

# 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

<b>1/00</b>	<b>Mechanical igniters</b> (lighters containing fuel <a href="#">F23Q 2/00</a> ; matches <a href="#">C06F</a> )	2/40	. . Cover fastenings
1/02	. using friction or shock effects	2/42	. . Fuel containers; Closures for fuel containers
1/04	. . on a part moved by the fuel-controlling member, e.g. by a tap on a gas cooker	2/44	. . Wicks; Wick guides or fastenings
1/06	. . Portable igniters	2/46	. . Friction wheels; Arrangement of friction wheels
<b>2/00</b>	<b>Lighters containing fuel, e.g. for cigarettes</b>	2/48	. . Flint ( <a href="#">composition, manufacture C06C 15/00</a> ); Guides for, or arrangements of, flints
2/02	. Lighters with liquid fuel {fuel which is fluid at atmospheric pressure}	2/50	. . Protecting coverings
2/04	. . with cerium-iron alloy and wick {with friction ignition}	2/52	. . Filling devices ( <a href="#">in general B67D</a> )
2/06	. . . with friction wheel	<b>3/00</b>	<b>Igniters using electrically-produced sparks</b> ( <a href="#">sparking-plugs H01T 13/00</a> )
2/08	. . . with ignition by spring action of the cover	3/002	. {using piezo-electric elements}
2/10	. . . with other friction member	3/004	. {Using semiconductor elements}
2/12	. . with cerium-iron alloy without wick	3/006	. {Details ( <a href="#">sparking-plugs H01T 13/00</a> )}
2/14	. . with cerium-iron alloy and torch ignited by striking or pushing	3/008	. {Structurally associated with fluid-fuel burners}
2/16	. Lighters with gaseous fuel, e.g. the gas being stored in liquid phase	3/01	. Hand-held lighters, e.g. for cigarettes
2/161	. . {with friction wheel}	<b>5/00</b>	<b>Make-and-break ignition, i.e. with spark generated between electrodes by breaking contact therebetween</b> ( <a href="#">specially adapted for internal-combustion engines F02P 15/00</a> )
2/162	. . {with non-adjustable gas flame (if electrically ignited <a href="#">F23Q 2/28</a> )}	<b>7/00</b>	<b>Incandescent ignition; Igniters using electrically-produced heat, e.g. lighters for cigarettes</b> ( <a href="#">circuits therefor H01T 15/00</a> ); Electrically-heated glowing plugs
2/163	. . . {Burners (gas valves)}	7/001	. {Glowing plugs for internal-combustion engines}
2/164	. . {Arrangements for preventing undesired ignition}	2007/002	. . {with sensing means}
2/165	. . {with more than one flame}	2007/004	. . {Manufacturing or assembling methods}
2/167	. . with adjustable flame	2007/005	. . . {pressure sensors}
2/173	. . Valves therefor ( <a href="#">valves in general F16K</a> )	2007/007	. . . {ion current sensors}
2/18	. Lighters with solid fuel	2007/008	. . . {temperature sensors}
2/20	. . with cerium-iron alloy and friction wheel	7/02	. for igniting solid fuel
2/22	. . with cerium-iron alloy and tinder	7/04	. . with fans for transfer of heat to fuel
2/24	. . ignition pills or strips with inflammable parts {ignition pills <a href="#">C06C 9/00</a> , <a href="#">C06C 15/00</a> ; corresponding lighters with fluid fuel <a href="#">F23Q 2/10</a> }	7/06	. structurally associated with fluid-fuel burners ( <a href="#">lighters containing fuel F23Q 2/00</a> )
2/26	. . combined with liquid fuel lighters	7/08	. . for evaporating and igniting liquid fuel, e.g. in hurricane lanterns
2/28	. Lighters characterised by electrical ignition of the fuel (lighter with electrically-produced sparks but without fuel <a href="#">F23Q 3/00</a> )	7/10	. . for gaseous fuel, e.g. in welding appliances
2/282	. . {with incandescent ignition (lighters with incandescent ignition but without fuel <a href="#">F23Q 7/00</a> )}	7/12	. . . actuated by gas-controlling device
2/285	. . {with spark ignition}	7/14	. Portable igniters
2/287	. . . {piezo-electric}	7/16	. . with built-in battery
2/30	. Lighters characterised by catalytic ignition of fuel ( <a href="#">catalytic igniters without fuel C06C</a> )	7/18	. . with built-in generator
2/32	. Lighters characterised by being combined with other objects ( <a href="#">combinations with smokers' equipment A24F</a> )	7/20	. . with built-in mains transformer
2/325	. . {combined with clock, timer or counter}	7/22	. Details
2/34	. Component parts or accessories	7/24	. . Safety arrangements
2/345	. . {Scent-distribution or flame-colouring devices}	7/26	. . . Provision for re-ignition
2/36	. . Casings	<b>9/00</b>	<b>Pilot flame igniters</b>
2/365	. . . {Tabletop lighters}	9/02	. without interlock with main fuel supply
2/38	. . . with containers for flints or tools	9/04	. . for upright burners, e.g. gas-cooker burners
		9/045	. . . {Structurally associated with a main-burner}
		9/06	. . for inverted burners, e.g. gas lamps
		9/08	. with interlock with main fuel supply
		9/10	. . to determine the sequence of supply of fuel to pilot and main burners

- 9/12 . . to permit the supply to the main burner in dependence upon existence of pilot flame
- 9/14 . . . using electric means, e.g. by light-sensitive elements

**11/00 Arrangement of catalytic igniters** ([catalytic igniters per se C06C](#))

- 11/04 . at the burner
- 11/06 . remote from the burner, e.g. on the chimney of a lamp
- 11/08 . on a part moved by the fuel controlling member
- 11/10 . . and moving out of the flame after ignition

**13/00 Igniters not otherwise provided for**

- 13/005 . {using light, e.g. sunlight or laser}
- 13/02 . using gas burners, e.g. gas pokers
- 13/04 . using portable burners, e.g. torches, fire pots

**21/00 Devices for effecting ignition from a remote location**

**23/00 Testing of ignition installations** ([peculiar to internal combustion engines F02P 17/00](#))

- 23/02 . Testing of ignition timing
- 23/08 . Testing of components ([of sparking plugs H01T 13/58, F02P 17/12](#))
- 23/10 . . electrically

**25/00 Extinguishing-devices, e.g. for blowing-out or snuffing candle flames** ([for cigarettes A24F](#))