Title (en)

Ignition coil.

Title (de)

Zündspule.

Title (fr)

Bobine d'allumage.

Publication

EP 0635856 A1 19950125 (EN)

Application

EP 94109288 A 19940616

Priority

JP 14793693 A 19930618

Abstract (en)

Disclosed is an ignition coil which is most small in size without degrading performance under low primary current. The ignition coil includes an iron core (1) forming a closed magnetic circuit through an air gap (2), a primary winding (6) wound around the iron core (1) for magnetizing the iron core (1) and a permanent magnet (4) magnetized in an opposite direction to a magnetizing direction by the primary winding current. A cross-sectional area (SG) of the iron core (1) at which the permanent magnet (4) is inserted is made substantially equal to that (SM) of the permanent magnet (4). In order for the permanent magnet (4) to bias by 2/3 of the magnetic flux saturation point of the iron core (1), the permanent magnet (4) is so shaped that its thickness (LM) satisfies 0.6 mm<LM<1.8 mm and its cross-sectional area (SM) and the cross-sectional area (SF) of winding portion of the iron core (1) satisfies 1.3<SM/SF<3.0. <IMAGE>

IPC 1-7

H01F 38/12

IPC 8 full level

F02P 15/00 (2006.01); **H01F 38/12** (2006.01)

CPC (source: EP KR)

F02P 1/00 (2013.01 - KR); **H01F 38/12** (2013.01 - EP)

Citation (search report)

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Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

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