

## F24S

**SOLAR HEAT COLLECTORS; SOLAR HEAT SYSTEMS (for producing mechanical power from solar energy [F03G 6/00](#))**

### References

#### Limiting references

*This place does not cover:*

Devices for producing mechanical power from solar energy	<a href="#">F03G 6/00</a>
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#### Application-oriented references

*Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:*

Distillation or evaporation of water using solar energy	<a href="#">C02F 1/14</a>
Drying solid materials or objects by radiation, e.g. from the sun	<a href="#">F26B 3/28</a>
Thermophotovoltaic systems	<a href="#">H02S 10/30</a>
Photovoltaic [PV] modules including means associated with the PV module to utilise heat energy	<a href="#">H02S 40/44</a>
Photovoltaic [PV] cells including means directly associated with the PV cell to utilise heat energy	<a href="#">H10F 77/67</a>

#### Informative references

*Attention is drawn to the following places, which may be of interest for search:*

Semiconductor devices specially adapted for converting solar energy into electrical energy	<a href="#">H10F 10/00</a> , <a href="#">H10F 19/00</a>
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### Glossary of terms

*In this place, the following terms or expressions are used with the meaning indicated:*

Solar heat collector modules	whole solar heat collectors; part of solar heat collectors, e.g. reflectors, lens or heat storages
Absorbing elements	elements for absorbing solar-ray and converting it into heat
Solar heat systems	systems having solar heat collectors as their components and using the collected heat

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having two or more passages for the same working fluid layered in direction of solar-rays, e.g. having upper circulation channels connected with lower circulation channels

**References****Informative references**

*Attention is drawn to the following places, which may be of interest for search:*

Solar heat collectors having working fluid conveyed through collector, the working fluid being conveyed between plates	<a href="#">F24S 10/50</a>
Solar heat collectors having working fluid conveyed through collector, the working fluid being conveyed through tubular heat absorbing conduits	<a href="#">F24S 10/70</a>

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having evaporator sections and condenser sections, e.g. heat pipes

**References****Informative references**

*Attention is drawn to the following places, which may be of interest for search:*

Heat-exchange apparatus with the intermediate heat-transfer medium in closed tubes passing into or through the conduit walls in which the medium condenses and evaporates, e.g. heat-pipes	<a href="#">F28D 15/02</a>
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in the form of roof constructions (in the form of shingles or tiles [F24S 20/69](#))

**References****Limiting references**

*This place does not cover:*

Solar heat collectors integrated in fixed constructions in the form of shingles or tiles	<a href="#">F24S 20/69</a>
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**Informative references**

*Attention is drawn to the following places, which may be of interest for search:*

Supporting structures specially adapted for roof structures of buildings for directly fixing photovoltaic modules	<a href="#">H02S 20/23</a>
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**F24S 23/00****Arrangements for concentrating solar-rays for solar heat collectors****References****Informative references**

*Attention is drawn to the following places, which may be of interest for search:*

Optical elements or systems per se	<a href="#">G02B</a>
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**F24S 25/00****Arrangement of stationary mountings or supports for solar heat collector modules****References****Informative references**

*Attention is drawn to the following places, which may be of interest for search:*

Stands or trestles as supports for apparatus not specific to apparatus provided for elsewhere	<a href="#">F16M 11/00</a>
Supporting structures specially adapted for roof structures of buildings for directly fixing photovoltaic modules	<a href="#">H02S 20/23</a>

**F24S 30/00****Arrangements for moving or orienting solar heat collector modules****References****Informative references**

*Attention is drawn to the following places, which may be of interest for search:*

Stands or trestles as supports for apparatus not specific to apparatus provided for elsewhere	<a href="#">F16M 11/00</a>
Supporting structures specially adapted for roof structures of buildings for directly fixing photovoltaic modules	<a href="#">H02S 20/23</a>

**F24S 50/20****for tracking****References****Informative references**

*Attention is drawn to the following places, which may be of interest for search:*

Arrangements for moving or orienting solar heat collector modules	<a href="#">F24S 30/00</a>
Supporting structures of photovoltaic modules for generation of electric power specially adapted for solar tracking systems	<a href="#">H02S 20/32</a>

## F24S 60/00

Arrangements for storing heat collected by solar heat collectors (working fluids forming pools or ponds [F24S 10/10](#))

### References

#### Limiting references

*This place does not cover:*

Arrangements for storing heat collected by solar heat collectors in the working fluids forming pools or ponds	<a href="#">F24S 10/10</a>
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#### Informative references

*Attention is drawn to the following places, which may be of interest for search:*

Heat storage plants or apparatus in general	<a href="#">F28D 20/00</a>
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## F24S 70/20

characterised by absorbing coatings; characterised by surface treatment for increasing absorption

### References

#### Informative references

*Attention is drawn to the following places, which may be of interest for search:*

Radiation-absorbing paints	<a href="#">C09D 5/32</a>
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## F24S 80/20

Working fluids specially adapted for solar heat collectors

### References

#### Informative references

*Attention is drawn to the following places, which may be of interest for search:*

Materials for heat transfer	<a href="#">C09K 5/00</a>
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## F24S 80/30

Arrangements for connecting the fluid circuits of solar collectors with each other or with other components, e.g. pipe connections; Fluid distributing means, e.g. headers

### References

#### Informative references

*Attention is drawn to the following places, which may be of interest for search:*

Joints or fittings for pipes in general	<a href="#">F16L</a>
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Branch units for pipes in general	<a href="#">F16L 41/02</a>
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## F24S 80/50

**Elements for transmitting incoming solar rays and preventing outgoing heat radiation; Transparent coverings**

### References

#### Informative references

*Attention is drawn to the following places, which may be of interest for search:*

Solar heat collectors having working fluid conveyed through collector surrounded by transparent enclosures, e.g. evacuated solar collectors	<a href="#">F24S 10/40</a>
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## F24S 90/00

**Solar heat systems not otherwise provided for**

### References

#### References out of a residual place

*Examples of places in relation to which this place is residual:*

Distillation or evaporation of water using solar energy	<a href="#">C02F 1/14</a>
Devices for producing mechanical power from solar energy	<a href="#">F03G 6/00</a>
Thermophotovoltaic systems	<a href="#">H02S 10/30</a>
Photovoltaic [PV] modules including means associated with the PV module to utilise heat energy	<a href="#">H02S 40/44</a>
Photovoltaic [PV] cells including means directly associated with the PV cell to utilise heat energy	<a href="#">H10F 77/67</a>

## F24S 90/10

**using thermosiphonic circulation**

### References

#### References out of a residual place

*Examples of places in relation to which this place is residual:*

Solar heat collectors using working fluids using internal thermosiphonic circulation	<a href="#">F24S 10/90</a>
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