

Title (en)

Method for manufacturing a magnetic pulse generator

Title (de)

Verfahren zur Herstellung eines magnetischen Impulsgebers

Title (fr)

Procédé pour la fabrication d'un générateur de pulsations magnétique

Publication

EP 0557689 B1 19980408 (DE)

Application

EP 93100179 A 19930108

Priority

DE 4202240 A 19920128

Abstract (en)

[origin: US6120617A] For manufacturing a pulse generator wherein a voltage pulse dependent on the change in magnetic field can be achieved by sudden magnetic reversal (Barkhausen skip) given an applied magnetic field, an iron alloy is employed for one of the materials of the composite member, the additional alloy constituents of this iron alloy being selected such that a structural conversion with volume change respectively occurs at different temperatures. For producing the stressed condition, a thermal treatment is then implemented, which includes heating above the upper transition temperature and a cooling below the lower transition temperature. As a result, substantially greater stresses between the materials of the composite member arise, causing a pulse behavior significantly improved in comparison to known pulse generators of the type capable of recognizing constant or alternating magnetic fields.

IPC 1-7

H01F 3/00; **H01F 1/04**

IPC 8 full level

H01F 1/14 (2006.01); **C21D 8/12** (2006.01); **H01F 1/03** (2006.01); **H01F 1/04** (2006.01); **H01F 3/00** (2006.01); **H01F 3/10** (2006.01); **H01F 27/24** (2006.01); **H01F 41/02** (2006.01); **H03K 3/45** (2006.01)

CPC (source: EP US)

C21D 8/12 (2013.01 - EP US); **H01F 1/0304** (2013.01 - EP US); **H01F 1/143** (2013.01 - EP US); **H01F 3/00** (2013.01 - EP US); **H01F 3/10** (2013.01 - EP US); **C21D 2251/00** (2013.01 - EP US); **C21D 2251/02** (2013.01 - EP US); **H01F 2003/106** (2013.01 - EP US); **Y10S 428/928** (2013.01 - EP US); **Y10T 428/12465** (2015.01 - EP US); **Y10T 428/12931** (2015.01 - EP US); **Y10T 428/12937** (2015.01 - EP US)

Cited by

EP0782014A2

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

US 6120617 A 20000919; AT E164964 T1 19980415; CA 2088207 A1 19930729; DE 4202240 A1 19930729; DE 59308365 D1 19980514; EP 0557689 A2 19930901; EP 0557689 A3 19941214; EP 0557689 B1 19980408; ES 2114960 T3 19980616; FI 930149 A0 19930114; FI 930149 A 19930729; JP 2528801 B2 19960828; JP H0684630 A 19940325; NO 930273 D0 19930127; NO 930273 L 19930729

DOCDB simple family (application)

US 22407494 A 19940407; AT 93100179 T 19930108; CA 2088207 A 19930127; DE 4202240 A 19920128; DE 59308365 T 19930108; EP 93100179 A 19930108; ES 93100179 T 19930108; FI 930149 A 19930114; JP 2857593 A 19930125; NO 930273 A 19930127