

**CPC****COOPERATIVE PATENT CLASSIFICATION****F23Q**

**IGNITION** (devices or installations peculiar to internal-combustion engines [F02P](#); of cigarettes or tobacco [A24F](#); compositions therefor, chemical igniters [C06C](#));  
**Extinguishing-devices**

**F23Q 1/00**

**Mechanical igniters** (lighters containing fuel [F23Q 2/00](#); matches [C06F](#))

## F23Q 1/02

. using friction or shock effects

## F23Q 1/04

.. on a part moved by the fuel-controlling member, e.g. by a tap on a gas cooker

## F23Q 1/06

.. Portable igniters

**F23Q 2/00**

**Lighters containing fuel, e.g. for cigarettes**

## F23Q 2/02

. Lighters with liquid fuel {fuel which is fluid at atmospheric pressure}

## F23Q 2/04

.. with cerium-iron alloy and wick {with friction ignition}

## F23Q 2/06

... with friction wheel

## F23Q 2/08

.... with ignition by spring action of the cover

## F23Q 2/10

... with other friction member

## F23Q 2/12

.. with cerium-iron alloy without wick

## F23Q 2/14

.. with cerium-iron alloy and torch ignited by striking or pushing

## F23Q 2/16

. Lighters with gaseous fuel, e.g. the gas being stored in liquid phase

## F23Q 2/161

.. { with friction wheel}

**WARNING**

groups [F23Q 2/161](#) and [F23Q 2/165](#) are not complete, pending reorganisation. See also [F23Q 2/16](#)

## F23Q 2/162

.. {with non-adjustable gas flame (if electrically ignited [F23Q 2/28](#))}

## F23Q 2/163

... {Burners (gas valves)}

## F23Q 2/164

.. {Arrangements for preventing undesired ignition}

## F23Q 2/165

.. { with more than one flame}

## F23Q 2/167

.. with adjustable flame

## F23Q 2/173

.. Valves therefor (valves in general [F16K](#))

## F23Q 2/18

. Lighters with solid fuel

## F23Q 2/20

.. with cerium-iron alloy and friction wheel

## F23Q 2/22

.. with cerium-iron alloy and tinder

## F23Q 2/24

.. ignition pills or strips with inflammable parts {(ignition pills [C06C 9/00](#), [C06C 15/00](#); corresponding lighters with fluid fuel [F23Q 2/10](#))}

## F23Q 2/26

.. combined with liquid fuel lighters

- F23Q 2/28 . Lighters characterised by electrical ignition of the fuel (lighter with electrically-produced sparks but without fuel [F23Q 3/00](#))
- F23Q 2/282 .. {with incandescent ignition (lighters with incandescent ignition but without fuel [F23Q 7/00](#))}
- F23Q 2/285 .. {with spark ignition}
- F23Q 2/287 ... {piezo-electric}
- F23Q 2/30 . Lighters characterised by catalytic ignition of fuel (catalytic igniters without fuel [C06C](#))
- F23Q 2/32 . Lighters characterised by being combined with other objects (combinations with smokers` equipment [A24F](#))
- F23Q 2/325 .. { combined with clock, timer or counter}

**WARNING**

groups [F23Q 2/325](#) is not complete, pending reorganisation. See also [F23Q 2/32](#)

- F23Q 2/34 . Component parts or accessories
- F23Q 2/345 .. { Scent-distribution or flame-colouring devices}

**WARNING**

[N: WARNING, groups [F23Q 2/345](#) is not complete, pending reorganisation. See also [F23Q 2/34](#)

- F23Q 2/36 .. Casings
- F23Q 2/365 ... { Tabletop lighters}

**WARNING**

groups [F23Q 2/365](#) is not complete, pending reorganisation. See also [F23Q 2/36](#)

- F23Q 2/38 ... with containers for flints or tools
- F23Q 2/40 .. Cover fastenings
- F23Q 2/42 .. Fuel containers; Closures for fuel containers
- F23Q 2/44 .. Wicks; Wick guides or fastenings
- F23Q 2/46 .. Friction wheels; Arrangement of friction wheels
- F23Q 2/48 .. Flint (composition, manufacture [C06C 15/00](#)); Guides for, or arrangements of, flints
- F23Q 2/50 .. Protecting coverings
- F23Q 2/52 .. Filling devices (in general [B67D](#))

