

Title (en)  
GRAIN-ORIENTED SILICON STEEL SHEET AND PROCESS FOR PRODUCING THE SAME

Publication  
**EP 0184891 B1 19890712 (EN)**

Application  
**EP 85301496 A 19850305**

Priority  
EP 85301496 A 19850305

Abstract (en)  
[origin: EP0184891A1] Extremely low watt-loss of W17/50  $\leq$  0.88 w/kg is provided by the combination of extremely low carbon, silicon and nitrogen contents; a thin sheet thickness of 0.15 to 0.23 mm; a high magnetic flux density B10  $\leq$  1.89 T; and copresence of coarse and fine (2 mm or less) grains, the distance (ND) between the fine grains controlled to 2.0 to 8.0 mm.

IPC 1-7  
**C21D 8/12; H01F 1/16**

IPC 8 full level  
**C21D 8/12** (2006.01); **H01F 1/147** (2006.01)

CPC (source: EP)  
**C21D 8/1233** (2013.01); **C21D 8/1266** (2013.01); **H01F 1/14775** (2013.01)

Cited by  
EP0959142A3; US6039818A; EP0837149A3; US6083326A; EP0837148A3; US5667598A; EP0798392A1; EP0333221A3; US4992114A; EP0234443A3; EP0716151A1; US5702541A; US5800633A; US6331215B1; US6444050B1; US6929704B2; EP0438592B1

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**EP 0184891 A1 19860618; EP 0184891 B1 19890712**; DE 3571464 D1 19890817

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