITIQUE S'Y RAPPORTANT

Publication

EP 3969628 A1 20220323 (EN)

Application

EP 20716219 A 20200330

Priority

- IB 2019054022 W 20190515
- IB 2020052999 W 20200330

Abstract (en)

[origin: WO2020229877A1] A cold rolled martensitic steel sheet comprising of the following elements, expressed in percentage by weight: 0.1%#C#0.2%;1.5% # Mn # 2.5%;0.1% # Si # 0.25%; 0.1% # Cr # 1%; 0.01% # Al # 0.1%; 0.001% # Ti # 0.1%;0% # S # 0.09%;0% # P # 0.09%;0% # N # 0.09%; and can contain one or more of the following optional elements0% # Ni # 1%;0% # Cu # 1%;0% # Mo # 0.4%;0% # Nb # 0.1%;0% # V# 0.1%;0% # B # 0.05%;0% #Sn# 0.1%;0% # Pb# 0.1%;0% # Sb# 0.1%;0.001% # Ca# 0.01%; the remainder composition being composed of iron and unavoidable impurities caused by processing, the microstructure of said steel comprising, by area percentage, at least 95% of martensite, a cumulated amount of ferrite and bainite between 1 % and 5%, and an optional amount of residual austenite between 0% and 2%.

IPC 8 full level

C21D 8/02 (2006.01)

CPC (source: EP KR US)

B21C 47/02 (2013.01 - KR); **C21D 1/19** (2013.01 - EP US); **C21D 1/26** (2013.01 - EP); **C21D 6/004** (2013.01 - US); **C21D 6/005** (2013.01 - US); **C21D 6/008** (2013.01 - US); **C21D 8/0226** (2013.01 - KR); **C21D 8/0236** (2013.01 - KR); **C21D 8/0273** (2013.01 - KR); **C21D 8/0405** (2013.01 - US); **C21D 8/041** (2013.01 - EP); **C21D 8/0426** (2013.01 - EP US); **C21D 8/0436** (2013.01 - EP US); **C21D 8/0463** (2013.01 - EP US); **C21D 8/0473** (2013.01 - EP); **C21D 9/46** (2013.01 - US); **C21D 9/48** (2013.01 - EP); **C22C 38/001** (2013.01 - EP KR US); **C22C 38/002** (2013.01 - US); **C22C 38/02** (2013.01 - EP US); **C22C 38/06** (2013.01 - EP US); **C22C 38/42** (2013.01 - EP KR US); **C22C 38/44** (2013.01 - EP KR US); **C22C 38/46** (2013.01 - EP KR US); **C22C 38/48** (2013.01 - EP KR US); **C22C 38/50** (2013.01 - EP KR US); **C22C 38/54** (2013.01 - EP KR US); **C22C 38/58** (2013.01 - EP KR US); **C22C 38/60** (2013.01 - KR); **C21D 2211/002** (2013.01 - EP US); **C21D 2211/005** (2013.01 - EP US); **C21D 2211/008** (2013.01 - EP KR US)

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Designated extension state (EPC)

BA ME

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WO 2020229877 A1 20201119; BR 112021021486 A2 20211221; CA 3140117 A1 20201119; CA 3140117 C 20240102; CN 113748219 A 20211203; CN 113748219 B 20230620; EP 3969628 A1 20220323; JP 2022532625 A 20220715; JP 2024045307 A 20240402; KR 20210149145 A 20211208; MA 55949 A 20220323; US 2022213573 A1 20220707; WO 2020229898 A1 20201119; ZA 202107698 B 20220629

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