

EUROPEAN PATENT OFFICE
U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 776

DATE: JANUARY 1, 2020

PROJECT RP0627

The following classification changes will be effected by this Notice of Changes:

<u>Action</u>	<u>Subclass</u>	<u>Group(s)</u>
SCHEME:		
Titles Changed:	F24D	SUBCLASS
	F24D	1/00
	F24D	3/00, 3/12
	F24D	5/00
	F24D	7/00
	F24D	9/00
	F24D	11/00, 11/02
	F24D	12/02
	F24D	13/00
	F24D	17/00
	F24D	19/08, 19/10
Warnings Modified:	F24D	SUBCLASS
DEFINITIONS:		
Definitions Deleted: (no frozen (F) symbol definitions should be deleted)		
Definitions New:	F24D	3/12
	F24D	11/02
	F24D	19/08, 19/10
Definitions Modified:	F24D	SUBCLASS
	F24D	1/00
	F24D	11/00
	F24D	13/00
	F24D	17/00
	F24D	19/00

No other subclasses/groups are impacted by this Notice of Changes.

This Notice of Changes includes the following [Check the ones included]:

1. CLASSIFICATION SCHEME CHANGES

- A. New, Modified or Deleted Group(s)
- B. New, Modified or Deleted Warning(s)
- C. New, Modified or Deleted Note(s)
- D. New, Modified or Deleted Guidance Heading(s)

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2. DEFINITIONS

- A. New or Modified Definitions (Full definition template)
 - B. Modified or Deleted Definitions (Definitions Quick Fix)
3. REVISION CONCORDANCE LIST (RCL)
 4. CHANGES TO THE CPC-TO-IPC CONCORDANCE LIST (CICL)
 5. CHANGES TO THE CROSS-REFERENCE LIST (CRL)

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1. CLASSIFICATION SCHEME CHANGES

A. New, Modified or Deleted Group(s)**SUBCLASS F24D - DOMESTIC- OR SPACE-HEATING SYSTEMS, e.g. CENTRAL HEATING SYSTEMS;DOMESTIC HOT-WATER SUPPLY SYSTEMS;ELEMENTS OR COMPONENTS THEREFOR**

<u>Type*</u>	<u>Symbol</u>	<u>Indent Level Number of dots (e.g. 0, 1, 2)</u>	<u>Title</u> <u>“CPC only” text should normally be enclosed in {curly brackets}**</u>	<u>Transferred to[#]</u>
M	F24D	Subclass	DOMESTIC- OR SPACE-HEATING SYSTEMS, e.g. CENTRAL HEATING SYSTEMS; DOMESTIC HOT-WATER SUPPLY SYSTEMS; ELEMENTS OR COMPONENTS THEREFOR (using steam or condensate extracted or exhausted from steam engine plants for heating purposes F01K17/02)	
M	F24D1/00	0	Steam central heating systems (district heating systems F24D 10/00; central heating systems using heat accumulated in storage masses F24D 11/00)	
M	F24D3/00	0	Hot-water central heating systems (district heating systems F24D 10/00; central heating systems using heat accumulated in storage masses F24D 11/00)	
M	F24D3/12	1	Tube and panel arrangements for ceiling, wall, or underfloor heating (electric underfloor heating F24D13/02)	
M	F24D5/00	0	Hot-air central heating systems (district heating systems F24D 10/00; central heating systems using heat accumulated in storage masses F24D 11/00; air conditioning F24F); Exhaust gas central heating systems	
M	F24D7/00	0	Central heating systems employing heat-transfer fluids not covered by groups F24D1/00 - F24D5/00, e.g. oil, salt, gas (district heating systems F24D 10/00; central heating systems using heat accumulated in storage masses F24D 11/00)	
M	F24D9/00	0	Central heating systems employing combinations of heat transfer fluids covered by two or more of groups F24D1/00 - F24D7/00 (district heating systems F24D 10/00; central heating systems using heat accumulated in storage masses F24D 11/00)	
M	F24D11/00	0	Central heating systems using heat accumulated in storage masses (self-contained storage heating units F24D15/02)	
M	F24D11/02	1	using heat pumps	

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M	F24D12/02	1	having more than one heat source (using heat pumps, in water central heating systems F24D 3/18; in air central heating systems F24D 5/12; in systems using heat storage masses F24D 11/02)
M	F24D13/00	0	Electric heating systems
M	F24D17/00	0	Domestic hot-water supply systems
M	F24D19/08	1	Arrangements for drainage, venting or aerating (valves for venting or aerating F16K24/00)
M	F24D19/10	1	Arrangement or mounting of control or safety devices (only the heater being controlled F24H9/20)

*N = new entries where reclassification into entries is involved; C = entries with modified file scope where reclassification of documents from the entries is involved; Q = new entries which are firstly populated with documents via administrative transfers from deleted (D) entries. Afterwards, the transferred documents into the Q entry will either stay or be moved to more appropriate entries, as determined by intellectual reclassification; T = existing entries with enlarged file scope, which receive documents from C or D entries, e.g. when a limiting reference is removed from the entry title; M = entries with no change to the file scope (no reclassification); D = deleted entries; F = frozen entries will be deleted once reclassification of documents from the entries is completed; U = entries that are unchanged.

