

Title (en)
HEAT TREATED COLD ROLLED STEEL SHEET AND A METHOD OF MANUFACTURING THEREOF

Title (de)
HITZEBEHANDELTES KALTGEWALZTES STAHLBLECH UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)
TÔLE D'ACIER LAMINÉE À FROID ET TRAITÉE THERMIQUEMENT ET PROCÉDÉ DE FABRICATION DE CELLE-CI

Publication
EP 4073280 A1 20221019 (EN)

Application
EP 20823957 A 20201210

Priority

- IB 2019060741 W 20191213
- IB 2020061765 W 20201210

Abstract (en)
[origin: WO2021116976A1] A heat treated and cold rolled steel sheet having a composition comprising of the following elements $0.09\% \leq \text{Carbon} \leq 0.15\%$, $1.8\% \leq \text{Manganese} \leq 2.5\%$, $0.2\% \leq \text{Silicon} \leq 0.7\%$, $0.01\% \leq \text{Aluminum} \leq 0.1\%$, $0\% \leq \text{Phosphorus} \leq 0.09\%$, $0\% \leq \text{Sulfur} \leq 0.09\%$, $0\% \leq \text{Nitrogen} \leq 0.09\%$, $0\% \leq \text{Niobium} \leq 0.1\%$, $0\% \leq \text{Titanium} \leq 0.1\%$, $0\% \leq \text{Chromium} \leq 1\%$, $0\% \leq \text{Molybdenum} \leq 1\%$, $0\% \leq \text{Vanadium} \leq 0.1\%$, $0\% \leq \text{Calcium} \leq 0.005\%$, $0\% \leq \text{Boron} \leq 0.01\%$, $0\% \leq \text{Cerium} \leq 0.1\%$, $0\% \leq \text{Magnesium} \leq 0.05\%$, $0\% \leq \text{Zirconium} \leq 0.05\%$ the remainder composition being composed of iron and unavoidable impurities caused by processing, the microstructure of said steel sheet comprising in area fraction, 65 to 85% Tempered Martensite, 0% to 5% Residual Austenite and a cumulative presence of Ferrite and Bainite between 15 and 35%.

IPC 8 full level
C21D 8/00 (2006.01); **C21D 8/02** (2006.01); **C21D 8/04** (2006.01); **C22C 38/00** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01)

CPC (source: EP KR US)
C21D 8/00 (2013.01 - EP); **C21D 8/02** (2013.01 - EP); **C21D 8/0205** (2013.01 - US); **C21D 8/0226** (2013.01 - EP KR US); **C21D 8/0236** (2013.01 - EP KR US); **C21D 8/0263** (2013.01 - EP US); **C21D 8/0273** (2013.01 - EP KR US); **C21D 8/04** (2013.01 - EP); **C21D 8/0426** (2013.01 - EP); **C21D 8/0436** (2013.01 - EP); **C21D 8/0463** (2013.01 - EP); **C21D 8/0473** (2013.01 - EP); **C21D 9/46** (2013.01 - KR US); **C22C 38/00** (2013.01 - EP); **C22C 38/001** (2013.01 - KR US); **C22C 38/02** (2013.01 - EP KR US); **C22C 38/04** (2013.01 - EP KR US); **C22C 38/06** (2013.01 - EP KR US); **C22C 38/38** (2013.01 - KR); **C22C 38/60** (2013.01 - KR US); **C21D 2211/001** (2013.01 - KR US); **C21D 2211/002** (2013.01 - EP KR US); **C21D 2211/005** (2013.01 - EP KR US); **C21D 2211/008** (2013.01 - EP KR US); **C22C 38/18** (2013.01 - EP); **C22C 38/22** (2013.01 - EP); **C22C 38/24** (2013.01 - EP); **C22C 38/26** (2013.01 - EP)

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