F	Sektion	MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING
F28	Klasse	HEAT EXCHANGE IN GENERAL (heat-transfer, heat-exchange or heat-storage materials C09K 5/00; arrangement or mounting of heat-exchangers in air-conditioning, air-humidification or ventilation F24F 13/30)
F28C	Unterklasse	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 to F28D 19/00; details of heat-exchange apparatus of general application F28F)
F28C 1/00	Hauptgruppe	Direct-contact trickle coolers, e.g. cooling towers (building construction E04H 5/12; enclosed spaces cooled by trickle F25; component parts of trickle coolers F28F 25/00)
F28C 1/02	1-Punkt Untergruppe	. with counter-current only
F28C 1/04	1-Punkt Untergruppe	. with cross-current only
F28C 1/06	1-Punkt Untergruppe	. with both counter-current and cross-current
F28C 1/08	1-Punkt Untergruppe	. Arrangements for recovering heat from exhaust steam
F28C 1/10	1-Punkt Untergruppe	. Arrangements for suppressing noise [5]
F28C 1/12	1-Punkt Untergruppe	. Arrangements for preventing clogging by frost [3]
F28C 1/14	1-Punkt Untergruppe	. comprising also a non-direct contact heat exchange [3]
F28C 1/16	1-Punkt Untergruppe	. Arrangements for preventing condensation, precipitation or mist formation, outside the cooler (F28C 1/14 takes precedence) [3]
F28C 3/00	Hauptgruppe	Other direct-contact heat-exchange apparatus
F28C 3/02	1-Punkt Untergruppe	. the heat-exchange media both being gases or vapours
F28C 3/04	1-Punkt Untergruppe	. the heat-exchange media both being liquids
F28C 3/06	1-Punkt Untergruppe	. the heat-exchange media being a liquid and a gas or vapour (temperators for cooling steam F22)
F28C 3/08	2-Punkt Untergruppe	with change of state, e.g. absorption, evaporation, condensation (generating steam under pressure F22)
F28C 3/10	1-Punkt Untergruppe	. one heat-exchange medium at least being a fluent solid, e.g. a particulate material
F28C 3/12	2-Punkt Untergruppe	the heat-exchange medium being a particulate material and a gas, vapour, or liquid
F28C 3/14	3-Punkt Untergruppe	the particulate material moving by gravity, e.g. down a tube
F28C 3/16	3-Punkt Untergruppe	the particulate material forming a bed, e.g. fluidised, on vibratory sieves
F28C 3/18	3-Punkt Untergruppe	the particulate material being contained in rotating drums