NOTES:

- **No { curly brackets } are used for titles in CPC only subclasses, e.g. C12Y, A23Y; 2000 series symbol titles of groups found at the end of schemes (orthogonal codes); or the Y section titles. The { curly brackets } are used for 2000 series symbol titles found interspersed throughout the main trunk schemes (breakdown codes).
- U groups: it is obligatory to display the required “anchor” symbol (U group), i.e. the entry immediately preceding a new group or an array of new groups to be created (in case new groups are not clearly subgroups of C-type groups). Always include the symbol, indent level and title of the U group in the table above.
- All entry types should be included in the scheme changes table above for better understanding of the overall scheme change picture. Symbol, indent level, and title are required for all types.
- “Transferred to” column must be completed for all C, D, F, and Q type entries. F groups will be deleted once reclassification is completed.
- When multiple symbols are included in the “Transferred to” column, avoid using ranges of symbols in order to be as precise as possible.
- For administrative transfer of documents, the following text should be used: “<administrative transfer to XX>”, “<administrative transfer to XX and YY simultaneously>”, or “<administrative transfer to XX, YY, and ZZ simultaneously>” when administrative transfer of the same documents is to more than one place.
- Administrative transfer to main trunk groups is assumed to be the source allocation type, unless otherwise indicated.
- Administrative transfer to 2000/Y series groups is assumed to be “additional information”.
- If needed, instructions for allocation type should be indicated within the angle brackets using the abbreviations “ADD” or “INV”: <administrative transfer to XX ADD> , <administrative transfer to XX INV>, or <administrative transfer to XX ADD, YY INV, ... and ZZ ADD simultaneously>.
- In certain situations, the “D” entries of 2000-series or Y-series groups may not require a destination (“Transferred to”) symbol, however it is required to specify “<no transfer>” in the “Transferred to” column for such cases.
- For finalization projects, the deleted “F” symbols should have <no transfer> in the “Transferred to” column.
- For more details about the types of scheme change, see CPC Guide.

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B. New, Modified or Deleted Warning(s)

SUBCLASS F24D - DOMESTIC- OR SPACE-HEATING SYSTEMS, e.g. CENTRAL HEATING SYSTEMS; DOMESTIC HOT-WATER SUPPLY SYSTEMS;ELEMENTS OR COMPONENTS THEREFOR

Type*	Location	Old Warning	New/Modified Warning
M	F24D	In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.	{In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.}

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2. A. DEFINITIONS (new)

Insert: The following new definitions for subclass F24D.

F24D 3/12

References

Limiting references

This place does not cover:

Electric underfloor heating	F24D 13/02
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Informative references

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

Special adaptations of floors for incorporating ducts, e.g. for heating or ventilating	E04B 5/48
Building elements of block or other shape for the construction of parts of buildings characterised by special adaptations, e.g. serving for locating conduits	E04C 1/39
Building elements of relatively thin form for the construction of parts of buildings with special adaptations for auxiliary purposes, e.g. serving for locating conduits	E04C 2/52

F24D 11/02

References

Informative references

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

Heat pumps for producing heat in general	F25B 29/00
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F24D 19/08

References

Limiting references

This place does not cover:

Valves for venting or aerating	F16K 24/00
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Informative references

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

Valves for drainage	F16K
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F24D 19/10

References

Limiting references

This place does not cover:

Arrangements where only the heater is controlled	F24H 9/20
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Informative references

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

Control valves	F16K
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Special rules of classification

Looping references between [F24D 19/10](#) and [F24H 9/20](#) have been identified. Until this inconsistency is resolved in IPC, the current classification practice in CPC is as follows: Please follow the limiting reference as it is in [F24D19/10](#). The limiting reference in [F24H9/20](#) is an informative reference.

2. A. DEFINITIONS (modified)

Insert: The following new modifications for subclass F24D.

F24D

Definition statement

This place covers:

Replace: The first portion of the definition statement
Domestic- or space-heating systems of the following kind:
with the following new statement

Systems for domestic- or space heating, in which heat is generated at one location and transmitted by a circuit to a consumer at a different location, of the following kind:

Relationships with other classification places

Replace: The first eight paragraphs, as listed below:

Subclass [F24D](#) covers systems for domestic- or space heating in which heat is generated at one location and transmitted by a circuit to a consumer at a different location.

