

# 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.

<b>1/00</b>	<b>Production of ice</b> ( <a href="#">F25C 3/00</a> takes precedence)	5/043	. . . {Tools, e.g. ice picks, ice crushers, ice shavers}
1/02	. Production of natural ice, i.e. without refrigeration	5/046	. . . {Ice-crusher machines}
1/04	. by using stationary moulds	5/06	. . . by deforming bodies with which the ice is in contact, e.g. by inflatable members
1/045	. . {with the open end pointing downwards}	5/08	. . . by heating bodies in contact with the ice
1/06	. . open or openable at both ends	5/10	. . . . using hot refrigerant; using fluid heated by refrigerant
1/08	. by immersing freezing chambers or plates into water	5/12	. . . Ice-shaving machines
1/10	. by using rotating or otherwise moving moulds ( <a href="#">F25C 1/08</a> takes precedence)	5/14	. Tools or machines for shaping or finishing ice pieces, e.g. ice presses
1/12	. by freezing water on cooled surfaces, e.g. to form slabs	5/16	. Tools or devices for ice handling not covered by any other subclass
1/125	. . {on flexible surfaces}	5/18	. Storing ice
1/14	. . to form thin sheets which are removed by scraping or wedging	5/182	. {Ice bins (distributing arrangements therefor <a href="#">F25C 5/007</a> )}
1/142	. . . {from the outer wall of a cooled body}	5/185	. . . {combined with freezing trays}
1/145	. . . {from the inner wall of a cooled body}	5/187	. . . {combined with ice level sensing means}
1/147	. . . . {by using augers}		
1/16	. by partially evaporating water in a vacuum		
1/18	. of a particular transparency or translucency, e.g. by injecting air	<b>2300/00</b>	<b>Special arrangements or features for production, working, storing or distribution of ice</b>
1/20	. . by agitation	<b>2301/00</b>	<b>Special arrangements or features for the production of ice</b>
1/22	. Construction of moulds; Filling devices therefor ( <a href="#">metering by volume in general G01F</a> )	2301/002	. Production of ice slurries
1/225	. . {Filling devices for moulds}	<b>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>
1/24	. . for refrigerators, e.g. freezing trays	2303/042	. Snow making by using solid ice, e.g. ice crushing
1/243	. . . {of plastic materials}	2303/044	. Snow making using additional features, e.g. additives, liquid gas
1/246	. . . {with separate grid structure}	2303/046	. Snow making by using low pressure air ventilators, e.g. fan type snow canons
<b>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> )	2303/048	. Snow making by using means for spraying water
3/02	. for ice rinks ( <a href="#">shape of rinks A63C 19/10</a> ; <a href="#">construction of rinks E01C</a> )	2303/0481	. . with the use of compressed air
3/04	. 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> )	<b>2305/00</b>	<b>Special arrangements or features for working or distributing ice</b>
<b>5/00</b>	<b>Working, storing or distribution of ice</b>	2305/022	. Harvesting of ice including rotating or tilting or pivoting of a mould or tray
5/002	. {Distributing ice}	<b>2400/00</b>	<b>Auxiliary features or devices for production, working, storing or distribution of ice</b>
5/005	. . {particularly adapted for household refrigerators}	2400/02	. Freezing surface state
5/007	. . {for storing bins (ice bins in general <a href="#">F25C 5/182</a> )}	2400/04	. Ice guide, e.g. for guiding ice blocks to storage tank
5/02	. Tools or machines for disintegrating, removing or harvesting ice	2400/06	. Multiple ice moulds or trays therefor
5/04	. . without the use of saws	2400/08	. for different type of ice
		2400/10	. Refrigerator units
		2400/12	. Means for sanitation

2400/14 . Water supply

**2500/00 Problems to be solved**

2500/02 . Geometry problems

2500/04 . Calculation of parameters

2500/06 . Spillage or flooding of water

2500/08 . Sticking or clogging of ice

**2600/00 Control issues**

2600/02 . Timing

2600/04 . Control means

**2700/00 Sensing or detecting of parameters; Sensors therefor**

2700/02 . Level of ice

2700/04 . Level of water

2700/06 . Rotation angle of the ejector ejecting ice from a stationary mould

2700/08 . Power to drive the auger motor of an auger type ice making machine

2700/10 . Rotating speed of the auger motor of an auger type ice making machine

2700/12 . Temperature of ice trays

2700/14 . Temperature of water