

Title (en)

Toner for developing electrostatic image, image forming method and process cartridge

Title (de)

Toner zur Entwicklung elektrostatischer Bilder, Bilderzeugungsverfahren und Prozesskartusche

Title (fr)

Révéléateur pour le développement d'images électrostatiques, méthode de production d'images et cartouche de traitement

Publication

EP 0686883 B1 19980729 (EN)

Application

EP 95107141 A 19950511

Priority

JP 12330394 A 19940513

Abstract (en)

[origin: EP0686883A1] A toner for developing electrostatic images having a uniform composition and uniform performances over varying sizes of toner particles is constituted by (a) a binder resin, (b) a long-chain alkyl compound and (c) an azo-type iron complex. The long-chain alkyl compound is represented by the following formula (1), (2) or (3): <CHEM> wherein x and y independently denote an average value in the range of 35 - 150; z denotes an average value in the range of 1 - 5, and R denotes H or an alkyl group having 1 - 10 carbon atoms. The azo-type iron complex compound is represented by the following formula (4); <CHEM> wherein X1 and X2 independently denote hydrogen atom, lower alkyl group, lower alkoxy group, nitro group or halogen atom; m and m' denote an integer of 1 - 3; R1 and R3 independently denote hydrogen atom, C1-18 alkyl or alkenyl, sulfonamide, mesyl, sulfonic acid group, carboxy ester group, hydroxy, C1-18 alkoxy, acetylamino, benzoylamino or halogen atom; n and n' denote an integer of 1 - 3; R2 and R4 denote hydrogen atom or nitro group; and A<+> denotes a cation including 75 - 98 mol. % of ammonium ion and another ion selected from the group consisting of hydrogen ion, sodium ion, potassium iron and mixtures thereof. <IMAGE>

IPC 1-7

G03G 9/09; **G03G 9/097**; **G03G 9/087**

IPC 8 full level

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

CPC (source: EP KR)

G03G 9/08759 (2013.01 - EP); **G03G 9/08782** (2013.01 - EP); **G03G 9/08795** (2013.01 - KR); **G03G 9/091** (2013.01 - EP); **G03G 9/09733** (2013.01 - EP); **G03G 9/09783** (2013.01 - KR); **G03G 9/0819** (2013.01 - KR); **G03G 9/087** (2013.01 - KR); **G03G 15/0216** (2013.01 - KR); **G03G 21/0011** (2013.01 - KR); **G03G 21/1814** (2013.01 - KR)

Cited by

EP1293835A3; EP1426830A1; US6641969B2; US6300024B1; US7094513B2

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CH DE ES FR GB IT LI NL

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