

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