

①⑫ **EUROPEAN PATENT APPLICATION**

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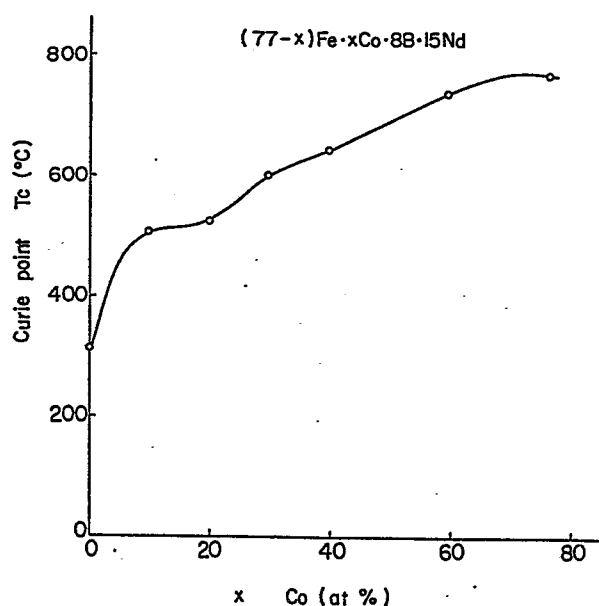
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⑤④ **Magnetic materials and permanent magnets.**

⑤⑦ Magnetic materials comprising Fe, B, R (rare earth elements) and Co having a major phase of Fe-Co-B-R intermetallic compound(s) of tetragonal system, and sintered anisotropic permanent magnets consisting essentially of, by atomic percent, 8-30% R (at least one of rare earth elements inclusive of Y), 2-28% B, no less than 50% Co, and the balance being Fe with impurities. Those may contain additional elements M (Ti, Ni, Bi, V, Nb, Ta, Cr, Mo, W, Mn, Al, Sb, Ge, Sn, Zr, Hf) providing Fe-Co-B-R-M type materials and magnets.





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# EUROPEAN SEARCH REPORT

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Application Number

EP 83 10 7351

| DOCUMENTS CONSIDERED TO BE RELEVANT                                                                                                                                                                                     |                                                                                                                                                                 |                                                                                                                                                                                                                                                                                  |                                                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| Category                                                                                                                                                                                                                | Citation of document with indication, where appropriate, of relevant passages                                                                                   | Relevant to claim                                                                                                                                                                                                                                                                | CLASSIFICATION OF THE APPLICATION (Int. Cl. <sup>3</sup> ) |
| A                                                                                                                                                                                                                       | PATENTS ABSTRACTS OF JAPAN, vol. 4, no. 189(E-39)(671), 25th December 1980; & JP - A - 55 132 004 (DAINI SEIKOSHA K.K.) 14-10-1980<br>* Abstract *<br><br>----- | 1-5, 25<br>-29                                                                                                                                                                                                                                                                   | H 01 F 1/04<br>H 01 F 1/08                                 |
|                                                                                                                                                                                                                         |                                                                                                                                                                 |                                                                                                                                                                                                                                                                                  | TECHNICAL FIELDS SEARCHED (Int. Cl. <sup>3</sup> )         |
|                                                                                                                                                                                                                         |                                                                                                                                                                 |                                                                                                                                                                                                                                                                                  | H 01 F                                                     |
| The present search report has been drawn up for all claims                                                                                                                                                              |                                                                                                                                                                 |                                                                                                                                                                                                                                                                                  |                                                            |
| Place of search<br>THE HAGUE                                                                                                                                                                                            |                                                                                                                                                                 | Date of completion of the search<br>29-10-1984                                                                                                                                                                                                                                   | Examiner<br>VITZTHUM N.A.                                  |
| <b>CATEGORY OF CITED DOCUMENTS</b>                                                                                                                                                                                      |                                                                                                                                                                 |                                                                                                                                                                                                                                                                                  |                                                            |
| X : particularly relevant if taken alone<br>Y : particularly relevant if combined with another document of the same category<br>A : technological background<br>O : non-written disclosure<br>P : intermediate document |                                                                                                                                                                 | T : theory or principle underlying the invention<br>E : earlier patent document, but published on, or after the filing date<br>D : document cited in the application<br>L : document cited for other reasons<br><br>& : member of the same patent family, corresponding document |                                                            |

