

CPC**COOPERATIVE PATENT CLASSIFICATION****F28B**

STEAM OR VAPOUR CONDENSERS (condensation of vapours [B01D 5/00](#); steam engine plants having condensers [F01K](#) ; liquefaction of gases [F25J](#) ; details of heat-exchange and heat-transfer arrangements of general application [F28E](#))

Guidance heading:**F28B 1/00**

Condensers in which the steam or vapour is separate from the cooling medium by walls, e.g. surface condenser

F28B 1/02

- . using water or other liquid as the cooling medium

F28B 1/04

- . . employing moving walls

F28B 1/06

- . using air or other gas as the cooling medium

NOTE

This group covers also air cooled heat exchangers for which the use as condenser is not explicitly specified, but the configuration is similar to air cooled condensers, e.g. dry cooling towers

F28B 1/08

- . . employing moving walls

F28B 3/00

Condensers in which the steam or vapour comes into direct contact with the cooling medium

F28B 3/02

- . by providing a flowing coating of cooling liquid on the condensing surface

F28B 3/04

- . by injecting cooling liquid into the steam or vapour ([F28B 3/08](#) takes precedence)

F28B 3/06

- . by injecting the steam or vapour into the cooling liquid ([F28B 3/08](#) takes precedence)

F28B 3/08

- . with rotatable members

F28B 5/00

Condensers employing a combination of the methods covered by main groups [F28B 1/00](#) and [F28B 3/00](#); Other condensers

F28B 7/00

Combinations of two or more condensers, e.g. provision of reserve condenser

F28B 9/00

Auxiliary systems, arrangements, or devices

F28B 9/005

- . {for protection against freezing }

F28B 9/02

- . for feeding steam or vapour to condensers

F28B 9/04

- . for feeding, collecting, and storing cooling water or other cooling liquid

F28B 9/06 . . with provision for re-cooling the cooling water or other cooling liquid

F28B 9/08 . for collecting and removing condensate

F28B 9/10 . for extracting, cooling, and removing non-condensable gases

F28B 11/00 **Controlling arrangements with features specially adapted for condensers** ([control arrangements in general G05](#))

Guidance heading:

F28B 2001/00 **Condensers in which the steam or vapour is separate from the cooling medium by walls, e.g. surface condenser**

F28B 2001/06 . using air or other gas as the cooling medium

NOTE

This group covers also air cooled heat exchangers for which the use as condenser is not explicitly specified, but the configuration is similar to air cooled condensers, e.g. dry cooling towers

F28B 2001/065 . . with secondary condenser, e.g. reflux condenser or dephlegmator