

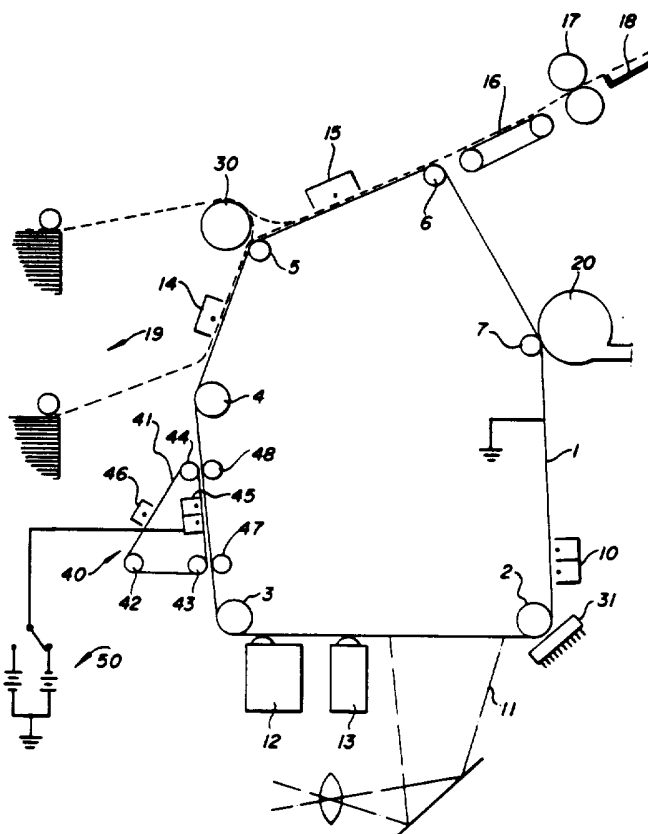


INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁵ : G03G 15/16, 15/01	A3	(11) International Publication Number: WO 92/07308 (43) International Publication Date: 30 April 1992 (30.04.92)
(21) International Application Number: PCT/US91/07664 (22) International Filing Date: 22 October 1991 (22.10.91) (30) Priority data: 601,629 22 October 1990 (22.10.90) US 601,538 22 October 1990 (22.10.90) US (71) Applicant: EASTMAN KODAK COMPANY [US/US]; 343 State Street, Rochester, NY 14650 (US). (72) Inventor: RANDALL, Kent, Allen ; 816 Westwood Trail, Webster, NY 14580 (US). (74) Agent: TREASH, Leonard, W., Jr.; 343 State Street, Ro- chester, NY 14650-2201 (US).	(81) Designated States: AT (European patent), BE (European patent), CH (European patent), DE (European patent), DK (European patent), ES (European patent), FR (European patent), GB (European patent), GR (European patent), IT (European patent), JP, LU (European patent), NL (European patent), SE (European patent). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 6 August 1992 (06.08.92)	

(54) Title: A METHOD AND APPARATUS OF FORMING COMBINED TONER IMAGES**(57) Abstract**

Toner images are combined for later transfer to a receiving sheet by forming first and second toner images on an image member (1) and transferring the first toner image to an intermediate member (41; 54). The first toner image is transferred back to the image member in registration with a second toner image to form a combined toner image.



DESIGNATIONS OF "DE"

Until further notice, any designation of "DE" in any international application whose international filing date is prior to October 3, 1990, shall have effect in the territory of the Federal Republic of Germany with the exception of the territory of the former German Democratic Republic.

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 91/07664

I. CLASSIFICATION OF SUBJECT MATTER (if several classification symbols apply, indicate all) ⁶		
According to International Patent Classification (IPC) or to both National Classification and IPC Int.Cl.5 G 03 G 15/16 G 03 G 15/01		
II. FIELDS SEARCHED		
Minimum Documentation Searched ⁷		
Classification System	Classification Symbols	
Int.Cl.5	G 03 G	
Documentation Searched other than Minimum Documentation to the Extent that such Documents are included in the Fields Searched ⁸		
III. DOCUMENTS CONSIDERED TO BE RELEVANT⁹		
Category ¹⁰	Citation of Document, ¹¹ with indication, where appropriate, of the relevant passages ¹²	Relevant to Claim No. ¹³
P, X	EP, A, 0444813 (HITACHI LTD) 4 September 1991, see page 21, lines 25-51; figures 19-21 ---	1, 2, 4-6, 9, 11, 12
A	US, A, 4352549 (TAKASHI OZAWA) 5 October 1982, see figure 1, detail 26 ---	1-12
A	US, A, 4643559 (TADASHI TONEGAWA) 17 February 1987, see figure 1, detail 6 ---	1-12
A	US, A, 4714939 (D.K. AHERN et al.) 22 December 1987, see abstract; figures 1, 5 -----	1-12
¹⁰ Special categories of cited documents : "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family		
IV. CERTIFICATION		
Date of the Actual Completion of the International Search	Date of Mailing of this International Search Report	
24-02-1992	23 JUN 1992	
International Searching Authority	Signature of Authorized Officer	
EUROPEAN PATENT OFFICE	Mme N. KUIPER	

FURTHER INFORMATION CONTINUED FROM THE SECOND SHEET

V. ☐ OBSERVATION WHERE CERTAIN CLAIMS WERE FOUND UNSEARCHABLE ¹

This International search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claim numbers _____ because they relate to subject matter not required to be searched by this Authority, namely: _____

2. ☐ Claim numbers _____ because they relate to parts of the International application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically: _____

3. ☐ Claim numbers _____ because they are dependent claims and are not drafted in accordance with the second and third sentences of PCT Rule 6.4(a).

VI. ☒ OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING ²

This International Searching Authority found multiple inventions in this International application as follows:

1. Claims 1-12 relate to a method and an apparatus for forming combined toner images
2. Claims 13-14 relate to a duplex imaging apparatus

1. ☐ As all required additional search fees were timely paid by the applicant, this International search report covers all searchable claims of the International application
2. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims of the International application for which fees were paid, specifically claims: _____
3. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claim numbers: 1-12
4. ☐ As all searchable claims could be searched without effort justifying an additional fee, the International Searching Authority did not invite payment of any additional fee.

Remark on Protest

- ☐ The additional search fees were accompanied by applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

**ANNEX TO THE INTERNATIONAL SEARCH REPORT
ON INTERNATIONAL PATENT APPLICATION NO.**

US 9107664

SA 53803

This annex lists the patent family members relating to the patent documents cited in the above-mentioned international search report.
The members are as contained in the European Patent Office EDP file on 18/06/92
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP-A- 0444813	04-09-91	JP-A- 3249670	07-11-91
		US-A- 5075730	24-12-91
US-A- 4352549	05-10-82	JP-A- 56021144	27-02-81
US-A- 4643559	17-02-87	JP-A- 60247653	07-12-85
		JP-A- 60247654	07-12-85
		DE-A, C 3518140	28-11-85
US-A- 4714939	22-12-87	DE-A- 3683490	27-02-92
		EP-A, B 0247090	02-12-87
		WO-A- 8702792	07-05-87
		JP-T- 62502363	10-09-87