

Title (en)

Electrophotographic apparatus and method of detecting opening or closing of a cover of the apparatus

Title (de)

Elektrophotographisches Gerät und Verfahren zur Detektion des Öffnens oder Schliessens eines Deckels des Gerätes

Title (fr)

Appareil électrophotographique et méthode de détection de l'ouverture et de la fermeture d'un couvercle de celui

Publication

**EP 1246027 A2 20021002 (EN)**

Application

**EP 02006647 A 20020326**

Priority

- JP 2001086611 A 20010326
- JP 2001175610 A 20010611
- JP 2002046268 A 20020222

Abstract (en)

A density detection value detected by the toner density detection sensor (23) before the door (20) is opened and a density detection value detected by the toner density detection sensor (23) after the door (20) is opened and closed are compared with each other, and determination is made on the basis of a difference between the detection values about whether or not the closed position of the door after the opening and closing operations of the door is in a regular closing position. Accordingly, since an incompletely closed state of the door is detected by the toner density detection sensor (23), various troubles due to the incompletely closed state of the door can be prevented from occurring. When the door has a reflecting plate a registration sensor can also be used.

IPC 1-7

**G03G 15/08**; **G03G 21/16**; **G03G 15/00**

IPC 8 full level

**G03G 21/00** (2006.01); **G03G 15/00** (2006.01); **G03G 15/16** (2006.01); **G03G 21/16** (2006.01)

CPC (source: EP)

**G03G 15/5041** (2013.01); **G03G 21/1633** (2013.01); **G03G 2215/00042** (2013.01); **G03G 2215/00544** (2013.01); **G03G 2215/00721** (2013.01); **G03G 2215/0078** (2013.01); **G03G 2221/169** (2013.01)

Cited by

KR20040074335A; EP2148246A3; US8270863B2

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

**EP 1246027 A2 20021002**; **EP 1246027 A3 20021009**; **EP 1246027 B1 20060104**; DE 60208457 D1 20060330; DE 60208457 T2 20060824; DE 60208457 T8 20061228; JP 2003066776 A 20030305; JP 4107372 B2 20080625

DOCDB simple family (application)

**EP 02006647 A 20020326**; DE 60208457 T 20020326; JP 2002046268 A 20020222