SECTION F — MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING

F25 REFRIGERATION OR COOLING; COMBINED HEATING AND REFRIGERATION SYSTEMS; HEAT PUMP SYSTEMS; MANUFACTURE OR STORAGE OF ICE; LIQUEFACTION OR SOLIDIFICATION OF GASES

F25J LIQUEFACTION, SOLIDIFICATION, OR SEPARATION OF GASES OR GASEOUS MIXTURES BY PRESSURE AND COLD TREATMENT (cryogenic pumps F04B 37/08; gas storage vessels, gas-holders F17; filling vessels with, or discharging from vessels, compressed, liquefied, or solidified gases F17C; refrigeration machines, plants, or systems F25B)

1/00 Processes or apparatus for liquefying or solidifying gases or gaseous mixtures [1, 2006.01]

1/02 • requiring the use of refrigeration, e.g. of helium or hydrogen **[1, 2006.01]**

3/00 Processes or apparatus for separating the constituents of gaseous mixtures involving the use of liquefaction or solidification [1, 2006.01]

3/02 • by rectification, i.e. by continuous interchange of heat and material between a vapour stream and a liquid stream (F25J 3/08 takes precedence) **[1, 2006.01]**

3/04 • • for air **[1, 2006.01]**

3/06 • by partial condensation (F25J 3/08 takes precedence; by rectification F25J 3/02) **[1, 2006.01]**

3/08 • Separating gaseous impurities from gases or gaseous mixtures (cold traps B01D 8/00) **[1, 2006.01]**

5/00 Arrangements of cold-exchangers or cold-accumulators in separation or liquefaction plants (heat-exchangers F28C, F28D, F28F) **[1, 2006.01]**