

Title (en)

Multipole magnetizing device and method for producing such device

Title (de)

Vorrichtung zur vielpoligen Magnetisierung und Verfahren zur Herstellung einer solchen Vorrichtung

Title (fr)

Dispositif d'aimantation multipolaire et procédé de sa fabrication

Publication

EP 1513169 A3 20091223 (EN)

Application

EP 04468015 A 20040903

Priority

SI 200300220 A 20030905

Abstract (en)

[origin: EP1513169A2] A multipole magnetizing device uses a solid multipolar magnetizing head to carry out magnetization of permanent magnets, made of highly coercive materials such as hard magnetic ferrites and rare earths based materials, that require a very high magnetic field strength concentrated on precisely defined sections to reach the point of magnetic saturation. The magnetization is carried out within a multipolar magnetizing head in such a way, that a series of symmetric and alternately opposite poles are produced on the permanent magnet. The magnetizing head has a shape of a tubular body, made of a material having good electrical conductivity. A succession of opposite current loops is created in the magnetizing head by appropriate geometry of vertical cuttings in the tubular body of the magnetizing head. The shape of the current loops ensures that the main portion of the electric current is sufficiently close to the surface of the magnet material. The width of the magnetic poles is defined by the gaps between the said cuttings.

IPC 8 full level

H01F 13/00 (2006.01)

CPC (source: EP)

H01F 13/003 (2013.01)

Citation (search report)

- [A] US 4638280 A 19870120 - STEINGROEVER DIETRICH [DE], et al
- [A] DE 3901303 A1 19900719 - PRUSCHKE GERD [DE]
- [A] DE 3506757 A1 19860828 - STEINGROEVER ERICH DR ING [DE]
- [A] US 3158797 A 19641124 - ANDREWS LEWIS D
- [A] CH 184107 A 19360515 - BAERMANN MAX JR [DE], et al
- [A] DATABASE WPI Week 199429, Derwent World Patents Index; AN 1994-240172, XP002555285
- [A] DATABASE WPI Week 199222, Derwent World Patents Index; AN 1992-181991, XP002555284

Cited by

CN111376388A; CN102789875A; CN111354531A; WO2020224747A1

Designated contracting state (EPC)

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Designated extension state (EPC)

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DOCDB simple family (publication)

EP 1513169 A2 20050309; EP 1513169 A3 20091223; EP 1513169 B1 20160608; SI 1513169 T1 20161028; SI 21630 A 20050430

DOCDB simple family (application)

EP 04468015 A 20040903; SI 200300220 A 20030905; SI 200432340 A 20040903