

SECTION F — MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING

F24 HEATING; RANGES; VENTILATING

F24J PRODUCTION OR USE OF HEAT NOT OTHERWISE PROVIDED FOR (materials therefor C09K 5/00; engines or other mechanisms for producing mechanical power from heat, see the relevant classes, e.g. F03G for using natural heat)

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|------|---|------|---|
| 1/00 | Apparatus or devices using heat produced by exothermal chemical reactions other than by combustion (for cooking-vessels A47J 36/28; self-heating compresses A61F 7/03; materials for the production of heat or cold undergoing non-reversible chemical reactions, other than by combustion, when used C09K 5/18) | 2/22 | • • • having extended surfaces, e.g. protrusions, corrugations (F24J 2/28 takes precedence) [4] |
| 2/00 | Use of solar heat, e.g. solar heat collectors (distillation or evaporation of water using solar energy C02F 1/14; roof covering aspects of energy collecting devices E04D 13/18; devices for producing mechanical power from solar energy F03G 6/00; semi-conductor devices specially adapted for converting solar energy into electrical energy H01L 25/00, H01L 31/00; semiconductor devices including arrays of solar cells using heat energy H01L 31/058; generators in which light radiation is directly converted into electrical energy H02N 6/00) [4, 5] | 2/23 | • • the working fluid trickling freely over collector elements [6] |
| 2/02 | • Solar heat collectors with support for article heated, e.g. stoves, ranges, crucibles, furnaces or ovens using solar heat [4] | 2/24 | • • the working fluid being conveyed through tubular heat absorbing conduits [4] |
| 2/04 | • Solar heat collectors having working fluid conveyed through collector [4] | 2/26 | • • • having extended surfaces, e.g. protrusions (F24J 2/28 takes precedence) [4] |
| 2/05 | • • surrounded by a transparent enclosure, e.g. evacuated solar collectors [6] | 2/28 | • • having permeable mass, foraminous or porous materials [4] |
| 2/06 | • • having concentrating elements (optical elements or systems <u>per se</u> G02B) [4] | 2/30 | • • with means to exchange heat between plural fluids [4] |
| 2/07 | • • • Receivers working at high temperature, e.g. for solar power plants [6] | 2/32 | • • having evaporator and condenser section, e.g. heat pipe [4] |
| 2/08 | • • • having lenses as concentrating elements [4] | 2/34 | • • having heat storage mass [4] |
| 2/10 | • • • having reflectors as concentrating elements [4] | 2/36 | • Rollable or foldable collector units [4] |
| 2/12 | • • • • parabolic [4] | 2/38 | • employing tracking means (F24J 2/02, F24J 2/06 take precedence; rotary supports or mountings therefor F24J 2/54; direction-finders for determining the direction from which electromagnetic waves are being received G01S 3/78; control of position or direction G05D 3/00) [4] |
| 2/13 | • • • • hemispherical [6] | 2/40 | • Control arrangements [4] |
| 2/14 | • • • • semi-cylindrical or cylindro-parabolic [4] | 2/42 | • Solar heat systems not otherwise provided for [4] |
| 2/15 | • • • • conical [6] | 2/44 | • • having thermosiphonic circulation [4] |
| 2/16 | • • • • having flat plates [4] | 2/46 | • Component parts, details or accessories of solar heat collectors [4] |
| 2/18 | • • • • spaced, opposed interacting reflecting surfaces [4] | 2/48 | • • characterised by the absorber material [4] |
| 2/20 | • • the working fluid being conveyed between plates [4] | 2/50 | • • Transparent coverings [4] |
| | | 2/51 | • • Thermal insulation (F24J 2/50 takes precedence) [6] |
| | | 2/52 | • • Arrangement of mountings or supports [4] |
| | | 2/54 | • • • specially adapted for rotary movement [6] |
| | | 3/00 | Other production or use of heat, not derived from combustion (use of solar heat F24J 2/00) |
| | | 3/06 | • using natural heat [4] |
| | | 3/08 | • • using geothermal heat (devices for producing mechanical power from geothermal energy F03G 4/00) [4, 5] |