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

F25D REFRIGERATORS; COLD ROOMS; ICE-BOXES; COOLING OR FREEZING APPARATUS NOT COVERED BY ANY OTHER SUBCLASS (refrigerated showcases A47F 3/04; thermally-insulated vessels for domestic use A47J 41/00; refrigerated vehicles, see the appropriate subclasses of classes B60-B64; containers with thermal insulation in general B65D 81/38; heat-transfer, heat-exchange or heat-storage materials, e.g. refrigerants, or materials for the production of heat or cold by chemical reactions other than by combustion C09K 5/00; thermally-insulated vessels for liquefied or solidified gases F17C; air-conditioning or air-humidification F24F; refrigeration machines, plants, or systems F25B; cooling of instruments or comparable apparatus without refrigeration G12B; cooling of engines or pumps, see the relevant classes)

Note(s) [5, 2009.01]

1. Devices associated with refrigerating machinery are classified in groups F25D 11/00-F25D 16/00.
2. In this subclass, the following term is used with the meaning indicated:
   - "device" means an enclosed space to be cooled; such devices being associated either with refrigerating machinery, e.g. in a refrigerator, or with other cold sources, e.g. in an ice-box.
3. Attention is drawn to Note (2) following the title of subclass F24F.

Subclass index

DEVICES NOT ASSOCIATED WITH REFRIGERATING MACHINERY
Using cold air or water; other cold materials or bodies....1/00, 3/00
Using endothermic chemical reactions, or evaporation without recovery....5/00, 7/00
Other devices, combinations....9/00
DEVICES ASSOCIATED WITH REFRIGERATING MACHINERY: SELF-CONTAINED MOVABLE; STATIONARY; OTHER....11/00, 13/00, 15/00
In combination with a cooling mode not associated with refrigerating machinery....16/00
STRUCTURAL PARTS OR ARRANGEMENTS, OF GENERAL APPLICATION: DEFROSTING; GENERAL FEATURES; HANDLING OF ARTICLES TO BE COOLED....21/00, 23/00, 25/00
CIRCULATING COOLING FLUID OR GAS; LIGHTING....17/00, 27/00
ARRANGEMENT OR MOUNTING: OF REFRIGERATION UNITS; OF CONTROL OR SAFETY DEVICES....19/00, 29/00
OTHER APPARATUS....31/00

Devices not associated with refrigerating machinery

1/00 Devices using naturally-cold air or water [1, 2006.01]

1/02 • using naturally-cold water, e.g. household-tap water **[1, 2006.01]**

3/00 Devices using other cold materials; Devices using cold-storage bodies [1, 2006.01]

3/02 • using ice, e.g. ice-boxes **[1, 2006.01]**
3/04 • • Stationary cabinets **[1, 2006.01]**
3/06 • • Movable containers **[1, 2006.01]**
3/08 • • • portable, i.e. adapted to be carried personally **[1, 2006.01]**
3/10 • using liquefied gases, e.g. liquid air **[1, 2006.01]**
3/11 • • with conveyors carrying articles to be cooled through the cooling space **[4, 2006.01]**
3/12 • using solidified gases, e.g. carbon-dioxide snow **[1, 2006.01]**
3/14 • • portable, i.e. adapted to be carried personally **[1, 2006.01]**

5/00 Devices using endothermic chemical reactions, e.g. using frigorific mixtures [1, 2006.01]

5/02 • portable, i.e. adapted to be carried personally **[1, 2006.01]**

7/00 Devices using evaporation effects without recovery of the vapour (butter or cheese dishes with cooling devices A47G 19/26) **[1, 2006.01]**

9/00 Devices not associated with refrigerating machinery and not covered by groups F25D 1/00-F25D 7/00; Combinations of devices covered by two or more of the groups F25D 1/00-F25D 7/00 [1, 2006.01]

Devices associated with refrigerating machinery

11/00 Self-contained movable devices associated with refrigerating machinery, e.g. domestic refrigerators [1, 2006.01]

11/02 • with cooling compartments at different temperatures **[1, 2006.01]**

11/04 • specially adapted for storing deep-frozen articles (F25D 11/02 takes precedence) **[1, 2006.01]**

13/00 Stationary devices associated with refrigerating machinery, e.g. cold rooms [1, 2006.01]

13/02 • with several cooling compartments, e.g. refrigerated locker systems **[1, 2006.01]**

13/04 • • the compartments being at different temperatures **[1, 2006.01]**

13/06 • with conveyors carrying articles to be cooled through the cooling space **[1, 2006.01]**

15/00 Devices associated with refrigerating machinery not covered by group F25D 11/00 or F25D 13/00, e.g. non-self-contained movable devices [1, 2006.01]

16/00 Devices using a combination of a cooling mode associated with refrigerating machinery with a cooling mode not associated with refrigerating machinery [5, 2006.01]

Details or features of the devices covered by groups F25D 1/00-F25D 16/00 [5]

17/00 Arrangements for circulating cooling fluids; Arrangements for circulating gas, e.g. air, within refrigerated spaces [1, 3, 2006.01]

17/02 • for circulating liquids, e.g. brine **[1, 2006.01]**

17/04 • for circulating gas, e.g. by natural convection **[1, 3, 2006.01]**

17/06 • • by forced circulation **[1, 2006.01]**

17/08 • • • using ducts **[1, 2006.01]**

19/00 Arrangement or mounting of refrigeration units with respect to devices [1, 2006.01]

19/02 • plug-in type **[1, 2006.01]**

19/04 • with more than one refrigeration unit **[1, 2006.01]**

21/00 Defrosting; Preventing frosting; Removing condensed or defrost water (removing ice or water from heat-exchange apparatus in general F28F 17/00; heating arrangements specially adapted for transparent or reflecting areas H05B 3/84) **[1, 2006.01]**

21/02 • Detecting the presence of frost or condensate **[1, 2006.01]**

21/04 • Preventing the formation of frost or condensate **[1, 2006.01]**

21/06 • Removing frost (defrosting cycles F25B 47/02) **[1, 2006.01]**

21/08 • • by electric heating **[1, 2006.01]**

21/10 • • by spraying with fluid **[1, 2006.01]**

21/12 • • by hot-fluid circulating system separate from the refrigerant system **[1, 2006.01]**

21/14 • Collecting or removing condensed and defrost water; Drip trays **[1, 2006.01]**

23/00 General constructional features (F25D 21/00 takes precedence) **[1, 2006.01]**

23/02 • Doors; Covers (F25D 23/08 takes precedence) **[1, 2006.01]**

23/04 • • with special compartments, e.g. butter conditioners **[1, 2006.01]**

23/06 • Walls (F25D 23/08 takes precedence; containers with thermal insulation B65D 81/38) **[1, 4, 2006.01]**

23/08 • Parts formed wholly or mainly of plastics materials **[1, 2006.01]**

23/10 • Arrangements for mounting in particular locations, e.g. for built-in type, for corner type **[1, 2006.01]**

23/12 • Arrangements of compartments additional to cooling compartments; Combinations of refrigerators with other equipment, e.g. stove **[1, 2006.01]**

25/00 Charging, supporting, or discharging the articles to be cooled [1, 2006.01]

25/02 • by shelves **[1, 2006.01]**

25/04 • by conveyors (in general B65G) **[1, 2006.01]**

27/00 Lighting arrangements (in general F21) **[1, 2006.01]**

29/00 Arrangement or mounting of control or safety devices [1, 2006.01]

31/00 Other cooling or freezing apparatus [1, 2006.01]