

**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.

**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}

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