

(19)



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11)

Publication number:

0 568 829 A3

(12)

EUROPEAN PATENT APPLICATION(21) Application number: **93105767.3**(51) Int. Cl.⁶: **G03G 15/16, G03G 15/00**(22) Date of filing: **07.04.93**

(30) Priority: **09.04.92 JP 88916/92**
10.04.92 JP 90701/92
25.01.93 JP 10159/93

(43) Date of publication of application:
10.11.93 Bulletin 93/45

(84) Designated Contracting States:
DE ES FR GB IT

(88) Date of deferred publication of the search report:
10.05.95 Bulletin 95/19

(71) Applicant: **Ricoh Company, Ltd**
3-6, 1-chome Nakamagome
Ohta-ku
Tokyo 143 (JP)

(72) Inventor: **HARASAWA, Yuko**
705-232 Nagae, Hayama-machi
Miura-gun
Kanagawa-ken (JP)
Inventor: **MATSUDA, Itaru**
4-1-4-405, Kirigaoka
Midori-ku
Yokohama-shi
Kanagawa-ken (JP)
Inventor: **TAKANO, Satoshi**
6-15-1, Hongo
Bunkyo-ku
Tokyo (JP)

Inventor: **YU, Hideo**
2-15-6-202, Toyogaoka
Tama-shi
Tokyo (JP)

Inventor: **KAWAISHI, Yasunori**
3-1-19-1302, Yatsu, Narashino-shi
Chiba-ken (JP)

Inventor: **KAMIYAMA, Hideki**
987-2-214, Kawawa-cho
Midori-ku

Yokohama-shi
Kanagawa-ken (JP)
Inventor: **MOTOHASHI, Toshiaki**
3-15-4, Yato-cho. Tanashi-shi
Tokyo (JP)

Inventor: **TAKAHASHI, Mitsuru**
Kamiikegami Dai-5 Ryo
4-22-10, Kamiikedai
Ota-ku
Tokyo (JP)

Inventor: **BISAIJI, Takashi**
3-3-303, Kitadanchi
2-chome Yokodai
Isogo-ku
Yokohama-shi
Kanagawa-ken (JP)

(74)

Representative: **Schwabe - Sandmair - Marx**
Stuntzstrasse 16
D-81677 München (DE)

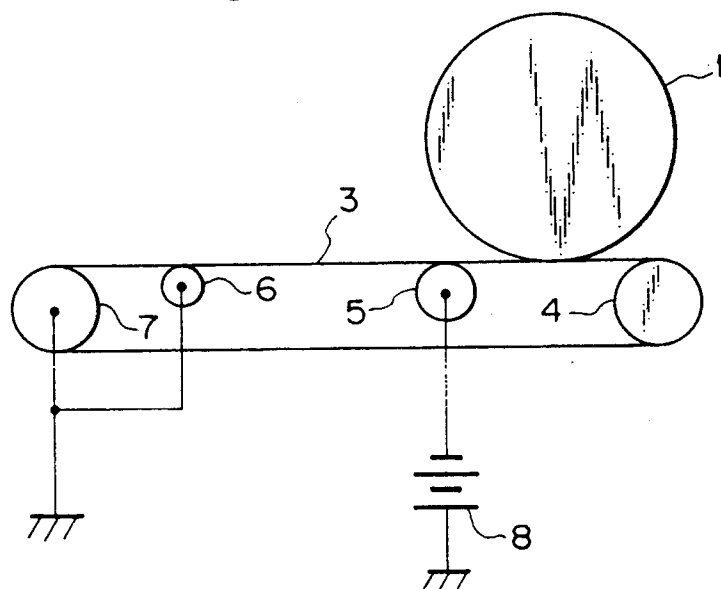
(54) **Image forming apparatus.**

(57) An image forming apparatus capable of surely transferring an image to produce an attractive image and, in addition, surely separating a transfer medium from a photoconductive element with no regard to the environment. A transfer belt (3) is passed over a drive roller (4) and driven rollers (5-7). The rollers 6

and 7 are connected to ground. The roller 5 plays the role of a bias roller or bias electrode while the roller 4 remains in an electrically floating state. The belt (3) contacts the photoconductive drum (1) over a predetermined nip width. Optionally the belt (3) acts as an intermediate transfer medium.

EP 0 568 829 A3

Fig. 1





European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 93 10 5767

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)
X	PATENT ABSTRACTS OF JAPAN vol. 14, no. 332 (P-1077) 17 July 1990 & JP-A-02 110 586 (CANON) 23 April 1990	1,2,4,5, 10	G03G15/16 G03G15/00
Y		3,9,13, 16,19, 22-24	
A		6-8,11, 12,14, 15,17, 18,20, 21,25,26	
P,X	* abstract * & US-A-5 172 173 (GOTO ET AL.)	1,2,4,5, 10	
P,Y		3,9,13, 16,19, 22-24	
P,A		6-8,11, 12,14, 15,17, 18,20, 21,25,26	
	* the whole document * ---		TECHNICAL FIELDS SEARCHED (Int.Cl.5)
Y	PATENT ABSTRACTS OF JAPAN vol. 15, no. 446 (P-1274) 13 November 1991 & JP-A-03 186 876 (CANON)	3	G03G
A		1,2,4,5, 10	
	* abstract * ---		
Y	EP-A-0 368 617 (CANON)	9,13,16, 19,22	
	* abstract * ---		
	--- -/--		
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 9 March 1995	Examiner Lipp, G
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			



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 93 10 5767

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)
Y	PATENT ABSTRACTS OF JAPAN vol. 12, no. 58 (P-669) 20 February 1988 & JP-A-62 203 169 (YAMAUCHI) 7 September 1987 * abstract *	23,24	
A	--- PATENT ABSTRACTS OF JAPAN vol. 7, no. 220 (P-226) (1365) 30 September 1983 & JP-A-58 111 960 (RICOH) 4 July 1983 * abstract * -----	9,13,16, 19,22	
			TECHNICAL FIELDS SEARCHED (Int.Cl.5)
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 9 March 1995	Examiner Lipp, G
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			