

Title (en)

Electrophotographic positively charged toner and manufacturing method thereof

Title (de)

Elektrophotographischer Toner mit positiver Ladung und Verfahren zu dessen Herstellung

Title (fr)

Révéléateur électrophotographique à chargement positive et procédé pour sa fabrication

Publication

**EP 1424606 A2 20040602 (EN)**

Application

**EP 03026952 A 20031125**

Priority

- JP 2002345636 A 20021128
- JP 2003350356 A 20031009

Abstract (en)

ÄProblemÜ To provide an electrophotographic positively charged toner and a manufacturing method thereof, according to which even if after kneading, pulverization and classification the toner is made spherical by melting the surfaces of the particles in a hot air current, the charge control agent is not coated and hence the charging ability thereof is not reduced, and thus the toner has sufficient tribo-charging ability for good image formation, excellent transfer efficiency, and excellent charge build-up performance and excellent charge stability upon continuous printing. <?? >ÄMeans of SolutionÜ In the case of an electrophotographic positively charged toner comprising a core toner that has a binder resin, a wax, a colorant and a charge control agent as principal component materials thereof and has been spherified through heat treatment, and at least fine silica particles as an external additive, the charge control agent is made to contain a resin having a quaternary ammonium salt group as a functional group and a nigrosine dye. <IMAGE>

IPC 1-7

**G03G 9/087**; **G03G 9/08**

IPC 8 full level

**G03G 9/08** (2006.01); **G03G 9/087** (2006.01); **G03G 9/09** (2006.01); **G03G 9/097** (2006.01)

CPC (source: EP US)

**G03G 9/08** (2013.01 - EP US); **G03G 9/087** (2013.01 - EP US); **Y10T 428/2956** (2015.01 - EP US); **Y10T 428/2985** (2015.01 - EP US); **Y10T 428/2993** (2015.01 - EP US)

Designated contracting state (EPC)

DE GB

DOCDB simple family (publication)

**EP 1424606 A2 20040602**; **EP 1424606 A3 20050119**; CN 1514310 A 20040721; JP 2004191934 A 20040708; US 2005074608 A1 20050407

DOCDB simple family (application)

**EP 03026952 A 20031125**; CN 200310115774 A 20031128; JP 2003350356 A 20031009; US 72176103 A 20031126