

**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	<ul style="list-style-type: none"> <li>for sledging or ski trails; Production of artificial snow (<a href="#">shape of trails A63C 19/10</a>; <a href="#">construction of trails E01C</a>)</li> </ul>
<b>F25C 5/00</b>	<b>Working, storing or distribution of ice</b>
F25C 5/002	<ul style="list-style-type: none"> <li>{Distributing ice}</li> </ul>
F25C 5/005	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>{particularly adapted for household refrigerators}</li> </ul> </li> </ul>
F25C 5/007	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>{for storing bins (<a href="#">ice bins in general F25C 5/182</a>)}</li> </ul> </li> </ul>
F25C 5/02	<ul style="list-style-type: none"> <li>Tools or machines for disintegrating, removing or harvesting ice</li> </ul>
F25C 5/04	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>without the use of saws</li> </ul> </li> </ul>
F25C 5/043	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>{Tools, e.g. ice picks, ice crushers, ice shavers}</li> </ul> </li> </ul> </li> </ul>
F25C 5/046	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>{Ice-crusher machines}</li> </ul> </li> </ul> </li> </ul>
F25C 5/06	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>by deforming bodies with which the ice is in contact, e.g. by inflatable members</li> </ul> </li> </ul>
F25C 5/08	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>by heating bodies in contact with the ice</li> </ul> </li> </ul>
F25C 5/10	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>using hot refrigerant; using fluid heated by refrigerant</li> </ul> </li> </ul> </li> </ul>
F25C 5/12	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>Ice-shaving machines</li> </ul> </li> </ul>
F25C 5/14	<ul style="list-style-type: none"> <li>Tools or machines for shaping or finishing ice pieces, e.g. ice presses</li> </ul>
F25C 5/16	<ul style="list-style-type: none"> <li>Tools or devices for ice handling not covered by any other subclass</li> </ul>
F25C 5/18	<ul style="list-style-type: none"> <li>Storing ice</li> </ul>
F25C 5/182	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>{Ice bins (<a href="#">distributing arrangements therefor F25C 5/007</a>)}</li> </ul> </li> </ul>
F25C 5/185	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>{combined with freezing trays}</li> </ul> </li> </ul>
F25C 5/187	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>{combined with ice level sensing means}</li> </ul> </li> </ul>
<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	<ul style="list-style-type: none"> <li>Production of ice slurries</li> </ul>
<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	<ul style="list-style-type: none"> <li>Snow making by using solid ice, e.g. ice crushing</li> </ul>
F25C 2303/044	<ul style="list-style-type: none"> <li>Snow making using additional features, e.g. additives, liquid gas</li> </ul>
F25C 2303/046	<ul style="list-style-type: none"> <li>Snow making by using low pressure air ventilators, e.g. fan type snow canons</li> </ul>
F25C 2303/048	<ul style="list-style-type: none"> <li>Snow making by using means for spraying water</li> </ul>
F25C 2303/0481	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>with the use of compressed air</li> </ul> </li> </ul>
<b>F25C 2305/00</b>	<b>Special arrangements or features for working or distributing ice</b>
F25C 2305/022	<ul style="list-style-type: none"> <li>Harvesting of ice including rotating or tilting or pivoting of a mould or tray</li> </ul>
<b>F25C 2400/00</b>	<b>Auxiliary features or devices for production, working, storing or distribution of ice</b>
F25C 2400/02	<ul style="list-style-type: none"> <li>Freezing surface state</li> </ul>
F25C 2400/04	<ul style="list-style-type: none"> <li>Ice guide, e.g. for guiding ice blocks to storage tank</li> </ul>

- 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