

EUROPEAN PATENT OFFICE
U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 1669

DATE: JANUARY 1, 2025

PROJECT MP12348

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:	F22D	1/02, 1/10, 1/14, 1/30, 1/40, 1/50
	F22D	3/08, 3/10
	F22D	5/00, 5/26, 5/34
	F22D	7/00
	F22D	11/003, 11/02
Warnings Deleted:	F22D	SUBCLASS
DEFINITIONS:		
Definitions New:	F22D	1/02, 1/10, 1/14, 1/30, 1/40, 1/50
	F22D	3/08, 3/10
	F22D	5/26, 5/34
	F22D	11/003, 11/02
Definitions Modified:	F22D	5/00
	F22D	7/00

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)

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 F22D - PREHEATING, OR ACCUMULATING PREHEATED, FEED-WATER FOR STEAM GENERATION; FEED-WATER SUPPLY FOR STEAM GENERATION; CONTROLLING WATER LEVEL FOR STEAM GENERATION; AUXILIARY DEVICES FOR PROMOTING WATER CIRCULATION WITHIN STEAM BOILERS

<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	F22D 1/02	1	with water tubes arranged in the boiler furnace, fire tubes or flue ways	
M	F22D 1/10	3	in horizontal arrangement	
M	F22D 1/14	2	Safety or venting devices	
M	F22D 1/30	2	with stages, steps, baffles, dishes, circular troughs, or other means to cause interrupted or cascading fall of water	
M	F22D 1/40	1	Combinations of exhaust-steam and smoke-gas preheaters	
M	F22D 1/50	1	incorporating thermal de-aeration of feed-water (de-aeration produced in the course of direct heat transfer F22D 1/28)	
M	F22D 3/08	1	specially adapted for locomotives	
M	F22D 3/10	2	Control devices	
M	F22D 5/00	0	Controlling water feed or water level; Automatic water feeding or water-level regulators	
M	F22D 5/26	1	Automatic feed-control systems	
M	F22D 5/34	2	Applications of valves	
M	F22D 7/00	0	Auxiliary devices for promoting water circulation	
M	F22D 11/003	1	{Emergency feed-water supply }	
M	F22D 11/02	1	Arrangements of feed-water pumps	

*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).

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- 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 finalisation 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 F22D - PREHEATING, OR ACCUMULATING PREHEATED, FEED-WATER FOR STEAM GENERATION; FEED-WATER SUPPLY FOR STEAM GENERATION; CONTROLLING WATER LEVEL FOR STEAM GENERATION; AUXILIARY DEVICES FOR PROMOTING WATER CIRCULATION WITHIN STEAM BOILERS

<u>Type*</u>	<u>Location</u>	<u>Old Warning</u>	<u>New/Modified Warning</u>
D	F22D	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.	Delete entire warning

*N = new warning, M = modified warning, D = deleted warning

NOTE: The "Location" column only requires the symbol PRIOR to the location of the warning. No further directions such as "before" or "after" are required.

2. A. DEFINITIONS (new)

F22D 1/02

References

Informative references

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

Heat-exchange tubes in general	F28F 1/00
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F22D 1/10

References

Informative references

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

Internally cooled grates for combustion chambers	F23H 3/02
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F22D 1/14

References

Informative references

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

Safety devices for boilers in general	F22B 37/42
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F22D 1/30**References****Informative references**

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

De-aeration apparatus	C02F
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F22D 1/40**References****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:

Feed-water heaters, e.g. preheaters, for locomotives	F22D 1/42
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F22D 1/50**References****Limiting references**

This place does not cover:

De-aeration produced in the course of direct heat transfer	F22D 1/28
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Informative references

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

Degasification of liquids in general	B01D 19/00
Degassing of water in general	C02F 1/20
Devices for venting enclosures, e.g. valves	F16K 24/04

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F22D 3/08

References

Informative references

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

Locomotive boilers	F22B 13/06
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F22D 3/10

References

Informative references

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

Controlling water feed to boilers, or water level	F22D 5/00
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F22D 5/26

References

Informative references

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

Automatic safety devices for steam boilers in general	F22B 37/42
Controlling flow in general	G05D 7/00

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F22D 5/34

References

Informative references

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

Valves per se	F16K
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F22D 11/003

References

Informative references

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

Safety devices for boilers in general	F22B 37/42
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F22D 11/02

References

Informative references

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

Pumps per se	F04
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2. A. DEFINITIONS (modified)

F22D5/00

Insert: A comma following “Also”, so that the updated Definition statement reads as follows.

Definition statement

This place covers:

Devices and methods for controlling the supply of feed water and the feed water level using intermediate compartments, pivoting buckets, receptacles outside of the boiler and devices with float actuated valves, responsive to thermal expansion and contraction, with electric switches. Also, regulators with varying the speed or delivery pressure of feed pumps and automatic feed-control systems are covered by said group.

References

Delete: The entire Limiting references section.

Insert: The following three new references in the Informative references table.

Informative references

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

Steam traps	F16T
Level indicators per se	G01F 23/00
Level control in general	G05D 9/00

F22D7/00

Insert: A period at the end of the Relationships section.

Relationships with other classification places

Pumps in general are classified in [F04B](#), [F04C](#), [F04D](#) and [F04F](#).

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References

Delete: The entire Limiting references section.

Insert: The following new reference in the Informative references table.

Informative references

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

Adaptation of boilers for promoting water circulation	F22B 37/34
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