

Publication

**EP 0708378 A3 19960501**

Application

**EP 95306880 A 19950929**

Priority

JP 26442894 A 19941005

Abstract (en)

[origin: EP0708378A2] A two-component type developer for developing an electrostatic image is constituted by at least a toner and a magnetic carrier. The toner has a weight-average particle size  $D_4$  of at most 10  $\mu\text{m}$  and a number-average particle size  $D_1$  satisfying  $D_4/D_1 \leq 1.5$ . The magnetic carrier comprises composite particles comprising magnetic iron compound particles, non-magnetic metal oxide particles, and a binder comprising a phenolic resin. The composite particles contain the magnetic iron compound and the non-magnetic metal oxide in a total proportion of 80 - 99 wt. %. The magnetic iron compound particles have a number-average particle size  $r_a$ , and the non-magnetic metal oxide particles have a number-average particle size  $r_b$  satisfying  $r_b/r_a > 1.0$ .

IPC 1-7

**G03G 9/107**; **G03G 9/10**; **G03G 9/113**; **G03G 9/08**

IPC 8 full level

**G03G 9/08** (2006.01); **G03G 9/10** (2006.01); **G03G 9/107** (2006.01); **G03G 13/09** (2006.01)

CPC (source: EP KR US)

**G03G 9/0819** (2013.01 - EP); **G03G 9/1075** (2013.01 - EP KR US); **G03G 9/108** (2020.08 - EP KR US); **G03G 9/1085** (2020.08 - EP KR US); **G03G 9/10884** (2020.08 - EP KR US); **G03G 13/09** (2013.01 - EP)

Citation (search report)

- [A] EP 0384697 A2 19900829 - TODA KOGYO CORP [JP], et al
- [A] EP 0317667 A1 19890531 - AGFA GEVAERT NV [BE]
- [A] PATENT ABSTRACTS OF JAPAN vol. 13, no. 368 (P - 919) 16 August 1989 (1989-08-16)
- [A] DATABASE WPI Section Ch Week 9224, Derwent World Patents Index; Class G08, AN 92-196283
- [A] PATENT ABSTRACTS OF JAPAN vol. 6, no. 225 (P - 154)<1103> 10 November 1982 (1982-11-10)
- [A] PATENT ABSTRACTS OF JAPAN vol. 14, no. 88 (P - 1008)<4031> 19 February 1990 (1990-02-19)

Cited by

EP0999477A1; DE102005018675A1; EP0801334A1; US5766814A; US6506531B1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

**EP 0708378 A2 19960424**; **EP 0708378 A3 19960501**; **EP 0708378 B1 20001213**; CN 1099054 C 20030115; CN 1130767 A 19960911; DE 69519620 D1 20010118; DE 69519620 T2 20010517; HK 1014051 A1 19990917; KR 0163996 B1 19990320; KR 960015106 A 19960522

DOCDB simple family (application)

**EP 95306880 A 19950929**; CN 95119963 A 19951005; DE 69519620 T 19950929; HK 98115373 A 19981224; KR 19950033832 A 19951004