

EUROPEAN PATENT OFFICE
U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 1766

DATE: AUGUST 1, 2025

PROJECT DP12709

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

<u>Action</u>	<u>Subclass</u>	<u>Group(s)</u>
DEFINITIONS:		
Definitions New:	F27D	17/10, 17/102, 17/12, 17/13, 17/20, 17/22, 17/302
Definitions Modified:	F27D	17/00, 17/30, 17/304

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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2. A. DEFINITIONS (new)

F27D 17/10

References

Informative references

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

Heat treatment of metals	C21D1/00
Vapour generation using waste gases	F22B1/18

F27D 17/102

References

Informative references

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

Arrangements for treatment or cleaning of waste gases	F27D17/20
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F27D 17/12

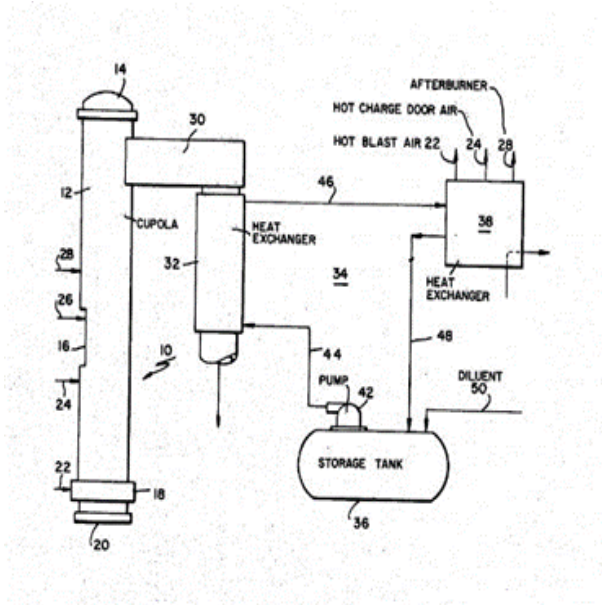
Definition statement

This place covers:

Illustrative example of subject matter classified in this place:

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The Figure illustrates a waste heat recovery apparatus where exhaust gas from cupola (10) passes through heat exchanger (32) to heat fluid stored in tank (36). The heat is subsequently utilised at heat exchanger (38).

References

Informative references

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

Heat storage type combustion burners	F23C
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F27D 17/13

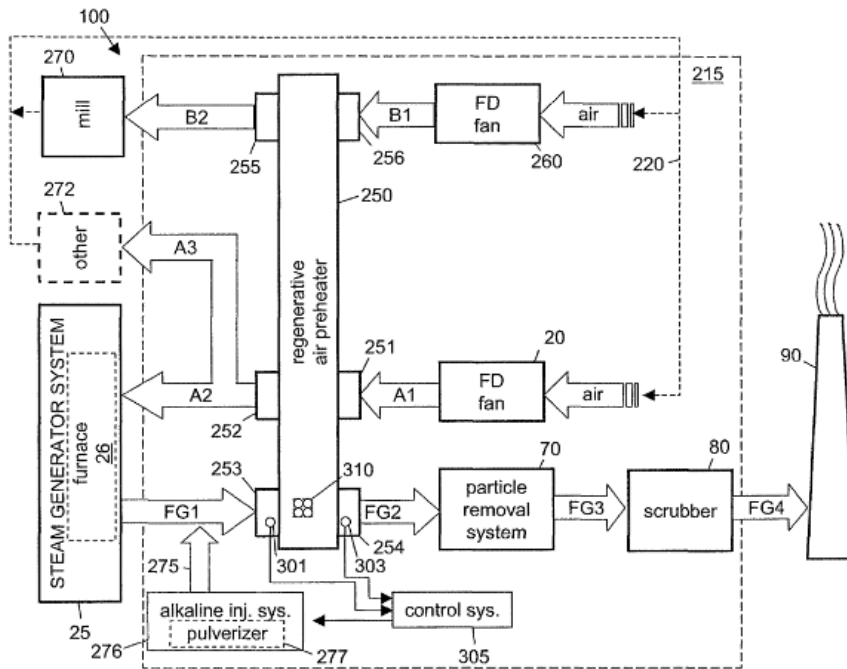
Definition statement

This place covers:

Illustrative example of subject matter classified in this place:

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The Figure illustrates an exhaust processing and heat recovery system with a regenerative heat exchanger (250), of the rotor type, which stores heat from flue gas (FG1) and then provides that heat to incoming air (A1). Exhaust air streams (A3, B2) use waste heat from furnace (26) to provide heat for other purposes, e.g. coal mill drying and grinding operations, site heating and others.

