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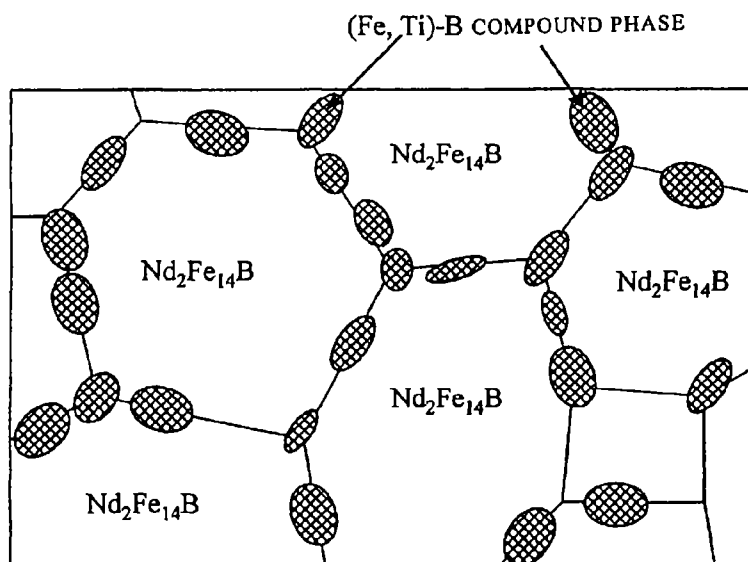
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(54) Title: PERMANENT MAGNET INCLUDING MULTIPLE FERROMAGNETIC PHASES AND METHOD FOR PRODUCING THE MAGNET



(57) Abstract: An iron-based rare earth alloy magnet has a composition represented by the general formula: $(\text{Fe}_{1-m}\text{T}_m)_{100-x-y-z}\text{Q}_x\text{R}_y\text{M}_z$, where T is at least one element selected from the group consisting of Co and Ni; Q is at least one element selected from the group consisting of B and C; R is at least one rare earth element substantially excluding La and Ce; and M is at least one metal element selected from the group consisting of Ti, Zr and Hf and always includes Ti. In this formula, the mole fractions x, y, z and m meet the inequalities of: $10 \text{ at}\% < x \leq 20 \text{ at}\%$; $6 \text{ at}\% \leq y < 10 \text{ at}\%$; $0.1 \text{ at}\% \leq z \leq 12 \text{ at}\%$; and $0 \leq m \leq 0.5$, respectively.

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