

Title (en)

System and method for determining defrost power delivered by a defrost heater

Title (de)

System und Verfahren zum Bestimmen der von einem Abtauheizer abgegebenen Abtauenergie

Title (fr)

Système et procédé pour déterminer la puissance de dégivrage fournie par un chauffage de dégivrage

Publication

EP 1843111 A2 20071010 (EN)

Application

EP 07007062 A 20070404

Priority

US 39915706 A 20060406

Abstract (en)

An adaptive defrost control system of the present invention monitors an amount of current flowing through the defrost heater (14) to calculate the instantaneous power and total energy delivered thereby. The circuit utilizes a thermistor (22) to monitor the temperature rise of the electrical trace (30) supplying current to the defrost heater (14) to allow the controller (12) to calculate the amount of current flowing therein. A second thermistor (24) may be used to compensate for a change in ambient temperature that might otherwise be attributed to a change in current flow through the power trace (30). A physical modification (26) to the power trace (30) to enhance the temperature rise characteristic at the point of placement of the thermistor (22) enhances the accuracy of the calculation. A secondary current flow path (28) around the branch of thermistor (22) placement is also provided so as to not reduce the total current carrying capacity of the power trace (30).

IPC 8 full level

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