

Title (en)  
SOFT MAGNETIC ALLOYS

Title (de)  
WEICHMAGNETISCHE LEGIERUNGEN

Title (fr)  
ALLIAGES MAGNETIQUES MOUX

Publication  
**EP 0868733 B1 20010613 (EN)**

Application  
**EP 96942478 A 19961218**

Priority  
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• GB 9525875 A 19951218

Abstract (en)  
[origin: GB2308386A] The invention provides a soft magnetic alloy having a composition represented by the general formula: Fe \* small Greek alpha \* Cu \* small Greek beta \* B \* small Greek gamma \* Si x M y Al z , wherein M is Mo or Nb, and wherein 0.5\* less than or equal to \* ; 6\* less than or equal to \* 12\* less than or equal to \*x\* less than or equal to \*18; 2\* less than or equal to \*y\* less than or equal to \*5; 1.5\* less than or equal to \*z\* less than or equal to \*9.5; and \* small Greek alpha \*=100-( \* small Greek beta \*+ \* small Greek gamma \*+x+y+z), all quantities being expressed in at. %. The addition of at least 1.5 at.% of Al to the known Fe-Cu-B-Si soft magnetic compositions results in lower coercivity and lower magnetostriction. The most preferred composition is Fe 65.5 Si 13.5 B 9 Mo 3 Cu 1 Al 8 .

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**H01F 1/153**

IPC 8 full level  
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