

## ECLA EUROPEAN CLASSIFICATION

- F23Q** **IGNITION** (devices or installations peculiar to internal-combustion engines [F02P](#); of cigarettes or tobacco [A24E](#); 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](#)]
- [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 internalcombustion 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)**