

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 A2 20240228 (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 7/02** (2006.01)

CPC (source: EP KR)  
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**C21D 9/46** (2013.01 - KR); **C22C 38/00** (2013.01 - EP); **C22C 38/02** (2013.01 - EP); **C22C 38/04** (2013.01 - EP); **C22C 38/08** (2013.01 - EP);  
**C22C 38/105** (2013.01 - EP KR); **H01J 9/142** (2013.01 - EP); **C21D 7/02** (2013.01 - EP); **C21D 9/46** (2013.01 - EP);  
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Citation (applicant)  
• JP 2003253398 A 20030910 - JFE STEEL KK  
• JP H06279946 A 19941004 - HITACHI METALS LTD

Designated contracting state (EPC)  
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