Title (en)
CONTROLLER AND METHOD FOR CONTROLLING A DEFROST OPERATION IN A REFRIGERATOR

Title (de)
STEUERVORRICHTUNG UND VERFAHREN ZUM STEUERN DES ABTAUVORGANGES IN EINEM KÜHLSCHRANK

Title (fr)
MODULE ET PROCEDE DE COMMANDE DU PROCESSUS DE DEGIVRAGE DANS UN REFRIGERATEUR

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Abstract (en)
[origin: EP1030137A1] The present invention relates to a controller and a method of controlling a defrost operation in a refrigerator. The duration of a refrigeration period is determined by the amount of time needed for defrosting the evaporator of the refrigerator. If the defrost duration deviates from a target defrost duration, the next refrigeration period is adjusted accordingly, to maintain the actual defrost duration close to the target defrost duration. According to the invention, the target defrost duration is determined based on the detection of a thermal dispersion of the refrigerator. A high ambient temperature results in a reduced target defrost duration while in low ambient temperature conditions the target defrost duration is larger. Preferably, the thermal dispersion is detected based on the ratio of a rate of fall of evaporator temperature when the compressor is on to a rate of rise of evaporator temperature when the compressor is off, on a continuous basis during the refrigeration period. <IMAGE>

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