

# CPC COOPERATIVE PATENT CLASSIFICATION

## F MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING (NOTE omitted)

### LIGHTING; HEATING

**F24 HEATING; RANGES; VENTILATING** (protecting plants by heating in gardens, orchards, or forests [A01G 13/06](#); baking ovens and apparatus [A21B](#); cooking devices other than ranges [A47J](#); forging [B21J](#), [B21K](#); specially adapted for vehicles, see the relevant subclasses of [B60](#) - [B64](#); combustion apparatus in general [F23](#); drying [F26B](#); ovens in general [F27](#); electric heating elements and arrangements [H05B](#))  
(NOTE omitted)

### **F24C OTHER DOMESTIC STOVES OR RANGES; DETAILS OF DOMESTIC STOVES OR RANGES, OF GENERAL APPLICATION** (radiator stoves of the fluid-circulating type [F24H](#))

- |             |   |             |  |
|-------------|---|-------------|--|
| <b>1/00</b> | <b>Stoves or ranges in which the fuel or energy supply is not restricted to solid fuel or to a type covered by a single one of the following groups <a href="#">F24C 3/00</a> - <a href="#">F24C 9/00</a>; Stoves or ranges in which the type of fuel or energy supply is not specified</b> | 3/062       | . . . {stoves}   |
|             |   | 3/065       | . . . . {of the closed type}   |
|             |   | 3/067       | . . . {Ranges}   |
|             |   | 3/08        | . Arrangement or mounting of burners ( <a href="#">burners per se F23D</a> )   |
| 1/02        | . adapted for the use of two or more kinds of fuel or energy supply ( <a href="#">F24C 1/16</a> takes precedence; combinations of two or more stoves or ranges each having a different kind of fuel or energy supply <a href="#">F24C 11/00</a> )   | 3/082       | . . {on stoves}  |
|             |   | 3/085       | . . {on ranges}  |
|             |   | 3/087       | . . . {in baking ovens}  |
|             |   | 3/10        | . Arrangement or mounting of ignition devices ( <a href="#">ignition devices per se F23Q</a> )   |
| 1/04        | . . simultaneously  | 3/103       | . . {of electric ignition devices}   |
| 1/06        | . . by replacing parts, e.g. replacing burner by electric heater  | 3/106       | . . {of flash tubes}   |
| 1/08        | . solely adapted for radiation heating ( <a href="#">F24C 1/16</a> takes precedence)  | 3/12        | . Arrangement for mounting of control and safety devices ( <a href="#">control valves F16K</a> ; safety devices for burners <a href="#">F23D</a> ; regulating or controlling combustion <a href="#">F23N</a> ) |
| 1/10        | . . with reflectors   |             |  |
| 1/12        | . . . of circular shape   | 3/122       | . . {on stoves}  |
| 1/14        | . Radiation heating stoves and ranges with additional provision for convection heating ( <a href="#">F24C 1/02</a> , <a href="#">F24C 1/16</a> take precedence; solely adapted for convection heating <a href="#">F24H</a> )  | 3/124       | . . {Control panels}   |
|             |   | 3/126       | . . {on ranges}  |
|             |   | 3/128       | . . . {in baking ovens}  |
| 1/16        | . with special adaptation for travelling, e.g. collapsible  | 3/14        | . with special adaptation for travelling, e.g. collapsible   |
| <b>3/00</b> | <b>Stoves and ranges for gaseous fuels</b>  | <b>5/00</b> | <b>Stoves and ranges for liquid fuels</b>  |
| 3/002       | . {Stoves}  | 5/02        | . with evaporation burners, e.g. dish type ( <a href="#">F24C 5/20</a> takes precedence)   |
| 3/004       | . . {of the closed type}  | 5/04        | . . wick type  |
| 3/006       | . . {simulating flames}   | 5/06        | . . . adjustable   |
| 3/008       | . {Ranges}  | 5/08        | . with heat produced wholly or partly by a radiant body  |
| 3/02        | . with heat produced solely by flame ( <a href="#">F24C 3/14</a> takes precedence)  | 5/10        | . with atomising burners ( <a href="#">F24C 5/20</a> takes precedence)   |
| 3/022       | . . {Stoves}  | 5/12        | . Arrangement or mounting of burners ( <a href="#">burners per se F23D</a> )   |
| 3/025       | . . . {of the closed type}  | 5/14        | . Arrangement or mounting of ignition devices ( <a href="#">ignition devices per se F23Q</a> )   |
| 3/027       | . . {Ranges}  | 5/16        | . Arrangement and mounting of control and safety devices ( <a href="#">control valves F16K</a> ; safety devices for burners <a href="#">F23D</a> ; regulating or controlling combustion <a href="#">F23N</a> ) |
| 3/04        | . with heat produced wholly or partly by a radiant body, e.g. by a perforated plate ( <a href="#">F24C 3/14</a> takes precedence)   |             |  |
| 3/042       | . . {Stoves}  |             |  |
| 3/045       | . . . {of the closed type}  |             |  |
| 3/047       | . . {Ranges}  |             |  |
| 3/06        | . . without any visible flame   |             |  |

