

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

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**