

Title (en)

POULTRY ENVIRONMENTAL CONTROL SYSTEMS AND METHODS

Title (de)

UMWELTKONTROLLSYSTEM UND -VERFAHREN FÜR GEFLÜGELHOF

Title (fr)

PROCEDES ET SYSTEMES DE REGULATION DE L'ENVIRONNEMENT DE POULAILLERS D'ELEVAGE

Publication

EP 0797793 A4 19990107 (EN)

Application

EP 95916437 A 19950418

Priority

- US 9504723 W 19950418
- US 30838794 A 19940919
- US 30885094 A 19940919

Abstract (en)

[origin: WO9609576A1] A poultry house controller (14) situated within a poultry house (12) regulates the relative humidity and temperature within the poultry house (12) via actuation of fans (22) and heaters (24) in response to temperature and humidity feedback signals from temperature sensors (16) and humidity sensors (18), respectively. The controller (14) can communicate with a host computer (16) and other controllers (14) situated at other houses (12). The controller (14) comprises an integrity check means (234) for checking temperature and humidity values detected by these sensors (16, 18). The integrity check means (234) ensures the accuracy of values by eliminating a value from consideration if it falls outside predefined range of the average of the other values received from other sensors. Additionally, the controller (14) utilizes watchdog timing signals (100) for ensuring continuous operation. The watchdog timing signals (100) are generated by a control program (108) and are sent to an alarm system (92). An alarm horn (94) is sounded upon failure to receive a watchdog timing signal (100) within a predefined time period. Finally, the controller (14) optimally controls the fans (22) for ventilation and for modifying temperature by decreasing the predefined time period pertaining to the fan dedicated to minimum ventilation requirements by a time amount corresponding to actuation of another fan within the predefined time interval.

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CPC (source: EP)

A01K 1/0047 (2013.01)

Citation (search report)

- [Y] US 4432210 A 19840221 - SAITO TAKAO [JP]
- [Y] DE 3145333 A1 19830526 - BBC BROWN BOVERI & CIE [DE]
- [Y] DE 4127179 A1 19930218 - GAEBKEN ELEKTROINSTALLATION GM [DE]
- [A] US 4845435 A 19890704 - BOHAN JR JOHN E [US]
- [A] EP 0191937 A1 19860827 - SIEMENS AG [DE]
- [A] GB 2092778 A 19820818 - VENTEC AGRICULTURAL LTD, et al
- See references of WO 9609576A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

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