- 5/18 . Liquid-fuel supply arrangements forming parts of stoves or ranges ([feeding liquid fuel to combustion apparatus in general F23K](#))
- 5/20 . with special adaptation for travelling, e.g. collapsible
- 7/00 Stoves or ranges heated by electrical energy (electric heating elements or arrangements H05B)**
- 7/002 . {Stoves ([F24C 7/02 - F24C 7/10 take precedence](#))}
- 7/004 . . {simulating flames}
- 7/006 . {using electrically heated liquids}
- 7/008 . . {using electrode heaters}
- 7/02 . using microwaves ([heating using microwaves in general H05B 6/64](#))
- 7/04 . with heat radiated directly from the heating element ([F24C 7/10 takes precedence](#))
- 7/043 . . {Stoves}
- 7/046 . . {Ranges}

**WARNING**

Group [F24C 7/046](#) is not complete, pending reorganisation. See also [F24C 7/04](#)

- 7/06 . Arrangement or mounting of electric heating elements
- 7/062 . . {on stoves}
- 7/065 . . . {with reflectors ([reflectors per se F24C 15/22](#))}
- 7/067 . . {on ranges}

**WARNING**

Group [F24C 7/067](#) is not complete, pending reorganisation. See also [F24C 7/06](#)

- 7/08 . Arrangement or mounting of control or safety devices ([switches H01H](#); [circuit arrangements for electric heating H05B](#))
- 7/081 . . {on stoves}
- 7/082 . . {on ranges, e.g. control panels, illumination}
- 7/083 . . . {on tops, hot plates}

**WARNING**

Groups [F24C 7/083](#), [F24C 7/085](#), [F24C 7/086](#) are not complete, pending reclassification. See also [F24C 7/082](#)

- 7/085 . . . {on baking ovens}
- 7/086 . . . {touch control}
- 7/087 . . {of electric circuits regulating heat}
- 7/088 . . . {on stoves}
- 7/10 . with special adaptation for travelling, e.g. collapsible
- 7/105 . . {Stoves}

- 9/00 Stoves or ranges heated by a single type of energy supply not covered by groups [F24C 3/00 - F24C 7/00](#) or [F24B](#) (using the heat from an exothermal reaction not involving a supply of free oxygen gas, {using special gaseous fuel, e.g. acetylene, hydrogen,} using solar energy [F24J](#))**

- 11/00 Combinations of two or more stoves or ranges, e.g. each having a different kind of energy supply**

- 13/00 Stoves or ranges with additional provisions for heating water ([mounting arrangements of water heaters or water-heating elements F24H 1/00](#))**

- 14/00 Stoves or ranges having self-cleaning provisions, e.g. continuous or catalytic cleaning, electrostatic cleaning**

- 14/005 . {using a cleaning liquid}
- 14/02 . pyrolytic type
- 14/025 . . {for gaseous fuels}