**F23Q 3/00 Igniters using electrically-produced sparks (sparking-plugs [H01T 13/00](#))**

- F23Q 3/002 . {using piezo-electric elements}
- F23Q 3/004 . {Using semiconductor elements}
- F23Q 3/006 . {Details (sparking-plugs [H01T 13/00](#))}
- F23Q 3/008 . {Structurally associated with fluid-fuel burners}
- F23Q 3/01 . Hand-held lighters, e.g. for cigarettes

**F23Q 5/00** **Make-and-break ignition, i.e. with spark generated between electrodes by breaking contact therebetween** (specially adapted for internal-combustion engines [F02P 15/00](#))

**F23Q 7/00** **Incandescent ignition; Igniters using electrically-produced heat, e.g. lighters for cigarettes** (circuits therefor [H01T 15/00](#)); **Electrically-heated glowing plugs**

- F23Q 7/001 . {Glowing plugs for internal-combustion engines}
- F23Q 2007/002 . . {with sensing means }
- F23Q 2007/004 . . {Manufacturing or assembling methods }
- F23Q 2007/005 . . . {pressure sensors }
- F23Q 2007/007 . . . {ion current sensors }
- F23Q 2007/008 . . . {temperature sensors }
- F23Q 7/02 . for igniting solid fuel
- F23Q 7/04 . . with fans for transfer of heat to fuel
- F23Q 7/06 . structurally associated with fluid-fuel burners ([lighters containing fuel F23Q 2/00](#))
- F23Q 7/08 . . for evaporating and igniting liquid fuel, e.g. in hurricane lanterns
- F23Q 7/10 . . for gaseous fuel, e.g. in welding applicances
- F23Q 7/12 . . . actuated by gas-controlling device
- F23Q 7/14 . Portable igniters
- F23Q 7/16 . . with built-in battery
- F23Q 7/18 . . with built-in generator
- F23Q 7/20 . . with built-in mains transformer
- F23Q 7/22 . Details
- F23Q 7/24 . . Safety arrangements
- F23Q 7/26 . . . Provision for re-ignition

**F23Q 9/00** **Pilot flame igniters**

- F23Q 9/02 . without interlock with main fuel supply

F23Q 9/04	..	for upright burners, e.g. gas-cooker burners
F23Q 9/045	...	{Structurally associated with a main-burner}
F23Q 9/06	..	for inverted burners, e.g. gas lamps
F23Q 9/08	.	with interlock with main fuel supply
F23Q 9/10	..	to determine the sequence of supply of fuel to pilot and main burners
F23Q 9/12	..	to permit the supply to the main burner in dependence upon existence of pilot flame
F23Q 9/14	...	using electric means, e.g. by light-sensitive elements
<b>F23Q 11/00</b>		<b>Arrangement of catalytic igniters</b> (catalytic igniters per se <a href="#">C06C</a> )
F23Q 11/04	.	at the burner
F23Q 11/06	.	remote from the burner, e.g. on the chimney of a lamp
F23Q 11/08	.	on a part moved by the fuel controlling member
F23Q 11/10	..	and moving out of the flame after ignition
<b>F23Q 13/00</b>		<b>Igniters not otherwise provided for</b>
F23Q 13/005	.	{ using light, e.g. sunlight or laser}
F23Q 13/02	.	using gas burners, e.g. gas pokers
F23Q 13/04	.	using portable burners, e.g. torches, fire pots
<b>F23Q 21/00</b>		<b>Devices for effecting ignition from a remote location</b>
<b>F23Q 23/00</b>		<b>Testing of ignition installations</b> (peculiar to internalcombustion engines <a href="#">F02P 17/00</a> )
F23Q 23/02	.	Testing of ignition timing
F23Q 23/08	.	Testing of components (of sparking plugs <a href="#">H01T 13/58</a> , <a href="#">F02P 17/12</a> )
F23Q 23/10	..	electrically
<b>F23Q 25/00</b>		<b>Extinguishing-devices, e.g. for blowing-out or snuffing candle flames</b> (for cigarettes <a href="#">A24F</a> )