The heaters as such are covered by [F24H](#).

Air-conditioning systems able for cooling and heating are only covered by [F24F](#).

Arrangements for protecting plants by heating, e.g. in gardens, are only covered by [A01G13/06](#).

Systems for space heating adapted for vehicles are covered by [B60](#) - [B64](#).

Details concerning the heaters as such are covered in [F24H3/00](#).

Domestic stoves or ranges are covered by [F24B](#) and [F24C](#).

Combined heating and refrigeration systems are covered by [F25B](#).

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with the following new paragraphs.

The heaters as such are covered by [F24H](#), e.g. details concerning the heaters are covered in [F24H 3/00](#).

Air-conditioning systems for cooling and heating are only covered by [F24F](#).

Arrangements for protecting plants by heating, e.g. in gardens, are only covered by [A01G 13/06](#).

Systems for space heating specially adapted for vehicles are covered by [B60](#) - [B64](#).

References

Limiting references

This place does not cover:

Delete: The following rows from the Limiting references table.

Arrangements for protecting plants by heating , e.g. in gardens	A01G 13/06
Baking ovens	A21B
Cooking devices other than ranges	A47J
Domestic stoves	F24B , F24C
Air-conditioning systems able for cooling and heating	F24F

Insert: The following new row into the Limiting references table.

Steam engine plants using steam or condensate extracted or exhausted from steam engine plants for heating purposes	F01K 17/02
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Informative references

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

Delete: The following row from the Informative references table.

Using steam or condensate extracted or exhausted from steam engine plants	F01K17/00
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Insert: The following new rows into the Informative references table.

Preventing corrosion	C23F
Steam traps	F16T
Domestic stoves or ranges	F24B, F24C
Cleaning heat exchange tubes	F28G

Replace: The text for the following references with the following new text.

Water supply in general	E03
Water or air heaters having heat generating means	F24H
Combined heating and refrigeration systems	F25B
Heat exchange apparatus or elements	F28
Electric heating elements or arrangements	H05B

F24D 1/00

Definition statement

This place covers:

Replace: The first portion of the definition statement
Steam central heating systems:

with the following new statement

Central heating systems comprising steam as heat transport medium and combinations thereof:

Replace: The third bullet
operating with exhaust steam (i.e. exhaust steam of a generating power plant being used for heating)
with
operating with exhaust steam of a generating power plant being used for heating

Relationships with other classification places

Delete: The first and fourth paragraphs, i.e.
This group cover central heating systems comprising steam as heat transport medium.
Details of the steam central heating systems concerning drainage, venting, aerating or control are covered by the relevant subgroup in [F24D19/1003](#).

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References**Limiting references***This place does not cover:*Delete: The following rows from the Informative references table.

Steam engine plants as such	F01K
Steam generation, steam boilers	F22B

Informative references*Attention is drawn to the following places, which may be of interest for search:*Delete: The following row from the Informative references table.

The special case of using steam or condensate extracted or exhausted from steam engine plants for heating purposes extracted or exhausted from steam engine plants for heating purposes	F01K 17/02
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Insert: The following rows into the Informative references table.

Steam engine plants as such	F01K
Steam generation; Steam boilers	F22B

Insert: The following new Special rules of Classification section and paragraph.**Special rules of classification**

Details of the steam central heating systems concerning drainage, venting, aerating or control are covered by the relevant subgroup in [F24D 19/1003](#).

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F24D 11/00

Relationships with other classification places

Replace: The entire content (7 paragraphs) of the *Relationships with other classification places* section with the following new paragraphs.

The central heating systems in this group comprise a storage mass for the central heating transfer fluid. This storage mass can stay in the tank or be able to flow outside for being used. Details concerning tanks of the storage mass per se are covered by [F24H 7/00](#). Details concerning water storage tanks with water being able to flow outside for being used are covered by [F24H 1/18](#). Details of the tanks as such are covered by [F28D 20/00](#)

Details of storage heaters heating a fluid using a heat pump are also covered by [F24H 4/04](#).

Storage masses in general are classified in the relevant subclasses, e.g. [C04B](#).

References

Limiting references

This place does not cover:

Delete: The following row from the Limiting references table.

Domestic hot-water supply system with accumulation of heated water	F24D 17/00
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Informative references

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

Replace: The text for reference F24D 12/00 with the following new text.

Other central heating systems not covered by groups F24D1/00 - F24D11/00 , in particular systems with more than one heat source	F24D 12/00
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Insert: The following new row into the Informative references table.

Domestic hot water supply system with accumulation of heated water	F24D 17/00
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Insert: The following new Special rules of Classification section and paragraph.

