

Title (en)

METHOD FOR MANUFACTURING HIGH STRENGTH STEEL SHEETS WITH EXCELLENT RESISTANCE TO DELAYED FRACTURE AFTER FORMING

Title (de)

HERSTELLUNGSVERFAHREN FÜR HOCHFESTES DÜNNES STAHLBLECH MIT HERVORRAGENDER BESTÄNDIGKEIT GEGENÜBER VERZÖGERTEM BRUCH NACH DEM UMFORMEN

Title (fr)

PROCEDE DE PREPARATION DE TOLE MINCE EN ACIER A RESISTANCE ELEVEE PRESENTANT UNE RESISTANCE EXCELLENTE A LA RUPTURE DIFFEREE APRES FORMATION

Publication

EP 1637618 B1 20100714 (EN)

Application

EP 03817075 A 20030527

Priority

JP 0306617 W 20030527

Abstract (en)

[origin: EP1637618A1] Steel sheets containing residual austenite of not more than 7 vol.%, crystallized and/or precipitated compounds with particle diameters of 0.01 to 5.0 µm of 100 to 100000 particle/mm² and C of 0.05 to 0.3 mass%, Si of not more than 3.0 mass%, Mn of 0.01 to 3.0 mass%, P of not more than 0.02 mass%, S of not more than 0.02 mass%, Al of 0.01 to 3.0 mass%, N of not more than 0.01 mass% and Mg of 0.0002 to 0.01 mass%, with the remainder comprising iron and unavoidable impurities.

IPC 8 full level

C22C 38/00 (2006.01); **C21D 9/46** (2006.01); **C22C 38/06** (2006.01)

CPC (source: EP US)

C21D 9/46 (2013.01 - EP US); **C22C 1/06** (2013.01 - EP US); **C22C 38/004** (2013.01 - EP US); **C22C 38/02** (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); **C22C 38/14** (2013.01 - EP US); **C22C 38/16** (2013.01 - EP US); **C21D 2211/00** (2013.01 - EP US); **C21D 2211/004** (2013.01 - EP US)

Cited by

CN102031457A; EP3269836A4; EP2455507A1; EP2216422A4; US8679265B2; US10655201B2; WO2015185956A1; US10612107B2; US11047020B2

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DOCDB simple family (application)

EP 03817075 A 20030527; AU 2003235443 A 20030527; DE 60333400 T 20030527; JP 0306617 W 20030527; US 55857905 A 20051128; US 92831010 A 20101207