

Title (en)

Electrophotographic positively charged toner and manufacturing method thereof

Title (de)

Elektrophotographischer Toner mit positiver Ladung und Verfahren zu dessen Herstellung

Title (fr)

Révélateur électrophotographique à chargement positive et procédé pour sa fabrication

Publication

**EP 1424606 A3 20050119 (EN)**

Application

**EP 03026952 A 20031125**

Priority

- JP 2002345636 A 20021128
- JP 2003350356 A 20031009

Abstract (en)

[origin: EP1424606A2] **Problem** 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. **Means of Solution** 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)

Citation (search report)

- [Y] US 4840863 A 19890620 - OTSU AKIRA [JP], et al
- [Y] US 4212837 A 19800715 - KUBO TSUTOMU [JP], et al
- [A] US 5759728 A 19980602 - HAGI MASAYUKI [JP], et al

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