

Title (en)  
METHOD FOR THE PRODUCTION OF FERRITE MAGNETS

Title (de)  
VERFAHREN ZUR HERSTELLUNG EINES FERRITHALTIGEN MAGNETEN

Title (fr)  
PROCEDE DE FABRICATION D'AIMANTS DU TYPE FERRITE

Publication  
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Application  
**EP 02735479 A 20020423**

Priority

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Abstract (en)  
[origin: WO02085810A1] The invention relates to a method for the production of ferrite permanent magnets of formula  $M_{1-x}R_xFe_{12-y}TyO_{19}$  wherein a) an MP mixture is formed from raw materials PMM, PMF, PMR et MPT respectively referring to the elements M, R, Fe and T, the raw material MPF referring to the element Fe, typically ferric oxide  $Fe_2O_3$ , and the raw material MPM are the main raw materials; the raw materials PMR et MPT are raw materials which are substitution materials MPS; b) said mixture is calcined in order to form a clinker B B; c) said clinker is wet milled; d) said particles are concentrated and compressed in an orienting magnetic field in order to form a green compact D which is anisotropic, can be handled and which has a predetermined form; e) the green anisotropic compact is sintered in order to obtain a sintered element E . The inventive method is characterized by the following: in the MP mixture at stage a) at least one of the raw substitution materials PMR or MPT has a particle size GR which is typically measured by the specific surface BET in  $m^2/g$  and specifically rated GR or GT for respectively the substitution materials MPR or MPT, selected according to the particle size GF of the main raw material MPF and according to the mass per cent value %S of said raw substitution material PMS with respect to said main raw material MPF, thereby resulting in square magnets having a generally high performance index.

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