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 <a>C23C <a>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, 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 | <u>F22</u> |
|------------------|------------|
| Domestic boilers | <u>F24</u> |

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, evaporator for organic materials

Relationships with other classification places

In $\underline{\mathsf{B01B}\ 1/00}$ there is no separation of components, while in $\underline{\mathsf{B01D}\ 1/00}$ 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 | <u>B01D</u> |
|--|-------------|
| Chemical vapour deposition | <u>C23C</u> |
| Cooling by evaporation | F01P 9/02 |
| Evaporation of fuels to be fed | <u>F23D</u> |
| Refrigeration by evaporation | <u>F25B</u> |
| Drying by evaporation | <u>F26B</u> |
| Evaporation for preparing samples for analysis | <u>G01N</u> |

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 vapors of a liquid being heated |
|------------------|--|
| | are cooled and allowed to drip back into the boiling apparatus. |