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Definition statement

This place covers:

Illustrative examples of subject matter classified in this place:

1.

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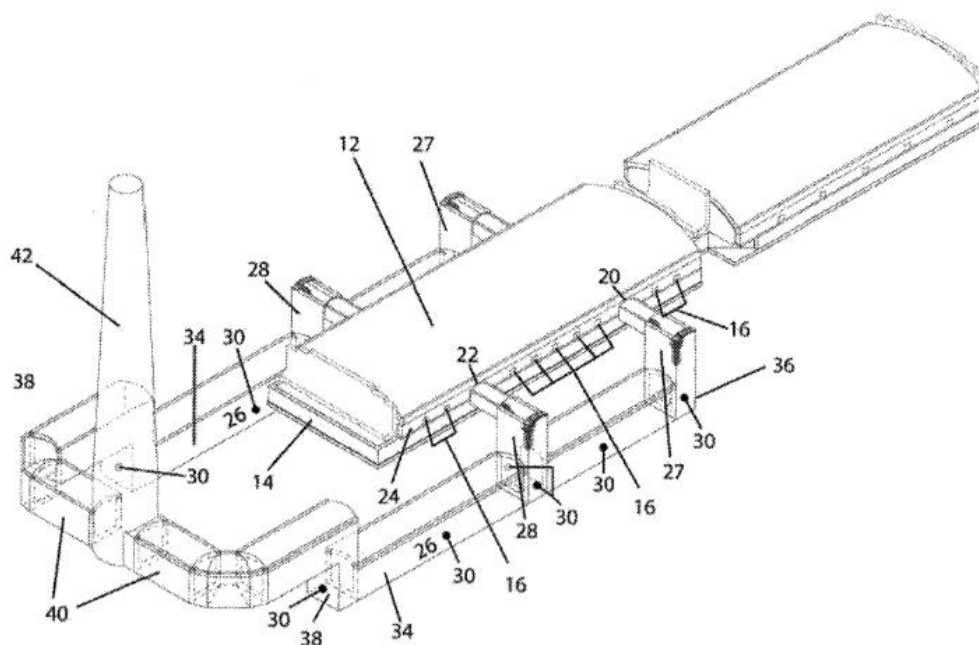
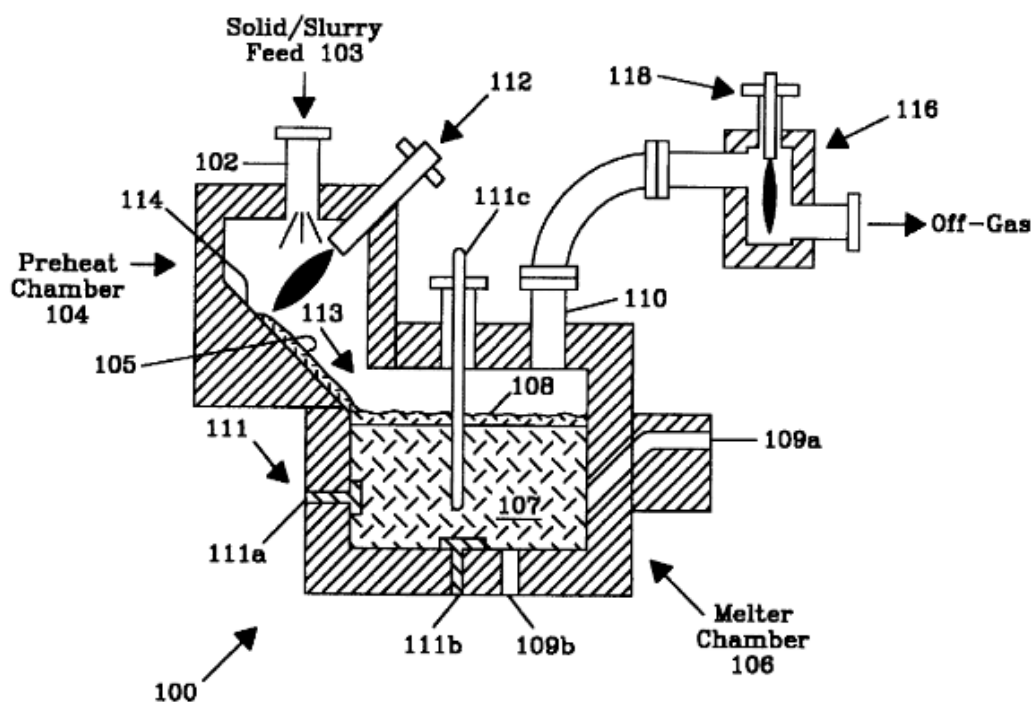


Figure 1 illustrates a plurality of nozzles (30) in the flue of furnace (12) which inject ammonia into the exhaust gas to treat NO_x emissions.

