CPC COOPERATIVE PATENT CLASSIFICATION

H ELECTRICITY

(NOTE omitted)

H01 ELECTRIC ELEMENTS

(NOTES omitted)

H01T SPARK GAPS; OVERVOLTAGE ARRESTERS USING SPARK GAPS; SPARKING PLUGS; CORONA DEVICES; GENERATING IONS TO BE INTRODUCED INTO NON-ENCLOSED GASES (overvoltage protection circuits H02H)

NOTE

In this subclass, the term "spark gaps" is used with the following meaning:

• enclosed or non-enclosed discharge device having cold electrodes and used exclusively to discharge a quantity of electrical energy in a small time duration.

1/00	Details of spark gaps	4/18	Arrangements for reducing height of stacked
1/02	 Means for extinguishing arc 		spark gaps
1/04	using magnetic blow-out	4/20	Arrangements for improving potential distribution
1/06	with permanent magnet	7/00	Rotary spark gaps, i.e. devices having one or more
1/08	using flow of arc-extinguishing fluid	7,00	rotating electrodes
1/10	• • • with extinguishing fluid evolved from solid		_
	material by heat of arc	9/00	Spark gaps specially adapted for generating
1/12	 Means structurally associated with spark gap for 		oscillations
	recording operation thereof	11/00	Spark gaps specially adapted as rectifiers
1/14	. Means structurally associated with spark gap for		
	protecting it against overload or for disconnecting	13/00	Sparking plugs
	it in case of failure (<u>H01T 1/15</u> , <u>H01T 1/16</u> ,	13/02	. Details
	H01T 1/18 take precedence; emergency protective	13/04	• Means providing electrical connection to sparking
	circuit arrangements for spark gap arrestors		plugs
1/15	H02H 7/24)	13/05	combined with interference suppressing or
1/15	 for protection against excessive pressure Series resistor structurally associated with spark gap 		shielding means
1/16		13/06	• Covers forming a part of the plug and protecting
1/18	Electrolytic device structurally associated with spark gap	12/00	it against adverse environment
1/20	Means for starting arc or facilitating ignition of	13/08	Mounting, fixing or sealing of sparking plugs, e.g.
1/20	spark gap	12/10	in combustion chamber
1/22	 by the shape or the composition of the electrodes 	13/10	by bayonet-type connection
1/24	 Selection of materials for electrodes (H01T 1/22) 	13/12	Means on sparking plugs for facilitating
1/24	takes precedence)	12/14	engagement by tool or by hand
		13/14	. Means for self-cleaning
2/00	Spark gaps comprising auxiliary triggering means	13/16	Means for dissipating heat
	(triggering circuits <u>H01T 15/00</u>)	13/18	Means for heating, e.g. for drying
2/02	 comprising a trigger electrode or an auxiliary spark 	13/20	. characterised by features of the electrodes or
	gap	12/22	insulation
4/00	Overvoltage arresters using spark gaps (H01T 2/00	13/22	 having two or more electrodes embedded in insulation (sparking plugs having two or more
., 00	takes precedence; overvoltage protection circuits		spark gaps <u>H01T 13/46</u>)
	using spark gaps <u>H02H 9/06</u>)	13/24	 having movable electrodes (<u>H01T 13/28</u> takes
4/02	• Details	13/24	precedence)
4/04	• Housings (<u>H01T 4/06</u> takes precedence)	13/26	• • • for adjusting spark gap otherwise than by
4/06	Mounting arrangements for a plurality of	13/20	bending of electrode
.,	overvoltage arresters	13/28	having spherically shaped electrodes, e.g. ball-
4/08	structurally associated with protected apparatus	10,20	shaped
	(with switches <u>H01H 9/14</u> ; with fuses <u>H01H 85/44</u>)	13/30	• • • mounted so as to permit free movement
4/10	 having a single gap or a plurality of gaps in parallel 	13/32	• characterised by features of the earthed electrode
4/12	. hermetically sealed	13/34	• characterised by the mounting of electrodes in
4/14	Arcing horns (associated with insulators	10,01	insulation, e.g. by embedding
	<u>H01B 17/46</u>)	13/36	• characterised by the joint between insulation and
4/16	 having a plurality of gaps arranged in series 		body, e.g. using cement
	· · · · · · · · · · · · · · · · ·		• • •

