

Title (en)
SOFT MAGNETIC ALLOYS

Title (de)
WEICHMAGNETISCHE LEGIERUNGEN

Title (fr)
ALLIAGES MAGNETIQUES MOUX

Publication
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Application
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Priority
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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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