



(11) Publication number : **0 474 460 A3**

(12)

EUROPEAN PATENT APPLICATION

(21) Application number : **91308055.2**

(51) Int. Cl.⁵ : **G03G 15/09**

(22) Date of filing : **03.09.91**

(30) Priority : **04.09.90 JP 232396/90**

(43) Date of publication of application :
11.03.92 Bulletin 92/11

(84) Designated Contracting States :
DE FR GB IT

(88) Date of deferred publication of search report :
12.08.92 Bulletin 92/33

(71) Applicant : **MITA INDUSTRIAL CO., LTD.**
2-28, 1-chome, Tamatsukuri Chuo-ku
Osaka 540 (JP)

(72) Inventor : **Nishino, Toshio**
1-56-101 Tsurumai, Higashimachi
Nara-shi, Nara-ken (JP)
Inventor : **Tomita, Shoji**
313-101 Naka-machi 2-chome, Onji
Yao-shi, Osaka-fu (JP)

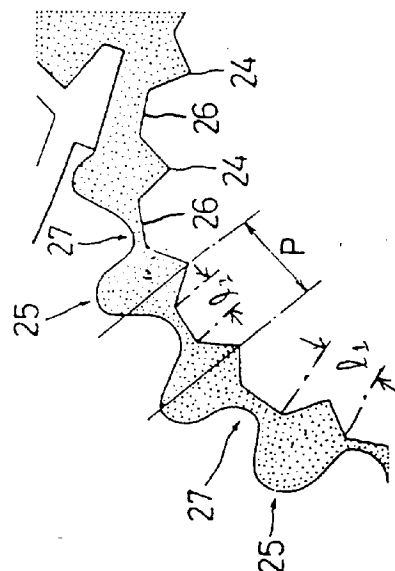
(74) Representative : **Williams, Trevor John et al**
J.A. KEMP & CO. 14 South Square Gray's Inn
London WC1R 5LX (GB)

(54) Developing process.

(57) Disclosed is a developing process, which comprises forming a magnetic brush of a two-component developer comprising a magnetic carrier and a toner on a developing sleeve and bringing the magnetic brush into sliding contact with a photosensitive material having a charged image to form a toner image on the photosensitive material, wherein in advance to the sliding contact with the photosensitive material, portions having a low pack density (27) of the developer and portions having a high pack density (25) of the developer are alternately formed on the developing sleeve in the circumferential direction.

According to this developing process, a contact frequency between the developing sleeve and the photosensitive material drum can be properly adjusted without drastic lamination of the earing length of the magnetic brush or the drum-sleeve distance, and an image having a high density can be obtained. Developing sleeve with the grooves (24) extending in axial direction used.

Fig. 4





European Patent
Office

EUROPEAN SEARCH REPORT

Application Number

EP 91 30 8055

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.5)
A	US-A-4 018 187 (JERRY JOE ABBOTT ET AL.) * column 2, line 22 - line 37; figures 1,2 * ---	1,5	G03G15/09
A	PATENT ABSTRACTS OF JAPAN vol. 14, no. 104 (P-1013)26 February 1990 & JP-A-1 307 783 (MINOLTA CAMERA) 12 December 1989 * abstract *	1	
A	PATENT ABSTRACTS OF JAPAN vol. 9, no. 195 (P-379)13 August 1985 & JP-A-60 061 776 (FUJITSU) 9 April 1985 * abstract *	1,5	
A	DE-A-3 014 849 (CANON K.K.) * page 9, line 22 - page 10, line 24 * * page 13, line 16 - page 14, line 3; figures 3,10 * -----	1	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			G03G
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 15 JUNE 1992	Examiner TREPP E.A.
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			

EPO FORM 1503 03.82 (P0401)