

Title (en)  
IRON BASE, SOFT MAGNETIC STEEL MATERIAL

Publication  
**EP 0429651 A4 19911204 (EN)**

Application  
**EP 90900342 A 19891208**

Priority  
JP 15502689 A 19890617

Abstract (en)  
[origin: EP0429651A1] This invention relates to an iron base, soft magnetic steel material which has high permeability and moreover, can be produced economically. The steel material of this invention uses a pure iron type component as a base and contains 0.5 to 2.5 % of Al and, whenever necessary, 0.005 to 1.0 % of Ti. Its ferrite crystal grain size is at least 0.5 mm, its magnetic flux density is at least 11,000 G at 0.5 Oe under the state where a lattice strain is removed sufficiently, its magnetic flux density is at least 15,500 G at 25 Oe and its coercive force is up to 0.4 Oe.

IPC 1-7  
**H01F 1/16; C22C 38/00**

IPC 8 full level  
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CPC (source: EP KR)  
**C22C 38/06** (2013.01 - EP); **H01F 1/147** (2013.01 - EP); **H01F 1/16** (2013.01 - KR)

Citation (search report)  
• [A] IEEE TRANSACTIONS ON MAGNETICS, vol. MAG-7, no. 1, 1st March 1971, pages 48-60; M.F. LITTMANN: "Iron and silicon-iron alloys"  
• See references of WO 9016076A1

Designated contracting state (EPC)  
DE FR GB IT NL

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