2.



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Figure 2 illustrates a plasma torch (118) at chamber (116) for pyrolysing volatile components in the exhaust gas.

References

Informative references

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

Separation in general	B01D
Separation of gases or vapours	B01D53/00
Removal of waste gases or dust coming from steel making converters	C21C5/38
Working-up flue dust	C22B7/02
Apparatus for combustion of waste gases or noxious gases	F23G7/06

F27D 17/22

References

Informative references

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

Dust collecting devices for iron or steel blast furnaces	C21B7/22
Details, accessories or equipment, e.g. dust-collectors, specially adapted for hearth-type furnaces	F27B3/10

F27D 17/302

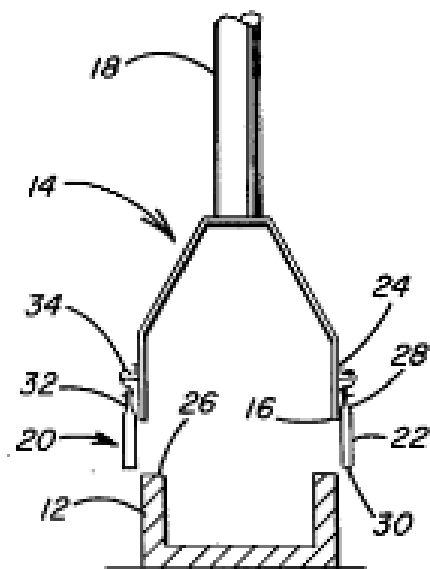
Definition statement

This place covers:

Illustrative example of subject matter classified in this place:

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The Figure illustrates a pipe curtain (20) for confining pollutants emitted from the furnace trough (12).

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2. A. DEFINITIONS (modified)

F27D 17/00

References

Informative references

Replace: The existing Informative references table with the following updated table.

Preventing escape of dirt or fumes from the area where they are produced	B08B15/00
Heat-exchangers in general	F28

F27D 17/30

References

Informative references

Replace: The existing Informative references table with the following updated table.

Parts, details or accessories of cooking-vessels for withdrawing or condensing cooking vapours from such vessels	A47J36/38
Preventing escape of dirt or fumes from the area where they are produced	B08B15/00
Removal of waste gases or dust coming from steel making converters	C21C5/38
Devices for conducting smoke or fumes, e.g. flues	F23J11/00
Removing cooking fumes from domestic stoves or ranges	F24C15/20

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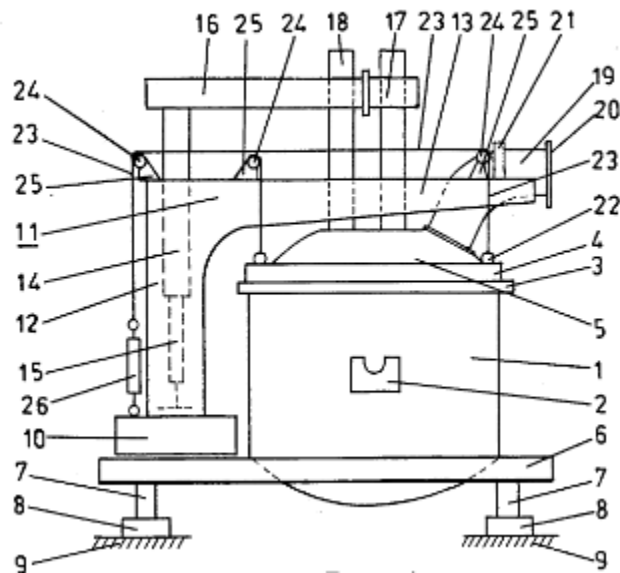
F27D 17/304

Insert: The following new Definition statement.

Definition statement

This place covers:

Illustrative example of subject matter classified in this place:



The Figure illustrates an electric arc furnace with an exhaust nozzle (19) integrated into the lid also supporting electrodes (17, 18).

References**Informative references**

Replace: The existing Informative references table with the following updated table.

Working up flue dust to produce non-ferrous metals and compounds thereof	C22B7/02
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