

**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 }

<b>F25C 3/00</b>	<b>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</b> (foundations or pavings for artificial surfaces for outdoor or indoor practice of snow or ice sports <a href="#">E01C 13/10</a> ; working on surfaces of snow or ice in order to make them suitable for traffic or sporting purposes <a href="#">E01H 4/00</a> )
F25C 3/02	. for ice rinks (shape of rinks <a href="#">A63C 19/10</a> ; construction of rinks <a href="#">E01C</a> )
F25C 3/04	. for sledging or ski trails; Production of artificial snow (shape of trails <a href="#">A63C 19/10</a> ; construction of trails <a href="#">E01C</a> )
<b>F25C 5/00</b>	<b>Working, storing or distribution of ice</b>
F25C 5/002	. { Distributing ice }
F25C 5/005	. . { particularly adapted for household refrigerators }
F25C 5/007	. . { for storing bins (ice bins in general <a href="#">F25C 5/182</a> ) }
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 <a href="#">F25C 5/007</a> ) }
F25C 5/185	. . . { combined with freezing trays }
F25C 5/187	. . . { combined with ice level sensing means }
<b>F25C 2300/00</b>	<b>Special arrangements or features for production, working, storing or distribution of ice</b>
<b>F25C 2301/00</b>	<b>Special arrangements or features for the production of ice</b>
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