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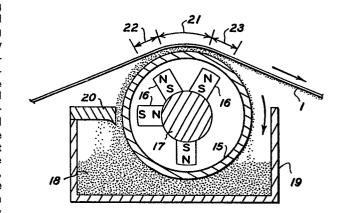
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Electrostatographic developing apparatus and method.

5 Electrostatographic developing apparatus including a developer applicator (15) for applying developer material (18) to an electrostatic latent image on a flexible imaging surface (1), the developer material comprising magnetically attractable carrier particles and toner particles. The applicator has within it magnets (16) for establishing a magnetic field having a region (21) of reduced strength in the development zone, and an electric field is established between the applicator and the imaging surface in the development zone. The imaging member (1) passes around a portion of the surface of the applicator (15) so as to be deflected by the applicator and spaced from it in use by at least one layer of carrier particles such that during relative movement between the applicator and the imaging surface, • the carrier particles therebetween are caused to make rotational movements. The resulting shearing action on the toner particles, together with the electric field, produces a migration of toner particles towards the imaging surface.





EUROPEAN SEARCH REPORT

EP 81 30 2440.3

	DOCUMENTS CONSID	CLASSIFICATION OF THE APPLICATION (Int. CI.3)		
Category	Citation of document with indicat passages	tion, where appropriate, of relevant	Relevant to claim]
	DE - A1 - 2 611 99	05 (GENERAL ELECTRIC)	1,10	
	<pre>* claims; fig. 2 *</pre>			G 03 G 15/09
	& US - A - 3 945 3	343		G 03 G 13/09
	IBM TECHNICAL DISC	CLOSURE BULLETIN,	1,10	:
	Vol. 17, No. 9, Fe	ebruary 1975		
	A.H. KNIGHT "Magne	et Configuration for		
	Magnetic Brush Dev	veloper"		
	pages 2684 to 2686	5		
	•			TECHNICAL FIELDS SEARCHED (Int. Cl.3)
	US - A - 4 177 757	(S. MURAKAWA et al.)	1,10	(inc. on)
	* fig. 3 *			G 03 G 13/00
Ī				G 03 G 15/00
P	Patents Abstracts	of Japan	1,10	
	Vol. 4, Nr. 115,	16 August 1980		
	page 23P23	_		
	& JP - A - 55 - 69	9155		
D	US - A - 3 900 001 (L.J. FRASER et		1,10	·
	a1.)			
1	* column 4, lines 24 to 33; fig.			
Ī	1 to 3 *			CATEGORY OF CITED DOCUMENTS
				X: particularly relevant
				A: technological background
				O: non-written disclosure .
				P: intermediate document T: theory or principle underlying
				the invention
				E: conflicting application
				D: document cited in the application
				L: citation for other reasons
1				&: member of the same patent
X	The present search report	The present search report has been drawn up for all claims		family, corresponding document
lace of sea	arch Da	te of completion of the search	Examiner	
	Berlin	06-11-1981		HOPPE