

ECLA**EUROPEAN CLASSIFICATION****F23Q**

IGNITION (devices or installations peculiar to internal-combustion engines [F02P](#); of cigarettes or tobacco [A24F](#); compositions therefor, chemical igniters [C06C](#));
Extinguishing-devices [\[C0002\]](#)

F23Q1/00

Mechanical igniters (lighters containing fuel [F23Q2/00](#); matches [C06F](#))

[F23Q1/02](#)

- . using friction or shock effects

[F23Q1/04](#)

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

[F23Q1/06](#)

- . . Portable igniters

F23Q2/00

Lighters containing fuel, e.g. for cigarettes

[F23Q2/02](#)

- . Lighters with liquid fuel [\[N: fuel which is fluid at atmospheric pressure\]](#)

[F23Q2/04](#)

- . . with cerium-iron alloy and wick [\[N: with friction ignition\]](#)

[F23Q2/06](#)

- . . . with friction wheel

[F23Q2/08](#)

- with ignition by spring action of the cover

[F23Q2/10](#)

- . . . with other friction member

[F23Q2/12](#)

- . . with cerium-iron alloy without wick

[F23Q2/14](#)

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

[F23Q2/16](#)

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

[F23Q2/16A](#)

- . . [\[N: with friction wheel\]](#) [\[N1204\]](#)

[\[N: WARNING](#)

groups [F23Q2/16A](#) and [F23Q2/16F](#) are not complete, pending reorganisation. See also [F23Q2/16](#)
[\]](#)

[F23Q2/16C](#)

- . . [\[N: with non-adjustable gas flame \(if electrically ignited \[F23Q2/28\]\(#\)\)\]](#)

[F23Q2/16C3](#)

- . . . [\[N: Burners \(gas valves\)\]](#)

[F23Q2/16D](#)

- . . [\[N: Arrangements for preventing undesired ignition\]](#)

[F23Q2/16F](#)

- . . [\[N: with more than one flame\]](#) [\[N1204\]](#)

[F23Q2/167](#)

- . . with adjustable flame [\[N9601\]](#)

[F23Q2/173](#)

- . . Valves therefor (valves in general [F16K](#)) [\[N9601\]](#)

[F23Q2/18](#)

- . Lighters with solid fuel

[F23Q2/20](#)

- . . with cerium-iron alloy and friction wheel

[F23Q2/22](#)

- . . with cerium-iron alloy and tinder

[F23Q2/24](#)

- . . ignition pills or strips with inflammable parts [\[N: \(ignition pills 78E, \[C06C9/00\]\(#\), \[C06C15/00\]\(#\); corresponding lighters with fluid fuel \[F23Q2/10\]\(#\)\)\]](#)

[F23Q2/26](#)

- . . combined with liquid fuel lighters

[F23Q2/28](#)

- . Lighters characterised by electrical ignition of the fuel (lighter with electrically-produced sparks but without fuel [F23Q3/00](#)) [\[N1204\]](#)

- F23Q2/28B . . [N: with incandescent ignition (lighters with incandescent ignition but without fuel [F23Q7/00](#))]
- F23Q2/28C . . [N: with spark ignition]
- F23Q2/28C2 . . . [N: piezo-electric]
- F23Q2/30 . Lighters characterised by catalytic ignition of fuel (catalytic igniters without fuel [C06C](#))
- F23Q2/32 . Lighters characterised by being combined with other objects (combinations with smokers` equipment [A24F](#))
- F23Q2/32A . . [N: combined with clock, timer or counter] [N1204]

[N: **WARNING**
groups [F23Q2/32A](#) is not complete, pending reorganisation. See also [F23Q2/32](#)
]
- F23Q2/34 . Component parts or accessories
- F23Q2/34B . . [N: Scent-distribution or flame-colouring devices] [N1204]

[N: **WARNING**
[N: WARNING, groups [F23Q2/34B](#) is not complete, pending reorganisation. See also [F23Q2/34](#)
]
- F23Q2/36 . . Casings
- F23Q2/36A . . . [N: Tabletop lighters] [N1204]

