

Title (en)  
AN ELECTROMAGNET AND A METHOD FOR MANUFACTURING IT

Publication  
**EP 0138408 B1 19880511 (EN)**

Application  
**EP 84306400 A 19840919**

Priority  
JP 19679583 A 19831019

Abstract (en)  
[origin: EP0138408A2] A cylindrical yoke of an electromagnet consists of two or more yoke elements, each of which is made of a number of yoke pieces made of magnetizable metal sheets and arranged radially around a cylindrical coil member of the electromagnet and of a filler member unifying the yoke pieces. The thickness of the yoke piece increases with increasing radial distance in order to improve the space factor of the yoke. The eddy current generated in the yoke is reduced due to the laminated construction of the yoke. The yoke disposed close to and coaxially with the coil member also contributes to the radial dispersion of the heat generated in the coil member and the yoke. The improved space factor results in the reduction of the leakage flux of the electromagnet and of the outermost size of the electromagnet for a certain available actuating power.

IPC 1-7  
**H01F 7/16**; **H01F 41/00**

IPC 8 full level  
**H01F 7/06** (2006.01); **H01F 7/08** (2006.01); **H01F 41/00** (2006.01)

CPC (source: EP)  
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Cited by  
FR2593432A2; DE4201449A1; DE4201448A1; FR2691283A1; US2012038439A9; US8669837B2; US6816050B2; WO03038844A1; WO0074087A1

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