CPC COOPERATIVE PATENT CLASSIFICATION

F MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING
(NOTE omitted)

LIGHTING; HEATING

F28 HEAT EXCHANGE IN GENERAL
(NOTES omitted)

F28C HEAT-EXCHANGE APPARATUS, NOT PROVIDED FOR IN ANOTHER SUBCLASS, IN WHICH THE HEAT-EXCHANGE MEDIA COME INTO DIRECT CONTACT WITHOUT CHEMICAL INTERACTION (safety devices in general F16P; fluid heaters having heat generating means F24H; with an intermediate heat-transfer medium coming into direct contact with heat-exchange media F28D 15/00 - F28D 19/00; details of heat-exchange apparatus of general application F28F)

WARNING

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.

1/00 Direct-contact trickle coolers, e.g. cooling towers (building construction E04H 5/12; enclosed spaces cooled by trickle F25; components parts of trickle coolers F28F 25/00; {indirect-contact cooling towers F28B 1/06})

1/003 . {comprising outlet ducts for exhaust gases}

2001/006 . {Systems comprising cooling towers, e.g. for recooling a cooling medium}

1/02 . with counter-current only

1/04 . with cross-current only

1/06 . with both counter-current and cross-current

1/08 . Arrangements for recovering heat from exhaust steam

1/10 . Arrangements for suppressing noise

1/12 . Arrangements for preventing clogging by frost

1/14 . comprising also a non-direct contact heat exchange

2001/145 . . {with arrangements of adjacent wet and dry passages}

1/16 . Arrangements for preventing condensation, precipitation or mist formation, outside the cooler (F28C 1/14 takes precedence)

3/00 Other direct-contact heat-exchange apparatus

3/005 . {one heat-exchange medium being a solid (F28C 3/10 takes precedence)}

3/02 . the heat-exchange media both being gases or vapours

3/04 . the heat-exchange media both being liquids

3/06 . the heat-exchange media being a liquid and a gas or vapour (temperators for cooling steam F22)

3/08 . . with change of state, e.g. absorption, evaporation, condensation (generating steam under pressure F22)

3/10 . one heat-exchange medium at least being a fluent solid, e.g. a particulate material

3/12 . . the heat-exchange medium being a particulate material and a gas, vapour, or liquid

3/14 . . . the particulate material moving by gravity, e.g. down a tube

3/16 . . . the particulate material forming a bed, e.g. fluidised, on vibratory sieves

3/18 . . . the particulate material being contained in rotating drums