

CPC COOPERATIVE PATENT CLASSIFICATION

H ELECTRICITY

(NOTE omitted)

H01 BASIC ELECTRIC ELEMENTS

(NOTE 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 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	<ul style="list-style-type: none"> Arrangements for reducing height of stacked spark gaps
1/02	<ul style="list-style-type: none"> Means for extinguishing arc 	4/20	<ul style="list-style-type: none"> Arrangements for improving potential distribution
1/04	<ul style="list-style-type: none"> using magnetic blow-out 	7/00	Rotary spark gaps, i.e. devices having one or more rotating electrodes
1/06	<ul style="list-style-type: none"> with permanent magnet 	9/00	Spark gaps specially adapted for generating oscillations
1/08	<ul style="list-style-type: none"> using flow of arc-extinguishing fluid 	11/00	Spark gaps specially adapted as rectifiers
1/10	<ul style="list-style-type: none"> with extinguishing fluid evolved from solid material by heat of arc 	13/00	Sparking plugs
1/12	<ul style="list-style-type: none"> Means structurally associated with spark gap for recording operation thereof 	13/02	<ul style="list-style-type: none"> Details
1/14	<ul style="list-style-type: none"> Means structurally associated with spark gap for protecting it against overload or for disconnecting it in case of failure (H01T 1/15, H01T 1/16, H01T 1/18 take precedence; emergency protective circuit arrangements for spark gap arrestors H02H 7/24) 	13/04	<ul style="list-style-type: none"> Means providing electrical connection to sparking plugs
1/15	<ul style="list-style-type: none"> for protection against excessive pressure 	13/05	<ul style="list-style-type: none"> combined with interference suppressing or shielding means
1/16	<ul style="list-style-type: none"> Series resistor structurally associated with spark gap 	13/06	<ul style="list-style-type: none"> Covers forming a part of the plug and protecting it against adverse environment
1/18	<ul style="list-style-type: none"> Electrolytic device structurally associated with spark gap 	13/08	<ul style="list-style-type: none"> Mounting, fixing or sealing of sparking plugs, e.g. in combustion chamber
1/20	<ul style="list-style-type: none"> Means for starting arc or facilitating ignition of spark gap 	13/10	<ul style="list-style-type: none"> by bayonet-type connection
1/22	<ul style="list-style-type: none"> by the shape or the composition of the electrodes 	13/12	<ul style="list-style-type: none"> Means on sparking plugs for facilitating engagement by tool or by hand
1/24	<ul style="list-style-type: none"> Selection of materials for electrodes (H01T 1/22 takes precedence) 	13/14	<ul style="list-style-type: none"> Means for self-cleaning
2/00	Spark gaps comprising auxiliary triggering means (triggering circuits H01T 15/00)	13/16	<ul style="list-style-type: none"> Means for dissipating heat
2/02	<ul style="list-style-type: none"> comprising a trigger electrode or an auxiliary spark gap 	13/18	<ul style="list-style-type: none"> Means for heating, e.g. for drying
4/00	Overvoltage arresters using spark gaps (H01T 2/00 takes precedence; overvoltage protection circuits using spark gaps H02H 9/06)	13/20	<ul style="list-style-type: none"> characterised by features of the electrodes or insulation
4/02	<ul style="list-style-type: none"> Details 	13/22	<ul style="list-style-type: none"> having two or more electrodes embedded in insulation (sparking plugs having two or more spark gaps H01T 13/46)
4/04	<ul style="list-style-type: none"> Housings (H01T 4/06 takes precedence) 	13/24	<ul style="list-style-type: none"> having movable electrodes (H01T 13/28 takes precedence)
4/06	<ul style="list-style-type: none"> Mounting arrangements for a plurality of overvoltage arresters 	13/26	<ul style="list-style-type: none"> for adjusting spark gap otherwise than by bending of electrode
4/08	<ul style="list-style-type: none"> structurally associated with protected apparatus (with switches H01H 9/14; with fuses H01H 85/44) 	13/28	<ul style="list-style-type: none"> having spherically shaped electrodes, e.g. ball-shaped
4/10	<ul style="list-style-type: none"> having a single gap or a plurality of gaps in parallel 	13/30	<ul style="list-style-type: none"> mounted so as to permit free movement
4/12	<ul style="list-style-type: none"> hermetically sealed 	13/32	<ul style="list-style-type: none"> characterised by features of the earthed electrode
4/14	<ul style="list-style-type: none"> Arcing horns (associated with insulators H01B 17/46) 	13/34	<ul style="list-style-type: none"> characterised by the mounting of electrodes in insulation, e.g. by embedding
4/16	<ul style="list-style-type: none"> having a plurality of gaps arranged in series 	13/36	<ul style="list-style-type: none"> characterised by the joint between insulation and body, e.g. using cement

- 13/38 . . Selection of materials for insulation
- 13/39 . . Selection of materials for electrodes
- 13/40 . 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 ([H01T 13/52 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 F02P 17/12](#))
- 13/60 . . 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](#))

15/00 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](#))

19/00 Devices providing for corona discharge (for charging electrographic elements [G03G 15/02](#))

- 19/02 . Corona rings
- 19/04 . having pointed electrodes

21/00 Apparatus or processes specially adapted for the manufacture or maintenance of spark gaps or sparking plugs

- 21/02 . of sparking plugs
- 21/04 . . Cleaning ([means for self-cleaning H01T 13/14](#); abrasive blasting devices for cleaning sparking-plugs [B24C 3/34](#))
- 21/06 . Adjustment of spark gaps ([sparking-plugs having movable electrodes for adjusting the gap H01T 13/26](#))

23/00 Apparatus for generating ions to be introduced into non-enclosed gases, e.g. into the atmosphere