CPC - 2024.05

13/38 13/39 13/40	 Selection of materials for insulation Selection of materials for electrodes structurally combined with other devices (combined or associated with fuel injectors F02M 57/06; structurally combined with other parts of internal-combustion engines F02P 13/00)
13/41	• with interference suppressing or shielding means
13/42	• • with magnetic spark generators
13/44	• • with transformers, e.g. for high-frequency ignition
13/46	 having two or more spark gaps
13/462	• • {in series connection}
13/465	• • { one spark gap being incorporated in the sparking plug}
13/467	• • {in parallel connection}
13/48	 having means for rendering sparks visible
13/50	 having means for ionisation of gap (<u>H01T 13/52</u> takes precedence)
13/52	 characterised by a discharge along a surface
13/54	 having electrodes arranged in a partly-enclosed ignition chamber
13/56	 characterised by having component parts which are easily assembled or disassembled
13/58	• Testing (testing characteristics of the spark in internal-combustion engine ignition <u>F02P 17/12</u>)
13/60	of electrical properties
13/00	• • of electrical properties
14/00	Spark gaps not provided for in groups H01T 2/00 - H01T 13/00 (devices providing for corona discharge H01T 19/00)
	Spark gaps not provided for in groups H01T 2/00 - H01T 13/00 (devices providing for
14/00	Spark gaps not provided for in groups H01T 2/00 - H01T 13/00 (devices providing for corona discharge H01T 19/00) Circuits specially adapted for spark gaps, e.g. ignition circuits (ignition circuits for internal-combustion engines F02P; electric spark ignition for combustion apparatus F23Q; protection circuits using
14/00 15/00	Spark gaps not provided for in groups H01T 2/00 - H01T 13/00 (devices providing for corona discharge H01T 19/00) Circuits specially adapted for spark gaps, e.g. ignition circuits (ignition circuits for internal-combustion engines F02P; electric spark ignition for combustion apparatus F23Q; protection circuits using spark gaps H02H 9/06) Devices providing for corona discharge (for
14/00 15/00 19/00	Spark gaps not provided for in groups H01T 2/00 - H01T 13/00 (devices providing for corona discharge H01T 19/00) Circuits specially adapted for spark gaps, e.g. ignition circuits (ignition circuits for internal-combustion engines F02P; electric spark ignition for combustion apparatus F23Q; protection circuits using spark gaps H02H 9/06) Devices providing for corona discharge (for charging electrographic elements G03G 15/02)
14/00 15/00 19/00 19/02	Spark gaps not provided for in groups H01T 2/00 - H01T 13/00 (devices providing for corona discharge H01T 19/00) Circuits specially adapted for spark gaps, e.g. ignition circuits (ignition circuits for internal-combustion engines F02P; electric spark ignition for combustion apparatus F23Q; protection circuits using spark gaps H02H 9/06) Devices providing for corona discharge (for charging electrographic elements G03G 15/02) Corona rings having pointed electrodes Apparatus or processes specially adapted for the manufacture or maintenance of spark gaps or
14/00 15/00 19/00 19/02 19/04	Spark gaps not provided for in groups H01T 2/00 - H01T 13/00 (devices providing for corona discharge H01T 19/00) Circuits specially adapted for spark gaps, e.g. ignition circuits (ignition circuits for internal-combustion engines F02P; electric spark ignition for combustion apparatus F23Q; protection circuits using spark gaps H02H 9/06) Devices providing for corona discharge (for charging electrographic elements G03G 15/02) . Corona rings . having pointed electrodes Apparatus or processes specially adapted for the manufacture or maintenance of spark gaps or sparking plugs
14/00 15/00 19/00 19/02 19/04 21/00	Spark gaps not provided for in groups H01T 2/00 - H01T 13/00 (devices providing for corona discharge H01T 19/00) Circuits specially adapted for spark gaps, e.g. ignition circuits (ignition circuits for internal-combustion engines F02P; electric spark ignition for combustion apparatus F23Q; protection circuits using spark gaps H02H 9/06) Devices providing for corona discharge (for charging electrographic elements G03G 15/02) . Corona rings . having pointed electrodes Apparatus or processes specially adapted for the manufacture or maintenance of spark gaps or sparking plugs . of sparking plugs . Cleaning (means for self-cleaning H01T 13/14; abrasive blasting devices for cleaning sparking-
14/00 15/00 19/00 19/02 19/04 21/00	Spark gaps not provided for in groups H01T 2/00 - H01T 13/00 (devices providing for corona discharge H01T 19/00) Circuits specially adapted for spark gaps, e.g. ignition circuits (ignition circuits for internal-combustion engines F02P; electric spark ignition for combustion apparatus F23Q; protection circuits using spark gaps H02H 9/06) Devices providing for corona discharge (for charging electrographic elements G03G 15/02) . Corona rings . having pointed electrodes Apparatus or processes specially adapted for the manufacture or maintenance of spark gaps or sparking plugs . of sparking plugs . Cleaning (means for self-cleaning H01T 13/14;

CPC - 2024.05