

①⑫

EUROPEAN PATENT APPLICATION

②① Application number: **88308153.1**

⑤① Int. Cl.4: **G 03 G 9/08**

②② Date of filing: **02.09.88**

③① Priority: **02.09.87 JP 221126/87**

④③ Date of publication of application:
08.03.89 Bulletin 89/10

⑧④ Designated Contracting States: **DE FR GB**

⑧⑧ Date of deferred publication of search report:
09.08.89 Bulletin 89/32

⑦① Applicant: **SOKEN CHEMICAL & ENGINEERING CO. LTD.,**
29-5 Takada 3-chome
Toshima-Ku Tokyo (JP)

⑦② Inventor: **Imai, Tatsuhiko c/o Soken Chemical & Engineering Co. Ltd. 130 Kamihirose**
Sayami-shi Saitama (JP)

Kawase, Susumu c/o Soken Chemical & Engineering Co. Ltd. 130 Kamihirose
Sayami-shi Saitama (JP)

⑦④ Representative: **Pett, Christopher Phineas et al**
Frank B. Dehn & Co. Imperial House 15-19 Kingsway
London WC2B 6UZ (GB)

⑤④ **Toner and process for preparation thereof.**

⑤⑦ Toner particles are described, each particle comprising a spheroidal resin core, a pigment layer on the surface of said core and a layer of a static electrification controlled resin on the surface of said pigment layer. The state of static electrification of the toner is substantially determined by that of the outermost layer of the static electrification controlled resin, and thus can be precisely controlled by simply controlling the amount of static electrification of the resin particles used to form the outermost layer. Since the state of static electrification of the toner can be precisely controlled, the kind and concentration of the pigment used can be freely selected. The presence of the outermost layer 3 prevents the pigment from breaking away from the toner. Further, it is possible to improve the fluidity and anti-block properties of the toner without any adverse effect. In addition, it is not necessary to use an additional static electrification controlling agent such as silica which might adversely affect the color shade of the toner.



EP 88 30 8153

DOCUMENTS CONSIDERED TO BE RELEVANT					
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)		
A	PATENT ABSTRACTS OF JAPAN, vol. 11; no. 259 (C-441)[2706], 21st August 1987; & JP-A-62 61 632 (JAPAN SYNTHETIC RUBBER CO., LTD) 18-03-1987 * Abstract *	1-6	G 03 G 9/08		
A	FR-A-2 571 515 (CANON) * Abstract; page 4, line 13 - page 12, line 18; claims; figures *	1-6			
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)		
			G 03 G C 08 J		
The present search report has been drawn up for all claims					
Place of search THE HAGUE		Date of completion of the search 18-05-1989	Examiner VANHECKE H.		
<table><tr><td>CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</td><td>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</td></tr></table>				CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document	T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document	T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document				