

# 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)

## F24T GEOTHERMAL COLLECTORS; GEOTHERMAL SYSTEMS

10/00	<b>Geothermal collectors</b> <b>WARNING</b> Group <a href="#">F24T 10/00</a> is impacted by reclassification into groups <a href="#">F24T 10/10</a> , <a href="#">F24T 10/30</a> , <a href="#">F24T 10/40</a> , and <a href="#">F24T 50/00</a> . All groups listed in this Warning should be considered in order to perform a complete search.	10/30	<ul style="list-style-type: none"> <li>using underground reservoirs for accumulating working fluids or intermediate fluids</li> </ul> <b>WARNING</b> Group <a href="#">F24T 10/30</a> is incomplete pending reclassification of documents from groups <a href="#">F24T 10/00</a> and <a href="#">F24T 10/10</a> . Group <a href="#">F24T 10/30</a> is also impacted by reclassification into group <a href="#">F24T 10/40</a> . All groups listed in this Warning should be considered in order to perform a complete search.
10/10	<ul style="list-style-type: none"> <li>with circulation of working fluids through underground channels, the working fluids not coming into direct contact with the ground</li> </ul> <b>WARNING</b> Group <a href="#">F24T 10/10</a> is incomplete pending reclassification of documents from group <a href="#">F24T 10/00</a> . Group <a href="#">F24T 10/10</a> is also impacted by reclassification into groups <a href="#">F24T 10/30</a> and <a href="#">F24T 10/40</a> . All groups listed in this Warning should be considered in order to perform a complete search.	10/40	<ul style="list-style-type: none"> <li>operated without external energy sources, e.g. using thermosiphonic circulation or heat pipes</li> </ul> <b>WARNING</b> Group <a href="#">F24T 10/40</a> is incomplete pending reclassification of documents from groups <a href="#">F24T 10/00</a> , <a href="#">F24T 10/10</a> , and <a href="#">F24T 10/30</a> . All groups listed in this Warning should be considered in order to perform a complete search.
10/13	<ul style="list-style-type: none"> <li>using tube assemblies suitable for insertion into boreholes in the ground, e.g. geothermal probes</li> </ul>	2010/50	<ul style="list-style-type: none"> <li>{Component parts, details or accessories}</li> </ul> <b>WARNING</b> Group <a href="#">F24T 50/00</a> is incomplete pending reclassification of documents from group <a href="#">F24T 10/00</a> . Groups <a href="#">F24T 10/00</a> and <a href="#">F24T 50/00</a> should be considered in order to perform a complete search.
10/15	<ul style="list-style-type: none"> <li>using bent tubes; using tubes assembled with connectors or with return headers</li> </ul>		
10/17	<ul style="list-style-type: none"> <li>using tubes closed at one end, i.e. return-type tubes</li> </ul>		
10/20	<ul style="list-style-type: none"> <li>using underground water as working fluid; using working fluid injected directly into the ground, e.g. using injection wells and recovery wells</li> </ul>	2010/53	<ul style="list-style-type: none"> <li>{Methods for installation}</li> </ul>
		2010/56	<ul style="list-style-type: none"> <li>{Control arrangements}</li> </ul>

## F24T

**50/00**      **Geothermal systems** (for producing mechanical power from geothermal energy {[F03G 7/04](#)})

### WARNING

Group [F24T 50/00](#) is incomplete pending reclassification of documents from group [F24T 10/00](#).

Groups [F24T 10/00](#) and [F24T 50/00](#) should be considered in order to perform a complete search.

**2201/00**      **Prediction; Simulation**