

Title (en)
DISTRIBUTED GAP ELECTRICAL CHOKE

Title (de)
ELEKTRISCHER DROSSEL MIT VERTEILTE SPALT

Title (fr)
BOBINE DE REACTANCE AVEC REPARTITION D'ENTREFER

Publication
EP 0873567 B1 20020403 (EN)

Application
EP 97901927 A 19970108

Priority
• US 9700178 W 19970108
• US 58478796 A 19960111

Abstract (en)
[origin: WO9725727A1] An electrical choke has a magnetic core with a distributed gap. The magnetic core is composed of an iron based, rapidly solidified metallic alloy. The distributed gap configuration is produced by an annealing treatment which causes partial crystallization of the amorphous alloy. As a result of the annealing treatment, the magnetic core exhibits permeability in the range of 100 to 400, low core loss (i.e. less than 70 W/Kg at 100 kHz and 0.1T) and excellent DC bias behavior (at least 40% of the initial permeability is maintained at a DC bias field of 3980 A/m or 50 Oe).

IPC 1-7
H01F 17/06; **H01F 27/25**; **H01F 27/34**; **H01F 1/153**

IPC 8 full level
H01F 1/153 (2006.01); **H01F 17/06** (2006.01); **H01F 27/24** (2006.01); **H01F 27/25** (2006.01)

CPC (source: EP KR)
H01F 1/15308 (2013.01 - EP); **H01F 17/06** (2013.01 - EP KR); **H01F 27/24** (2013.01 - EP); **H01F 27/25** (2013.01 - EP)

Cited by
US6479626B1; US7705139B2; US7262054B2; US6503717B2; US7491531B2

Designated contracting state (EPC)
AT CH DE DK FR GB IE IT LI NL

DOCDB simple family (publication)
WO 9725727 A1 19970717; AT E215727 T1 20020415; CN 1114217 C 20030709; CN 1208497 A 19990217; DE 69711599 D1 20020508; DE 69711599 T2 20021031; DK 0873567 T3 20020701; EP 0873567 A1 19981028; EP 0873567 B1 20020403; JP 2000503169 A 20000314; JP 2011061210 A 20110324; JP 4629165 B2 20110209; JP 4990389 B2 20120801; KR 100452535 B1 20041217; KR 19990076747 A 19991015; TW 351816 B 19990201

DOCDB simple family (application)
US 9700178 W 19970108; AT 97901927 T 19970108; CN 97191661 A 19970108; DE 69711599 T 19970108; DK 97901927 T 19970108; EP 97901927 A 19970108; JP 2010207490 A 20100916; JP 52533897 A 19970108; KR 19980704870 A 19980624; TW 86100556 A 19970120