Special rules of classification

Central heating systems using heat accumulated in storage masses using heat pumps are covered by [F24D 11/02](#).

F24D 13/00

Relationships with other classification places

Delete: The 2nd, 3rd and 4th paragraphs from the *Relationships with other classification places* section.

Central heating radiators comprising additional heating means located within the radiator are covered in [F24D13/04](#).

Details of electric heating means as such are covered by [H05B3/00](#).

Details of the control for electric heating systems are covered by the relevant subgroup in [F24D19/1096](#).

References

Informative references

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

Insert: The following new row into the Informative references table.

Electric water or air heaters	F24H
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Insert: The following new Special rules of Classification section and paragraph.

Special rules of classification

Central heating radiators comprising additional heating means located within the radiator are covered by [F24D 13/04](#).

F24D 17/00

Relationships with other classification places

Delete: The 1st and 2nd paragraphs from the *Relationships with other classification places* section.

Details of the control for domestic hot-water systems are covered by the relevant subgroup in [F24D19/1051](#).

Hot-water central heating systems combined with systems for domestic hot water supply are covered by [F24D3/08](#).

References

Informative references

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

Insert: The following new row into the Informative references table.

Combined with domestic- or space-heating systems	F24D 1/00 - F24D 15/00
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Insert: The following new Special rules of Classification section and paragraph.

Special rules of classification

Hot-water central heating systems combined with systems for domestic hot water supply are covered by [F24D 3/08](#).

F24D 19/00

Definition statement

This place covers:

Replace: The first portion of the definition statement

Details of heating systems, in particular:

with the following new statement

Details concerning the heating system and the central heating radiators, in particular:

Relationships with other classification places

Replace: The entire content (15 paragraphs) of the *Relationships with other classification places* section with the following new paragraphs.

Details concerning the heater, i.e. the device generating the heat, as such are covered by [F24H 9/00](#).

Central heating radiators as such are covered in [F28D 1/00](#).

Arrangements for connecting heat exchanger in general to flow lines are covered by [F28F 9/0246](#).

Arrangements for connecting different sections within a heat exchanger, e.g. radiators, are covered by [F28F 9/26](#).

Mounting arrangements for special applications fixed on a central heating radiator are classified in the relevant subclass:

- Towel racks: [A47K 10/06](#)
- Towel grips or hooks: [A47K 10/12](#)
- drying lines for attachment to central heating radiators: [D06F 57/127](#).

Arrangements for drainage, venting or aerating specially adapted for heating systems are covered in this group.

Draining valves or venting valves being used elsewhere are classified in the relevant subclass in [F16K](#).

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Arrangements for control of temperature and algorithm therefore are also covered by [G05D23/00](#).

References

Limiting references

This place does not cover:

Insert: The following new row into the Limiting references table.

Details of heat-exchange or heat-transfer apparatus, of general application	F28F
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Delete: The following rows from the Limiting references table.

Grips, hooks or the like for hanging-up towels (on a central heating radiator)	A47K 10/12
Supporting means for linen or garments to be dried or aired on attachments or suspension to central heating radiators	D06F 57/12
Arrangements of mountings or supports of heaters (not central heating radiators)	F24H 9/06
Central heating radiators as such	F28D 1/00

Replace: The text for reference [F24H 9/00](#) with the following new text, and insert two additional new symbols [F24H9/02](#) and [F24H9/06](#).

From existing

Casings, cover lids or ornamental panel for heaters (not central heating radiators)	F24H 9/02
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to the revised text and symbols

Details of water or air heaters, e.g. casings, cover lids or ornamental panel for heaters (not central heating radiators) and arrangements of mountings or supports of heaters (not central heating radiators)	F24H 9/00 , F24H 9/02 , F24H 9/06
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Informative references*Attention is drawn to the following places, which may be of interest for search:*Delete: The following row from the Informative references table.

Control of a water heater	F24H 9/00
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Insert: The following rows into the Informative references table.

Grips, hooks or the like for hanging-up towels (on a central heating radiator)	A47K 10/12
Supporting means for linen or garments to be dried or aired on attachments or suspension to central heating radiators	D06F 57/12
Central heating radiators as such	F28D 1/00

Insert: The following new Special rules of Classification section and paragraphs.**Special rules of classification**

Central heating radiators comprising additional heating means located within the radiator are covered by [F24D 13/04](#).

Details of the control for heating systems are covered by the relevant subgroup in [F24D 19/00](#).

Arrangements for connecting central heating radiators to circulation pipes are covered by [F24D 19/0002](#).

Devices for preventing or removing corrosion, slime or scale are covered by [F24D 19/0092](#).

Arrangements of mounting or support for central heating radiators are covered by [F24D 19/02](#).