

Title (en)
FE-NI-BASED ALLOY THIN PLATE

Title (de)
DÜNNE PLATTE AUS EINER LEGIERUNG AUF FE-NI-BASIS

Title (fr)
PLAQUE MINCE EN ALLIAGE À BASE DE FE-NI

Publication
EP 4328331 A3 20240522 (EN)

Application
EP 23217804 A 20170822

Priority
• JP 2016190743 A 20160929
• EP 17855488 A 20170822
• JP 2017029964 W 20170822

Abstract (en)
Provided are an Fe-Ni-based thin plate capable of having isotropic mechanical characteristics even if the plate is widened, and a method for producing the same. The Fe-Ni-based alloy thin plate and the method for producing the Fe-Ni-based alloy thin plate are characterized by the following: the thin plate is formed of, in terms of mass percentage, 35.0-43.0% of Ni + Co (Co is 0-6.0%), 0.5% or less of Si, 1.0% or less of Mn, with the remainder being Fe and impurities; a hot-rolled material is used as a material for cold rolling; first cold rolling is conducted on the material for cold rolling, with a rolling reduction ratio of 85% or higher; after the first cold rolling, recrystallization sintering is conducted on such material under conditions where the temperature is 800°C or higher and the retention time is 0.1-1.2 minutes; after the recrystallization sintering, a final cold rolling is conducted on such material with a rolling reduction ratio of 40% or less to obtain a Fe-Ni-based alloy thin plate having a thickness of 0.25 mm or less; and no heat treatment is conducted after the final cold rolling.

IPC 8 full level
C21D 9/46 (2006.01); **B21B 3/02** (2006.01); **C21D 6/00** (2006.01); **C21D 7/02** (2006.01); **C21D 8/02** (2006.01); **C21D 8/04** (2006.01); **C22C 38/00** (2006.01); **C22C 38/08** (2006.01); **C22C 38/10** (2006.01); **H01J 9/14** (2006.01); **H01J 29/07** (2006.01)

CPC (source: EP KR)
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Citation (search report)
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• [A] JP 2001262231 A 20010926 - NIPPON MINING CO
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• [A] JP H05220503 A 19930831 - NIPPON KOKAN KK
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