

CPC COOPERATIVE PATENT CLASSIFICATION

F MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING (NOTE omitted)

LIGHTING; HEATING

F25 REFRIGERATION OR COOLING; COMBINED HEATING AND REFRIGERATION SYSTEMS; HEAT PUMP SYSTEMS; MANUFACTURE OR STORAGE OF ICE; LIQUEFACTION SOLIDIFICATION OF GASES

F25C PRODUCING, WORKING OR HANDLING ICE

NOTE

In this subclass, the following term is used with the meaning indicated:

- "ice" means any frozen liquid and also covers frozen semiliquids or pasty substances.

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| 1/00 | Producing ice (F25C 3/00 takes precedence) | 5/08 | . . . by heating bodies in contact with the ice |
| 1/02 | . Producing natural ice, i.e. without refrigeration | 5/10 | using hot refrigerant; using fluid heated by refrigerant |
| 1/04 | . by using stationary moulds | 5/12 | . . . Ice-shaving machines |
| 1/045 | . . with the open end pointing downwards | 5/14 | . Apparatus for shaping or finishing ice pieces, e.g. ice presses |
| 1/06 | . . open or openable at both ends | 5/142 | . . {extrusion of ice crystals} |
| 1/08 | . by immersing freezing chambers {, cylindrical bodies} or plates into water | 5/18 | . Storing ice |
| 1/10 | . by using rotating or otherwise moving moulds (F25C 1/08 takes precedence) | 5/182 | . . Ice bins therefor |
| 1/12 | . by freezing water on cooled surfaces, e.g. to form slabs | 5/185 | . . . with freezing trays |
| 1/125 | . . {on flexible surfaces} | 5/187 | . . . with ice level sensing means |
| 1/14 | . . to form thin sheets which are removed by scraping or wedging, e.g. in the form of flakes | 5/20 | . Distributing ice |
| 1/142 | . . . from the outer walls of cooled bodies | 5/22 | . . {particularly adapted for household refrigerators} |
| 1/145 | . . . from the inner walls of cooled bodies | 5/24 | . . {for storing bins (ice bins F25C 5/182)} |
| 1/147 | by using augers | 2300/00 | Special arrangements or features for producing, working or handling ice |
| 1/16 | . by partially evaporating water in a vacuum | 2301/00 | Special arrangements or features for producing ice |
| 1/18 | . of a particular transparency or translucency, e.g. by injecting air | 2301/002 | . Producing ice slurries |
| 1/20 | . . by agitation | 2303/00 | Special arrangements or features for producing ice or snow for winter sports or similar recreational purposes, e.g. for sporting installations; Special arrangements or features for producing artificial snow |
| 1/22 | . Construction of moulds; Filling devices for moulds | 2303/042 | . Snow making by using solid ice, e.g. ice crushing |
| 1/24 | . . for refrigerators, e.g. freezing trays | 2303/044 | . Snow making using additional features, e.g. additives, liquid gas |
| 1/243 | . . . Moulds made of plastics e.g. silicone | 2303/046 | . Snow making by using low pressure air ventilators, e.g. fan type snow canons |
| 1/246 | . . . Moulds with separate grid structure | 2303/048 | . Snow making by using means for spraying water |
| 1/25 | . . Filling devices for moulds | 2303/0481 | . . with the use of compressed air |
| 3/00 | Processes or apparatus specially adapted for producing ice or snow for winter sports or similar recreational purposes, e.g. for sporting installations; Producing artificial snow | 2305/00 | Special arrangements or features for working or handling ice |
| 3/02 | . for ice rinks | 2305/022 | . Harvesting ice including rotating or tilting or pivoting of a mould or tray |
| 3/04 | . for sledging or ski trails; Producing artificial snow | 2305/0221 | . . rotating ice mould |
| 5/00 | Working or handling ice (F25C 3/00 takes precedence) | 2305/024 | . Rotating rake |
| 5/02 | . Apparatus for disintegrating, removing or harvesting ice | 2400/00 | Auxiliary features or devices for producing, working or handling ice |
| 5/04 | . . without the use of saws | 2400/02 | . Freezing surface state |
| 5/043 | . . . {Tools, e.g. ice picks, ice crushers, ice shavers} | | |
| 5/046 | . . . {Ice-crusher machines} | | |
| 5/06 | . . . by deforming bodies with which the ice is in contact, e.g. using inflatable members | | |

F25C

- 2400/04 . Ice guide, e.g. for guiding ice blocks to storage tank
- 2400/06 . Multiple ice moulds or trays therefor
- 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