

Title (en)
FERRITIC STAINLESS STEEL SHEET FOR AUTOMOBILE BRAKE DISK ROTORS, AUTOMOBILE BRAKE DISK ROTOR, AND HOT-STAMPED ARTICLE FOR AUTOMOBILE BRAKE DISK ROTORS

Title (de)
FERRITISCHES ROSTFREIES STAHLBLECH FÜR KRAFTFAHRZEUGBREMSSCHEIBENROTOREN, KRAFTFAHRZEUG-BREMSSCHEIBENROTOR UND WARMGESTANZTER GEGENSTAND FÜR KRAFTFAHRZEUGBREMSSCHEIBENROTOREN

Title (fr)
TÔLE D'ACIER INOXYDABLE FERRITIQUE DE DISQUES DE FREIN D'AUTOMOBILE, DISQUE DE FREIN D'AUTOMOBILE, ET ARTICLE ESTAMPÉ À CHAUD DE DISQUES DE FREIN D'AUTOMOBILE

Publication
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Application
EP 20778917 A 20200312

Priority
• JP 2019063177 A 20190328
• JP 2020010947 W 20200312

Abstract (en)
[origin: EP3950969A1] A ferritic stainless steel sheet for an automobile brake disc rotor includes: 0.001 to 0.05 mass% of C; 0.001 to 0.05 mass% of N; 0.3 to 4.0 mass% of Si; 0.01 to 2.0 mass% of Mn; 0.01 to 0.05 mass% of P; 0.0001 to 0.02 mass% of S; 10 to 20 mass% of Cr; one or both of 0.001 to 0.5 mass% of Ti and 0.01 to 0.8 mass% of Nb; and a balance consisting of Fe and impurities. After a hot stamping treatment, a crystal grain size is in a range from 100 to 200 µm, and precipitates each having a grain size of 500 nm or less are present at a density of 0.01 to 20 pieces per square micrometer.

IPC 8 full level
C21D 8/02 (2006.01); **C21D 1/18** (2006.01); **C21D 9/00** (2006.01); **C22C 38/00** (2006.01); **C22C 38/38** (2006.01); **C22C 38/60** (2006.01)

CPC (source: EP KR US)
B21D 22/022 (2013.01 - KR); **B21D 53/88** (2013.01 - KR); **C21D 1/19** (2013.01 - EP); **C21D 6/002** (2013.01 - EP); **C21D 6/004** (2013.01 - US); **C21D 6/005** (2013.01 - US); **C21D 6/007** (2013.01 - US); **C21D 6/008** (2013.01 - US); **C21D 6/02** (2013.01 - EP); **C21D 7/13** (2013.01 - EP); **C21D 8/0205** (2013.01 - EP US); **C21D 8/0226** (2013.01 - EP US); **C21D 8/0247** (2013.01 - EP); **C21D 8/0263** (2013.01 - US); **C21D 8/0273** (2013.01 - EP); **C21D 9/46** (2013.01 - EP KR US); **C22C 38/001** (2013.01 - EP US); **C22C 38/002** (2013.01 - EP US); **C22C 38/004** (2013.01 - EP); **C22C 38/005** (2013.01 - EP US); **C22C 38/008** (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 - EP US); **C22C 38/22** (2013.01 - EP US); **C22C 38/24** (2013.01 - EP US); **C22C 38/26** (2013.01 - EP); **C22C 38/28** (2013.01 - EP KR); **C22C 38/30** (2013.01 - EP US); **C22C 38/32** (2013.01 - EP US); **C22C 38/34** (2013.01 - EP KR); **C22C 38/38** (2013.01 - EP KR); **C22C 38/48** (2013.01 - EP US); **C22C 38/50** (2013.01 - EP US); **C22C 38/58** (2013.01 - KR); **C22C 38/60** (2013.01 - EP); **C21D 2211/004** (2013.01 - EP); **C21D 2211/005** (2013.01 - EP US)

Citation (search report)
• [X] EP 2980251 A1 20160203 - NIPPON STEEL & SUMIKIN SST [JP]
• [A] JP 2017095789 A 20170601 - NIPPON STEEL & SUMIKIN SST
• [A] JP 2014145097 A 20140814 - NIPPON STEEL & SUMIKIN SST
• [A] EP 2947170 A1 20151125 - JFE STEEL CORP [JP]
• [A] JP 2011225948 A 20111110 - JFE STEEL CORP
• [A] US 2017107593 A1 20170420 - HAMADA JUNICHI [JP], et al
• See references of WO 2020195915A1

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