

CPC**COOPERATIVE PATENT CLASSIFICATION****F25C**

PRODUCTION, WORKING, STORING OR DISTRIBUTION OF ICE (frozen sweets, including ice-cream, their production [A23G 9/00](#); concentrating solutions by removing frozen solvents [B01D 9/04](#); purification of water by freezing [C02F 1/22](#); refrigeration machines, plants or systems [F25B](#) ; solidification of gases or gaseous mixtures [F25J](#) ; freeze drying [F26B](#))

NOTE

Within the subclass, the term "ice" means any frozen liquid and is to be understood as also covering frozen semi-liquids or pasty substances.

Guidance heading:**F25C 1/00**

Production of ice ([F25C 3/00](#) takes precedence)

F25C 1/02

- . Production of natural ice, i.e. without refrigeration

F25C 1/04

- . by using stationary moulds

F25C 1/045

- .. {with the open end pointing downwards }

F25C 1/06

- .. open or openable at both ends

F25C 1/08

- . by immersing freezing chambers or plates into water

F25C 1/10

- . by using rotating or otherwise moving moulds ([F25C 1/08](#) takes precedence)

F25C 1/12

- . by freezing water on cooled surfaces, e.g. to form slabs

F25C 1/125

- .. {on flexible surfaces }

F25C 1/14

- .. to form thin sheets which are removed by scraping or wedging

F25C 1/142

- ... {from the outer wall of a cooled body }

F25C 1/145

- ... {from the inner wall of a cooled body }

F25C 1/147

- {by using augers }

F25C 1/16

- . by partially evaporating water in a vacuum

F25C 1/18

- . of a particular transparency or translucency, e.g. by injecting air

F25C 1/20

- .. by agitation

F25C 1/22

- . Construction of moulds; Filling devices therefor ([metering by volume in general G01F](#))

F25C 1/225

- .. {Filling devices for moulds }

F25C 1/24

- .. for refrigerators, e.g. freezing trays

F25C 1/243

- ... {of plastic materials }

F25C 1/246

- ... {with separate grid structure }

F25C 3/00

Methods or apparatus specially adapted for the production of ice or snow for

winter sports or similar recreational purposes, e.g. for sporting installations ;
Production of artificial snow (foundations or pavings for artificial surfaces for outdoor or indoor practice of snow or ice sports [E01C 13/10](#); working on surfaces of snow or ice in order to make them suitable for traffic or sporting purposes [E01H 4/00](#))

- F25C 3/02 . for ice rinks (shape of rinks [A63C 19/10](#); construction of rinks [E01C](#))
- F25C 3/04 . for sledging or ski trails; Production of artificial snow (shape of trails [A63C 19/10](#); construction of trails [E01C](#))
- F25C 5/00 Working, storing or distribution of ice**
- F25C 5/002 . {Distributing ice }
- F25C 5/005 . . {particularly adapted for household refrigerators }
- F25C 5/007 . . {for storing bins (ice bins in general [F25C 5/182](#)) }
- F25C 5/02 . Tools or machines for disintegrating, removing or harvesting ice
- F25C 5/04 . . without the use of saws
- F25C 5/043 . . . {Tools, e.g. ice picks, ice crushers, ice shavers }
- F25C 5/046 . . . {Ice-crusher machines }
- F25C 5/06 . . . by deforming bodies with which the ice is in contact, e.g. by inflatable members
- F25C 5/08 . . . by heating bodies in contact with the ice
- F25C 5/10 using hot refrigerant; using fluid heated by refrigerant
- F25C 5/12 . . . Ice-shaving machines
- F25C 5/14 . Tools or machines for shaping or finishing ice pieces, e.g. ice presses
- F25C 5/16 . Tools or devices for ice handling not covered by any other subclass
- F25C 5/18 . Storing ice
- F25C 5/182 . . {Ice bins (distributing arrangements therefor [F25C 5/007](#)) }
- F25C 5/185 . . . {combined with freezing trays }
- F25C 5/187 . . . {combined with ice level sensing means }

Guidance heading:

F25C 2300/00 Special arrangements or features for production, working, storing or distribution of ice

Guidance heading:

F25C 2301/00 Special arrangements or features for the production of ice

- F25C 2301/002 . Production of ice slurries

F25C 2303/00 **Special arrangements or features for the production of ice or snow for winter sports or similar recreational purposes, e.g. for sporting installations; Special arrangements or features for the production of artificial snow**

- F25C 2303/042 . Snow making by using solid ice, e.g. ice crushing
- F25C 2303/044 . Snow making using additional features, e.g. additives, liquid gas
- F25C 2303/046 . Snow making by using low pressure air ventilators, e.g. fan type snow canons
- F25C 2303/048 . Snow making by using means for spraying water
- F25C 2303/0481 . . with the use of compressed air

F25C 2305/00 **Special arrangements or features for working or distributing ice**

- F25C 2305/022 . Harvesting of ice including rotating or tilting or pivoting of a mould or tray

F25C 2400/00 **Auxiliary features or devices for production, working, storing or distribution of ice**

- F25C 2400/02 . Freezing surface state
- F25C 2400/04 . Ice guide, e.g. for guiding ice blocks to storage tank
- F25C 2400/06 . Multiple ice moulds or trays therefor
- F25C 2400/08 . for different type of ice
- F25C 2400/10 . Refrigerator units
- F25C 2400/12 . Means for sanitation
- F25C 2400/14 . Water supply

F25C 2500/00 **Problems to be solved**

- F25C 2500/02 . Geometry problems
- F25C 2500/04 . Calculation of parameters
- F25C 2500/06 . Spillage or flooding of water
- F25C 2500/08 . Sticking or clogging of ice

F25C 2600/00 **Control issues**

- F25C 2600/02 . Timing
- F25C 2600/04 . Control means

F25C 2700/00 Sensing or detecting of parameters; Sensors therefor

- F25C 2700/02 . Level of ice
- F25C 2700/04 . Level of water
- F25C 2700/06 . Rotation angle of the ejector ejecting ice from a stationary mould
- F25C 2700/08 . Power to drive the auger motor of an auger type ice making machine
- F25C 2700/10 . Rotating speed of the auger motor of an auger type ice making machine
- F25C 2700/12 . Temperature of ice trays
- F25C 2700/14 . Temperature of water