

Title (en)

Method for controlling the drying in the domestic laundry driers

Title (de)

Verfahren zum Steuern von Trockenvorgängen in Haushalt-Wäschetrocknern

Title (fr)

Procédé pour commander le séchage dans les sèche-linge domestiques

Publication

EP 0719885 B1 19990908 (DE)

Application

EP 95117421 A 19951106

Priority

DE 4447270 A 19941230

Abstract (en)

[origin: EP0719885A1] A domestic tumbler drier with a fan which blows air through a heater has temp. and moisture sensors as well as a programmable electronic controller which can store measured values and process variables. At the start (t0) of the drying process the air temp. (Δ 4s) at the drum exit is measured and during a time interval (t0-t2) part or all of the heater is periodically switched ON and OFF. At the end of the start-up period (t0-t2), which covers one to three switching cycles, temp. measurements at the heater inlet (Δ 2), at the drum inlet (Δ 3) and at the drum exit (Δ 4) are used to calculate temp. differences which are stored together with the time elapsed. Temps. and laundry moisture contents are measured continuously or with a frequency of several times per second. When limiting values (A1, A2) according to previously input laundry parameters have been reached, one of several stored process sequences are fed to the controller. Pref. the controller uses a fuzzy logic processor to estimate the drying time from the temp. differentials in the start-up period and the time taken to reach a critical outlet temp. or intermediate laundry moisture content. The controller has a number of algorithms for various input conditions, e.g. different degrees of required dryness, laundry type, etc..

IPC 1-7

D06F 58/28

IPC 8 full level

D06F 58/38 (2020.01)

CPC (source: EP US)

D06F 25/00 (2013.01 - EP US); **D06F 58/38** (2020.02 - EP US); **D06F 2103/00** (2020.02 - EP US); **D06F 2103/08** (2020.02 - EP US);
D06F 2103/12 (2020.02 - EP US); **D06F 2103/32** (2020.02 - EP US); **D06F 2103/38** (2020.02 - EP US); **D06F 2105/28** (2020.02 - EP US)

Cited by

CN110685112A; DE10213986A1; EP2966216A4; CN111379151A

Designated contracting state (EPC)

CH DE FR LI SE

DOCDB simple family (publication)

EP 0719885 A1 19960703; EP 0719885 B1 19990908; DE 4447270 A1 19960704; DE 59506787 D1 19991014; GB 2296793 A 19960710;
GB 2296793 B 19961218; GB 9526725 D0 19960228; HK 29197 A 19970321; US 5682684 A 19971104

DOCDB simple family (application)

EP 95117421 A 19951106; DE 4447270 A 19941230; DE 59506787 T 19951106; GB 9526725 A 19951229; HK 29197 A 19970313;
US 58187496 A 19960102