

Title (en)
IRON ALLOY, IRON ALLOY WIRE, AND IRON ALLOY STRANDED WIRE

Title (de)
EISENLEGIERUNG, DRAHT AUS EISENLEGIERUNG UND LITZENDRAHT AUS EISENLEGIERUNG

Title (fr)
ALLIAGE DE FER, FIL D'ALLIAGE DE FER ET FIL TORONNÉ D'ALLIAGE DE FER

Publication
EP 4194121 A4 20240103 (EN)

Application
EP 21852915 A 20210602

Priority
• JP 2020133707 A 20200806
• JP 2021021008 W 20210602

Abstract (en)
[origin: EP4194121A1] An iron alloy includes: a composition including, in mass%, 0.1% or more and 0.4% or less of C, 0.2% or more and 2.0% or less of Si, 0.05% or more and 2.0% or less of Mn, 25% or more and 42% or less of Ni, 0.1% or more and 3.0% or less of Cr, 0.2% or more and 3.0% or less of V, 0% or more and 0.1% or less of a total of one or more elements selected from a group consisting of Ca, Ti, Al, and Mg, 0% or more and 0.1% or less of a total of one or more elements selected from a group consisting of Zr, Hf, Mo, Cu, Nb, Ta, W, and B, and 0% or more and 5% or less of Co, a remainder of the composition consisting of Fe and an inevitable impurity; and a structure having a matrix in which oxides are dispersed, wherein in a cross section of the iron alloy, a maximum diameter of the oxides included in a region of 2 mm × 20 mm is less than 150 μm.

IPC 8 full level
B22D 7/00 (2006.01); **B22D 11/00** (2006.01); **B22D 11/16** (2006.01); **B22D 11/22** (2006.01); **C21D 6/00** (2006.01); **C21D 6/02** (2006.01); **C21D 8/06** (2006.01); **C21D 9/52** (2006.01); **C22C 38/00** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/42** (2006.01); **C22C 38/44** (2006.01); **C22C 38/46** (2006.01); **C22C 38/48** (2006.01); **C22C 38/50** (2006.01); **C22C 38/52** (2006.01); **C22C 38/54** (2006.01); **C22C 38/58** (2006.01)

CPC (source: EP KR)
B21F 17/00 (2013.01 - KR); **B22D 7/00** (2013.01 - EP); **B22D 11/16** (2013.01 - EP); **B22D 11/22** (2013.01 - EP KR); **B22D 27/04** (2013.01 - KR); **C21D 6/001** (2013.01 - EP); **C21D 6/02** (2013.01 - EP); **C21D 8/065** (2013.01 - EP); **C21D 9/525** (2013.01 - EP); **C22C 38/002** (2013.01 - EP); **C22C 38/02** (2013.01 - EP); **C22C 38/04** (2013.01 - EP); **C22C 38/34** (2013.01 - KR); **C22C 38/42** (2013.01 - EP); **C22C 38/44** (2013.01 - EP); **C22C 38/46** (2013.01 - EP KR); **C22C 38/48** (2013.01 - EP); **C22C 38/50** (2013.01 - EP); **C22C 38/52** (2013.01 - EP); **C22C 38/54** (2013.01 - EP); **C22C 38/58** (2013.01 - EP KR); **C21D 2211/004** (2013.01 - EP)

Citation (search report)
• [X] JP H07228947 A 19950829 - SANYO SPECIAL STEEL CO LTD
• [A] JP 2010024489 A 20100204 - SUMITOMO ELECTRIC INDUSTRIES
• [A] DE 10208855 A1 20021017 - SANYO SPECIAL STEEL CO LTD [JP], et al
• See also references of WO 2022030090A1

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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EP 4194121 A1 20230614; **EP 4194121 A4 20240103**; CN 116075378 A 20230505; JP 2022030019 A 20220218; JP 6831489 B1 20210217; KR 20230045012 A 20230404; WO 2022030090 A1 20220210

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