

Title (en)
Ice making machine

Title (de)
Eiserzeugungsmaschine

Title (fr)
Machine génératrice de glace

Publication
EP 0736738 A2 19961009 (EN)

Application
EP 96110325 A 19930329

Priority

- EP 93105187 A 19930329
- JP 5965292 U 19920731
- JP 6440092 U 19920822

Abstract (en)

Disclosed is a cam control mechanism in an ice making machine, in which a multiplicity of freezing fingers (36,117) formed on the lower surface of a freezing base plate (34,118) are dipped in the water supplied to a freezing chamber (32,129) defined in a water tray (24,116) to carry out a freezing operation and form inverted dome-shaped ice pieces (70,121) gradually around the freezing fingers (36,117); characterized in that said mechanism consists of a control cam (13,136) to be rotated by an actuator motor (AM) for tilting and resetting said water tray (24,116); and a control switch (SW1,SW7) disposed on the fixed side corresponding to the location of said control cam (13,136) for giving a cam action in accordance with a predetermined timing; wherein said control cam (13,136) and said control switch (SW1,SW7) are adapted to control at least tilting and resetting of said water tray (24,116), as well as, stopping thereof in such postures by the actuator motor (AM). The cam control mechanism of the invention can successfully attain a series of cam actions to be caused in accordance with the rotation of an actuator motor (AM) for driving the water tray (24,116) : (1) tilting of the water tray (24,116) and resetting thereof to the horizontal posture; (2) supply of hot gas to an evaporator (22,131) for accelerating releasing of ice pieces in the ice releasing operation and stopping thereof; and (3) replenishment of water to be frozen after a cycle of freezing operation and stopping thereof, whereby to realize simplification of the control system and reduction of production cost. <IMAGE>

IPC 1-7
F25C 1/08

IPC 8 full level
F25C 1/08 (2006.01)

CPC (source: EP KR)
F25C 1/08 (2013.01 - EP); **F25C 1/24** (2013.01 - KR); **F25C 2305/022** (2013.01 - EP); **F25C 2600/04** (2013.01 - EP)

Cited by
EP1736722A1; EP0859205A1; EP1757880A1; US9127871B2; US8844314B2; US8919145B2; US8695359B2; US8950197B2; US10493865B2; US8756951B2; US9273890B2; US9719711B2

Designated contracting state (EPC)
DE ES FR GB IT

DOCDB simple family (publication)
EP 0580950 A1 19940202; EP 0580950 B1 19970611; DE 69311452 D1 19970717; DE 69311452 T2 19971023; DE 69326360 D1 19991014; EP 0736738 A2 19961009; EP 0736738 A3 19970102; EP 0736738 B1 19990908; KR 940005934 A 19940322

DOCDB simple family (application)
EP 93105187 A 19930329; DE 69311452 T 19930329; DE 69326360 T 19930329; EP 96110325 A 19930329; KR 930011805 A 19930628