B01B

BOILING; BOILING APPARATUS {; EVAPORATION; EVAPORATION APPARATUS}

Definition statement

This place covers:

Documents where liquid evaporation or boiling without separation takes place.

Relationships with other classification places

Semi-conductor fabrication involving evaporation step process is classified in H01L 21/00.

Coating by vacuum evaporation is classified in C23C 14/00

References

Informative references

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

Feeding chemical reactors, in particular reformer	B01J 8/0278, B01J 19/0093
Selective catalytic reduction [SCR]	F01N 3/2066

B01B 1/00

Boiling; Boiling apparatus for physical or chemical purposes {; Evaporation in general}

Definition statement

This place covers:

- Boiling; Boiling apparatus for physical or chemical purposes, e.g. preventing foaming or preventing bumping
- Evaporation

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:

Concentration of starch suspensions	C08B 30/08
Evaporators or boiling pans specially adapted for sugar juices; Evaporating or boiling sugar juices	C13B 25/00

Informative references

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

Steam generation	F22
Domestic boilers	F24

B01B 1/005

{Evaporation for physical or chemical purposes; Evaporation apparatus therefor, e.g. evaporation of liquids for gas phase reactions}

Definition statement

This place covers:

Evaporation or evaporation apparatus for physical or chemical purposes, i.e. transformation of a liquid into gaseous form to be introduced in a further step (mainly reaction), e.g. evaporation of liquids for gas phase reactions or evaporator for organic materials.

Relationships with other classification places

In B01B 1/00 there is no separation of components, while in B01D 1/00 there is separation of components.

References

Informative references

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

Evaporation for separation	B01D
Chemical vapour deposition	C23C
Cooling by evaporation	F01P 9/02
Evaporation of fuels to be fed	F23D
Refrigeration by evaporation	F25B
Drying by evaporation	F26B
Evaporation for preparing samples for analysis	G01N

Glossary of terms

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

evaporation	liquid vaporisation that is a surface phenomenon that occurs at any temperature
boiling	liquid vaporisation that is a bulk phenomenon that only occurs when the temperature of the liquid is above the boiling point of the liquid

B01B 1/02

Preventing foaming

References

Informative references

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

Preventing foaming during degasification	B01D 19/02

B01B 1/08

Boiling apparatus provided with reflux condenser

References

Informative references

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

Condensation in separation	B01D 5/0063

Glossary of terms

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

reflux condenser	condenser in which the hot solvent vapours of a liquid being heated are cooled and allowed to drip back into the boiling apparatus