

Title (en)

Ignition coil having improved thermal stress resistance

Title (de)

Zündspule mit verbessertem Widerstand gegen thermische Spannungen

Title (fr)

Bobine d'allumage avec résistance accrue à la fatigue thermique

Publication

**EP 1589546 A1 20051026 (EN)**

Application

**EP 04009540 A 20040422**

Priority

EP 04009540 A 20040422

Abstract (en)

The present invention relates to an ignition coil apparatus housing several ignition coils and ignition coils provided with a coating with electrical conductive, resilient material properties. An ignition coil in question includes a magnetic core of a magnetically permeable material, a high-voltage winding and a low-voltage winding in order to allow generation of a high-voltage signal for being supplied to a spark plug of an internal combustion engine. The magnetic core has at least one axis (B', C', D', D''), coaxially to which each the high-voltage winding and the low-voltage winding are arranged. The low-voltage winding is in particular arranged outwardly to the high-voltage winding. The ignition coil is provided outwardly with the aforementioned coating to avoid or at least minimize mechanical stress resulting from thermal-mechanical elongation effects and to protect against potential internal discharges. <IMAGE>

IPC 1-7

**H01F 38/12**; **H01F 27/02**

IPC 8 full level

**H01F 27/36** (2006.01); **H01F 38/12** (2006.01); **H01F 27/02** (2006.01)

CPC (source: EP US)

**H01F 27/36** (2013.01 - EP); **H01F 27/366** (2020.08 - EP US); **H01F 38/12** (2013.01 - EP); **H01F 27/022** (2013.01 - EP)

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