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)

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)

2/00 **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]**

2/02 • Solar heat collectors with support for article heated, e.g. stoves, ranges, crucibles, furnaces or ovens using solar heat **[4]**

2/04 • Solar heat collectors having working fluid conveyed through collector **[4]**

2/05 • • surrounded by a transparent enclosure, e.g. evacuated solar collectors **[6]**

2/06 • • having concentrating elements (optical elements or systems per se G02B) **[4]**

2/07 • • • Receivers working at high temperature, e.g. for solar power plants **[6]**

2/08 • • • having lenses as concentrating elements **[4]**

2/10 • • • having reflectors as concentrating elements **[4]**

2/12 • • • • parabolic **[4]**

2/13 • • • • hemispherical **[6]**

2/14 • • • • semi-cylindrical or cylindro-parabolic **[4]**

2/15 • • • • conical **[6]**

2/16 • • • • having flat plates **[4]**

2/18 • • • • spaced, opposed interacting reflecting surfaces **[4]**

2/20 • • the working fluid being conveyed between plates **[4]**

2/22 • • • having extended surfaces, e.g. protrusions, corrugations (F24J 2/28 takes precedence) **[4]**

2/23 • • the working fluid trickling freely over collector elements **[6]**

2/24 • • the working fluid being conveyed through tubular heat absorbing conduits **[4]**

2/26 • • • having extended surfaces, e.g. protrusions (F24J 2/28 takes precedence) **[4]**

2/28 • • having permeable mass, foraminous or porous materials **[4]**

2/30 • • with means to exchange heat between plural fluids **[4]**

2/32 • • having evaporator and condenser section, e.g. heat pipe **[4]**

2/34 • • having heat storage mass **[4]**

2/36 • Rollable or foldable collector units **[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]**

2/40 • Control arrangements **[4]**

2/42 • Solar heat systems not otherwise provided for **[4]**

2/44 • • having thermosiphonic circulation **[4]**

2/46 • Component parts, details or accessories of solar heat collectors **[4]**

2/48 • • characterised by the absorber material **[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]**