

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)

Note(s)

Processes using enzymes or micro-organisms in order to:

- i. liberate, separate or purify a pre-existing compound or composition, or to
- ii. treat textiles or clean solid surfaces of materials

are further classified in subclass C12S.

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| <p>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)</p> | <p>2/22</p> <p>2/23</p> <p>2/24</p> <p>2/26</p> | <ul style="list-style-type: none"> • • • having extended surfaces, e.g. protrusions, corrugations (F24J 2/28 takes precedence) [4] • • the working fluid trickling freely over collector elements [6] • • the working fluid being conveyed through tubular heat absorbing conduits [4] • • • having extended surfaces, e.g. protrusions (F24J 2/28 takes precedence) [4] |
| <p>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]</p> | <p>2/28</p> <p>2/30</p> <p>2/32</p> <p>2/34</p> <p>2/36</p> <p>2/38</p> | <ul style="list-style-type: none"> • • having permeable mass, foraminous or porous materials [4] • • with means to exchange heat between plural fluids [4] • • having evaporator and condenser section, e.g. heat pipe [4] • • having heat storage mass [4] • Rollable or foldable collector units [4] • 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] |
| <p>2/02 • Solar heat collectors with support for article heated, e.g. stoves, ranges, crucibles, furnaces or ovens using solar heat [4]</p> | <p>2/40</p> | <ul style="list-style-type: none"> • Control arrangements [4] |
| <p>2/04 • Solar heat collectors having working fluid conveyed through collector [4]</p> | <p>2/42</p> | <ul style="list-style-type: none"> • Solar heat systems not otherwise provided for [4] |
| <p>2/05 • • surrounded by a transparent enclosure, e.g. evacuated solar collectors [6]</p> | <p>2/44</p> | <ul style="list-style-type: none"> • • having thermosiphonic circulation [4] |
| <p>2/06 • • having concentrating elements (optical elements or systems <u>per se</u> G02B) [4]</p> | <p>2/46</p> | <ul style="list-style-type: none"> • Component parts, details or accessories of solar heat collectors [4] |
| <p>2/07 • • • Receivers working at high temperature, e.g. for solar power plants [6]</p> | <p>2/48</p> | <ul style="list-style-type: none"> • • characterised by the absorber material [4] |
| <p>2/08 • • • having lenses as concentrating elements [4]</p> | <p>2/50</p> | <ul style="list-style-type: none"> • • Transparent coverings [4] |
| <p>2/10 • • • having reflectors as concentrating elements [4]</p> | <p>2/51</p> | <ul style="list-style-type: none"> • • Thermal insulation (F24J 2/50 takes precedence) [6] |
| <p>2/12 • • • • parabolic [4]</p> | <p>2/52</p> | <ul style="list-style-type: none"> • • Arrangement of mountings or supports [4] |
| <p>2/13 • • • • hemispherical [6]</p> | <p>2/54</p> | <ul style="list-style-type: none"> • • • specially adapted for rotary movement [6] |
| <p>2/14 • • • • semi-cylindrical or cylindro-parabolic [4]</p> | <p>3/00 Other production or use of heat, not derived from combustion (use of solar heat F24J 2/00)</p> | |
| <p>2/15 • • • • conical [6]</p> | <p>3/06</p> | <ul style="list-style-type: none"> • using natural heat [4] |
| <p>2/16 • • • • having flat plates [4]</p> | <p>3/08</p> | <ul style="list-style-type: none"> • • using geothermal heat (devices for producing mechanical power from geothermal energy F03G 4/00) [4, 5] |
| <p>2/18 • • • • spaced, opposed interacting reflecting surfaces [4]</p> | | |
| <p>2/20 • • the working fluid being conveyed between plates [4]</p> | | |