



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
30.05.2012 Bulletin 2012/22

(51) Int Cl.:
H01T 13/46^(2006.01) H01T 13/32^(2006.01)

(43) Date of publication A2:
29.04.2009 Bulletin 2009/18

(21) Application number: **08466027.3**

(22) Date of filing: **22.10.2008**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR
Designated Extension States:
AL BA MK RS

(72) Inventors:
• **Beroun, Stanislav**
460 05 Liberec (CZ)
• **Blazek, Josef**
463 34 Hradek nad Nisou (CZ)

(30) Priority: **23.10.2007 CZ 20070738**

(74) Representative: **Musil, Dobroslav**
Cejl 38
602 00 Brno (CZ)

(71) Applicant: **Technická Univerzita V Liberci**
461 17 Liberec 1 (CZ)

(54) **Spark plug**

(57) The spark plug, especially for the spark ignition piston engine, comprising the center electrode of spark-gap and the shell forming the second electrode of spark-gap and provided with means for connection of the spark plug to dead space of cylinder in combustion engine, while inside the shell the ignition chamber is performed, whose face adjacent to the dead space of the cylinder being respective to the spark plug comprises at least one connecting orifice. The center electrode is passing through the space of ignition chamber and it finishes in the connecting orifice in the face of ignition chamber, while between surface of circumference of the connecting orifice and surface of circumference of the end of center electrode there is the gap.

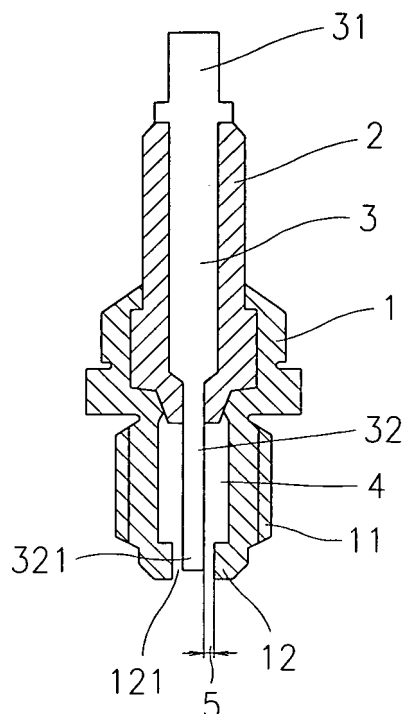


Fig. 1



EUROPEAN SEARCH REPORT

Application Number
EP 08 46 6027

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	DE 343 66 628 A1 (BERU) 10 April 1986 (1986-04-10) * page 9, line 9 - line 30; figure 2 *	1-3,5	INV. H01T13/46 H01T13/32
X	GB 253 780 A (MARTIN) 24 June 1926 (1926-06-24) * page 2, line 71 - line 119; figures 1-4 *	1,2,4	
X	CH 624 509 A (ESPADA ANSTALT) 31 July 1981 (1981-07-31) * page 3, line 17 - page 4, line 34; figures 1, 3 *	1,6,8	
X	FR 323 549 A (LUTHY) 9 March 1903 (1903-03-09) * page 2, line 5 - line 20; figure 2 *	1	
X	GB 351 340 A (KEGRESSE) 25 June 1931 (1931-06-25) * page 1, line 57 - line 74; figure 2 *	1	
X	WO 2005/022713 A1 (ANISIMOVA) 10 March 2005 (2005-03-10) * abstract; figure 1 *	1	TECHNICAL FIELDS SEARCHED (IPC) H01T
A	US 5 633 557 A (LINDSAY) 27 May 1997 (1997-05-27)	10	
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 17 April 2012	Examiner Bijn, Eric
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

2

EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 08 46 6027

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

17-04-2012

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
DE 34366628	A1	10-04-1986	-----	
GB 253780	A	24-06-1926	NONE	
CH 624509	A	31-07-1981	-----	
FR 323549	A	09-03-1903	NONE	
GB 351340	A	25-06-1931	NONE	
WO 2005022713	A1	10-03-2005	RU 2239925 C1	10-11-2004
			WO 2005022713 A1	10-03-2005
US 5633557	A	27-05-1997	NONE	