

Title (en)
COMPOSITE STRUCTURE TYPE HIGH TENSILE STRENGTH STEEL PLATE, PLATED PLATE OF COMPOSITE STRUCTURE TYPE HIGH TENSILE STRENGTH STEEL AND METHOD FOR THEIR PRODUCTION

Title (de)
KOMPOSITSTRUKTUR-STAHPLATTE MIT HOHER ZUGFESTIGKEIT, BESCHICHTETE KOMPOSITSTRUKTUR-STAHPLATTE MIT HOHER ZUGFESTIGKEIT UND DEREN HERSTELLUNGSVERFAHREN

Title (fr)
TOLE D'ACIER LAMINEE A FROID PRESENTANT UNE RESISTANCE ELEVEE A LA TRACTION DU TYPE STRUCTURE COMPOSITE

Publication
EP 1338667 A1 20030827 (EN)

Application
EP 01998666 A 20011127

Priority

- JP 0110340 W 20011127
- JP 2000361273 A 20001128
- JP 2000361274 A 20001128
- JP 2001312687 A 20011010
- JP 2001312688 A 20011010

Abstract (en)
[origin: US2003129444A1] The invention proposes a high-strength dual-phase cold rolled steel sheet having an excellent deep drawability, wherein the steel sheet has a composition comprising C: 0.01-0.08 mass %, Si: not more than 2.0 mass %, Mn: not more than 3.0 mass %, P: not more than 0.10 mass %, S: not more than 0.02 mass %, Al: 0.005-0.20 mass %, N: not more than 0.02 mass % and V: 0.01-0.5 mass %, provided that V and C satisfy a relationship of $0.5 \times C/12 \leq V/51 \leq 3 \times C/12$, and the remainder being Fe and inevitable impurities, and has a microstructure consisting of a ferrite phase as a primary phase and a secondary phase including martensite phase at an area ratio of not less than 1% to a whole of the microstructure and a high-strength dual-phase galvanized steel sheet comprising a galvanized coating on the above steel sheet as well as a method of producing the same.

IPC 1-7
C22C 38/00; **C21D 9/46**; **C23C 2/06**

IPC 8 full level
C21D 8/02 (2006.01); **C22C 38/00** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/12** (2006.01); **C23C 2/02** (2006.01); **C23C 2/06** (2006.01); **C23C 2/40** (2006.01)

CPC (source: EP KR US)
C22C 38/00 (2013.01 - KR); **C22C 38/001** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/06** (2013.01 - EP US); **C22C 38/12** (2013.01 - EP US); **C23C 2/0222** (2022.08 - EP KR US); **C23C 2/0224** (2022.08 - EP KR US); **C23C 2/024** (2022.08 - EP KR US); **C23C 2/40** (2013.01 - EP US); **C21D 2211/005** (2013.01 - EP US); **C21D 2211/008** (2013.01 - EP US); **Y10T 428/12799** (2015.01 - EP US)

Cited by
EP1682686A4; EP2636762A4; US10400301B2; US7608155B2; US7442268B2; US7879160B2; US8337643B2; US8366844B2; US7959747B2; US8435363B2; US9157138B2; WO2011036351A1; WO2011036352A1

Designated contracting state (EPC)
AT BE CH CY DE FR GB IT LI

DOCDB simple family (publication)
US 2003129444 A1 20030710; AU 2411802 A 20020611; AU 776043 B2 20040826; CA 2398126 A1 20020606; CN 1193110 C 20050316; CN 1419607 A 20030521; DE 60143907 D1 20110303; EP 1338667 A1 20030827; EP 1338667 A4 20050817; EP 1338667 B1 20110119; KR 20020073564 A 20020927; TW 520398 B 20030211; WO 0244434 A1 20020606

DOCDB simple family (application)
US 18181002 A 20020723; AU 2411802 A 20011127; CA 2398126 A 20011127; CN 01807327 A 20011127; DE 60143907 T 20011127; EP 01998666 A 20011127; JP 0110340 W 20011127; KR 20027009698 A 20020727; TW 90129328 A 20011127