- 15/00 Details**

- 15/001 . {arrangements for discharging combustion gases}
- 15/002 . . {for stoves of the closed type}
- 15/003 . {moisturising of air}
- 15/004 . {Windows not in a door}
- 15/005 . {Coatings for ovens}
- 15/006 . {Arrangements for circulation of cooling air}
- 15/007 . {Removable panels}
- 15/008 . {Illumination for oven cavities}
- 15/02 . Doors specially adapted for stoves or ranges ([in general E06B](#); [for combustion chambers F23M](#))
- 15/021 . . {sealings for doors or transparent panels ([sealings for wings in general E06B 7/16](#))}
- 15/022 . . {Latches ([in general E05C](#))}
- 15/023 . . . {Mounting of doors, e.g. hinges, counterbalancing ([in general E05D](#), [E05F](#))}
- 15/024 . . . {Handles ([in general E05B](#))}
- 15/025 . . {with air curtain closures}
- 15/026 . . {stowing of door in open position}
- 15/027 . . {located at bottom side of housing}
- 15/028 . . {Stoves doors}
- 15/04 . . with transparent panels
- 15/045 . . . {being dismountable, e.g. giving access for cleaning}
- 15/06 . Ornamental features, e.g. grate front, surround
- 15/08 . Foundations or supports plates; Legs or pillars; Casings; Wheels ([F24C 15/10 takes precedence](#))
- 15/083 . . {Anti-tip arrangements}
- 15/086 . . {Adjustable legs or pillars}
- 15/10 . Tops, e.g. hot plate; Rings ([F24C 15/12](#), [F24C 15/14 take precedence](#))
- 15/101 . . {provisions for circulation of air}
- 15/102 . . {electrically heated}
- 15/103 . . . {being movable or rotatable}
- 15/104 . . . {Arrangements of connectors, grounding, supply wires}
- 15/105 . . . {Constructive details concerning the regulation of the temperature}
- 15/106 . . . {electric circuits}
- 15/107 . . {Pan supports or grates therefor}
- 15/108 . . {Mounting of hot plate on worktop}
- 15/12 . Side rests; Side plates; Cover lids; Splash guards; Racks outside ovens, e.g. for drying plates
- 15/14 . Spillage trays or grooves
- 15/16 . Shelves, racks, {rotisserie spits,} or trays inside ovens; Supports therefor
- 15/162 . . {Co-operating with a door, e.g. operated by the door}
- 15/164 . . {Rotisserie spits inside ovens}
- 15/166 . . {with integrated heating means}
- 15/168 . . {with telescopic rail systems}
- 15/18 . Arrangement of compartments additional to cooking compartments, e.g. for warming, for storing utensils or fuel containers; Arrangements of additional heating or cooking apparatus, e.g. grills {additional cooking arrangements on stoves}

- 15/20 . Removing cooking fumes (parts, details or accessories of cooking-vessels for withdrawing or condensing cooking vapours from such vessels [A47J 36/38](#))
- 15/2007 . . {from oven cavities}
- 15/2014 . . . {with means for oxidation of cooking fumes}
- 15/2021 . . {Arrangement or mounting of control or safety systems}
- 15/2028 . . {using an air curtain}
- 15/2035 . . {Arrangement or mounting of filters [\(F24C 15/2021 takes precedence; filters per se B01D 46/00\)](#)}
- 15/2042 . . {Devices for removing cooking fumes structurally associated with a cooking range [\(F24C 15/2007 takes precedence\)](#)}
- 15/205 . . . {with means for oxidation of cooking fumes}
- 15/2057 . . {using a cleaning liquid}
- 15/2064 . . {illumination for cooking hood}
- 15/2071 . . {mounting of cooking hood}
- 15/2078 . . {movable}
- 15/2085 . . . {adjustable in height}
- 15/2092 . . . {extendable or pivotable}
- 15/22 . Reflectors for radiation heaters
- 15/24 . Radiant bodies or panels for radiation heaters [\(gas burners for producing infra-red radiation F23D 14/12\)](#)
- 15/26 . Handles for carrying
- 15/28 . Draught shields
- 15/30 . Arrangements for mounting stoves or ranges in particular locations
- 15/32 . Arrangements of ducts for hot gases, e.g. in or around baking ovens
- 15/322 . . {with forced circulation}
- 15/325 . . . {electrically-heated}
- 15/327 . . . {with air moisturising}
- 15/34 . Elements and arrangements for heat storage or insulation
- 15/36 . Protective guards, e.g. for preventing access to heated parts