[N: **WARNING**
groups [F23Q2/36A](#) is not complete, pending reorganisation. See also [F23Q2/36](#)
]
- F23Q2/38 . . . with containers for flints or tools
- F23Q2/40 . . Cover fastenings
- F23Q2/42 . . Fuel containers; Closures for fuel containers
- F23Q2/44 . . Wicks; Wick guides or fastenings
- F23Q2/46 . . Friction wheels; Arrangement of friction wheels
- F23Q2/48 . . Flint (composition, manufacture [C06C15/00](#)); Guides for, or arrangements of, flints
- F23Q2/50 . . Protecting coverings
- F23Q2/52 . . Filling devices (in general [B67D](#)) [C9601]
- F23Q3/00** **Igniters using electrically-produced sparks (sparking-plugs [H01T13/00](#))**
- F23Q3/00A . [N: using piezo-electric elements]
- F23Q3/00B . [N: Using semiconductor elements]
- F23Q3/00D . [N: Details (sparking-plugs [H01T13/00](#))]
- F23Q3/00F . [N: Structurally associated with fluid-fuel burners]
- F23Q3/01 . Hand-held lighters, e.g. for cigarettes
- F23Q5/00** **Make-and-break ignition, i.e. with spark generated between electrodes by breaking**

contact therebetween (specially adapted for internal-combustion engines [F02P15/00](#))

F23Q7/00

Incandescent ignition; Igniters using electrically-produced heat, e.g. lighters for cigarettes (circuits therefor [H01T15/00](#)); **Electrically-heated glowing plugs**

F23Q7/00B

- . **[N: Glowing plugs for internal-combustion engines]**

F23Q7/02

- . for igniting solid fuel

F23Q7/04

- . . with fans for transfer of heat to fuel

F23Q7/06

- . structurally associated with fluid-fuel burners (lighters containing fuel [F23Q2/00](#))

F23Q7/08

- . . for evaporating and igniting liquid fuel, e.g. in hurricane lanterns

F23Q7/10

- . . for gaseous fuel, e.g. in welding appliances

F23Q7/12

- . . . actuated by gas-controlling device

F23Q7/14

- . Portable igniters

F23Q7/16

- . . with built-in battery

F23Q7/18

- . . with built-in generator

F23Q7/20

- . . with built-in mains transformer

F23Q7/22

- . Details

F23Q7/24

- . . Safety arrangements

F23Q7/26

- . . . Provision for re-ignition

F23Q9/00

Pilot flame igniters

F23Q9/02

- . without interlock with main fuel supply

F23Q9/04

- . . for upright burners, e.g. gas-cooker burners

F23Q9/04B

- . . . **[N: Structurally associated with a main-burner]**

F23Q9/06

- . . for inverted burners, e.g. gas lamps

F23Q9/08

- . with interlock with main fuel supply

F23Q9/10

- . . to determine the sequence of supply of fuel to pilot and main burners

F23Q9/12

- . . to permit the supply to the main burner in dependence upon existence of pilot flame

F23Q9/14

- . . . using electric means, e.g. by light-sensitive elements

F23Q11/00

Arrangement of catalytic igniters (catalytic igniters per se [C06C](#))

F23Q11/04

- . at the burner

F23Q11/06

- . remote from the burner, e.g. on the chimney of a lamp

F23Q11/08

- . on a part moved by the fuel controlling member

F23Q11/10

- . . and moving out of the flame after ignition

F23Q13/00 Igniters not otherwise provided for

F23Q13/00D . [N: using light, e.g. sunlight or laser] [\[N1204\]](#)

F23Q13/02 . using gas burners, e.g. gas pokers

F23Q13/04 . using portable burners, e.g. torches, fire pots

F23Q21/00 Devices for effecting ignition from a remote location

F23Q23/00 Testing of ignition installations ([peculiar to internal combustion engines F02P17/00](#))

F23Q23/02 . Testing of ignition timing

F23Q23/08 . Testing of components (of sparking plugs H01T13/58, F02P17/12) [\[N1204\]](#)

F23Q23/10 . . electrically

F23Q25/00 Extinguishing-devices, e.g. for blowing-out or snuffing candle flames (for cigarettes A24F)