

**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

<b>F25C 2303/00</b>	<b>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</b>
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
<b>F25C 2305/00</b>	<b>Special arrangements or features for working or distributing ice</b>
F25C 2305/022	. Harvesting of ice including rotating or tilting or pivoting of a mould or tray
<b>F25C 2400/00</b>	<b>Auxiliary features or devices for production, working, storing or distribution of ice</b>
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
<b>F25C 2500/00</b>	<b>Problems to be solved</b>
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
<b>F25C 2600/00</b>	<b>Control issues</b>
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