

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