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) **[1, 2006.01]**

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; semiconductor devices specially adapted for converting solar energy into electrical energy H01L 31/00; photovoltaic [PV] cells including means directly associated with the PV cell to utilise heat energy H01L 31/0525; PV modules including means associated with the PV module to utilise heat energy H02S 40/44) **[4, 5, 2006.01, 2014.01]**

Note(s) [2014.01]

Supporting structures also intended for use with photovoltaic modules should further be classified in the relevant groups of subclass H02S.

2/02 • Solar heat collectors with support for article heated, e.g. stoves, ranges, crucibles, furnaces or ovens using solar heat **[4, 2006.01]**

2/04 • Solar heat collectors having working fluid conveyed through collector **[4, 2006.01]**

2/05 • • surrounded by a transparent enclosure, e.g. evacuated solar collectors **[6, 2006.01]**

2/06 • • having concentrating elements (optical elements or systems per se G02B) **[4, 2006.01]**

2/07 • • • Receivers working at high temperature, e.g. for solar power plants **[6, 2006.01]**

2/08 • • • having lenses as concentrating elements **[4, 2006.01]**

2/10 • • • having reflectors as concentrating elements **[4, 2006.01]**

2/12 • • • • parabolic **[4, 2006.01]**

2/13 • • • • hemispherical **[6, 2006.01]**

2/14 • • • • semi-cylindrical or cylindro-parabolic **[4, 2006.01]**

2/15 • • • • conical **[6, 2006.01]**

2/16 • • • • having flat plates **[4, 2006.01]**

2/18 • • • • spaced, opposed interacting reflecting surfaces **[4, 2006.01]**

2/20 • • the working fluid being conveyed between plates **[4, 2006.01]**

2/22 • • • having extended surfaces, e.g. protrusions, corrugations (F24J 2/28 takes precedence) **[4, 2006.01]**

2/23 • • the working fluid trickling freely over collector elements **[6, 2006.01]**

2/24 • • the working fluid being conveyed through tubular heat absorbing conduits **[4, 2006.01]**

2/26 • • • having extended surfaces, e.g. protrusions (F24J 2/28 takes precedence) **[4, 2006.01]**

2/28 • • having permeable mass, foraminous or porous materials **[4, 2006.01]**

2/30 • • with means to exchange heat between plural fluids **[4, 2006.01]**

2/32 • • having evaporator and condenser section, e.g. heat pipe **[4, 2006.01]**

2/34 • • having heat storage mass **[4, 2006.01]**

2/36 • Rollable or foldable collector units **[4, 2006.01]**

2/38 • employing tracking means (F24J 2/02, F24J 2/06 take precedence; rotary supports or mountings therefor F24J 2/54; supporting structures of photovoltaic modules for generation of electric power specially adapted for solar tracking systems H02S 20/32) **[4, 2006.01, 2014.01]**

2/40 • Control arrangements **[4, 2006.01]**

2/42 • Solar heat systems not otherwise provided for **[4, 2006.01]**

2/44 • • having thermosiphonic circulation **[4, 2006.01]**

2/46 • Component parts, details or accessories of solar heat collectors **[4, 2006.01]**

2/48 • • characterised by the absorber material **[4, 2006.01]**

2/50 • • Transparent coverings **[4, 2006.01]**

2/51 • • Thermal insulation (F24J 2/50 takes precedence) **[6, 2006.01]**

2/52 • • Arrangement of mountings or supports **[4, 2006.01]**

2/54 • • • specially adapted for rotary movement **[6, 2006.01]**

3/00 Other production or use of heat, not derived from combustion (use of solar heat F24J 2/00) **[1, 2006.01]**

3/06 • using natural heat **[4, 2006.01]**

3/08 • • using geothermal heat (devices for producing mechanical power from geothermal energy F03G 4/00) **[4, 5, 2006.01]**