

Title (en)
STAINLESS STEEL FOR MOLDS HAVING A LOWER DELTA-FERRITE CONTENT

Title (de)
EDELSTAHL FÜR FORMEN MIT GERINGEREM DELTA-FERRIT-ANTEIL

Title (fr)
ACIER INOXYDABLE POUR MOULES À TENEUR RÉDUITE EN FERRITE DELTA

Publication
EP 2503015 A4 20130717 (EN)

Application
EP 10830975 A 20101110

Priority
• BR PI0904608 A 20091117
• BR 2010000376 W 20101110

Abstract (en)
[origin: EP2503015A1] "STAINLESS MOLD STEEL WITH LOWER DELTA-FERRITE CONTENT", characterized by a composition of alloying elements consisting essentially of, in percentage by mass, Carbon between 0.01 and 0.20; Nitrogen between 0.01 and 0.07; Manganese between 2.0 and 4.0; Nickel between 0.01 and 1.0; Chromium between 11.0 and 13.0; Molybdenum + Tungsten lower than 1.0; Copper between 0.01 and 1.5; Vanadium between 0.01 and 1.0; Sulfur between 0.01 and 0.20; Calcium at maximum 0.01; Aluminum lower than 0.05; Silicon lower than 1.0; the remainder consisting essentially of Fe and inevitable impurities to the preparation process.

IPC 8 full level
C22C 38/38 (2006.01); **C21D 1/25** (2006.01)

CPC (source: EP KR US)
C21D 1/25 (2013.01 - KR); **C22C 38/001** (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 38/20** (2013.01 - KR); **C22C 38/38** (2013.01 - EP US); **C22C 38/42** (2013.01 - EP US); **C22C 38/44** (2013.01 - EP US); **C22C 38/46** (2013.01 - EP US); **C22C 38/58** (2013.01 - EP US); **C21D 2211/005** (2013.01 - EP US)

Citation (search report)
• [A] EP 1840237 A1 20071003 - SUMITOMO METAL IND [JP]
• [A] JP 2002146488 A 20020522 - KAWASAKI STEEL CO
• [A] EP 1314791 A1 20030528 - KAWASAKI STEEL CO [JP]
• [A] US 2003044305 A1 20030306 - MIYAZAKI ATSUSHI [JP], et al
• [A] GB 2027745 A 19800227 - KAWASAKI STEEL CO
• [A] JP H06184695 A 19940705 - HITACHI LTD
• See references of WO 2011060517A1

Cited by
KR20200086000A

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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