



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
20.12.2017 Bulletin 2017/51

(51) Int Cl.:
G03G 15/20 (2006.01)

(43) Date of publication A2:
11.12.2013 Bulletin 2013/50

(21) Application number: **13168004.3**

(22) Date of filing: **16.05.2013**

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA ME

- **Seo, Hiroshi**
Tokyo 143-8555 (JP)
- **Fujimoto, Ippei**
Tokyo 143-8555 (JP)
- **Waida, Takumi**
Tokyo 143-8555 (JP)

(30) Priority: **08.06.2012 JP 2012130734**

(74) Representative: **Schwabe - Sandmair - Marx**
Patentanwälte Rechtsanwalt
Partnerschaft mbB
Joseph-Wild-Straße 20
81829 München (DE)

(71) Applicant: **Ricoh Company, Ltd.**
Tokyo 143-8555 (JP)

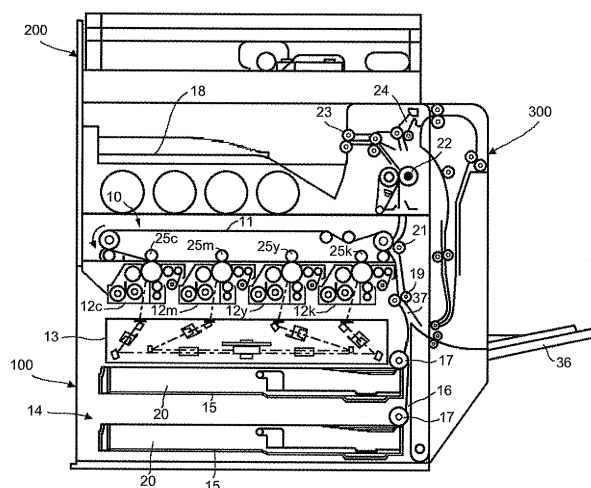
(72) Inventors:
• **Yamashina, Ryota**
Tokyo 143-8555 (JP)

(54) **Fixing device and image forming apparatus**

(57) A fixing device (22) sets a control period and a gap between recording media so that $T1 + T2 = C \times N$ is satisfied, where T1 denotes a time from when the leading end of a recording medium reaches a nip to when the trailing end thereof passes through the nip, T2 denotes a time corresponding to the gap between the recording media, C denotes the control period, and N denotes a positive integer; and heat generated by a heat source (5)

is supplied to the recording medium in synchronization with a timing at which the recording medium enters the nip. A correction amount is added to an electrification time in each control period and reduced at a predetermined rate in each control period based on temperature information of a pressing member (2) before start of feeding. The correction amount is changed depending on the basis weight of the recording medium.

FIG.1





EUROPEAN SEARCH REPORT

 Application Number
 EP 13 16 8004

5

10

15

20

25

30

35

40

45

50

55

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	US 2009/290893 A1 (OGISO TOSHIO [JP] ET AL) 26 November 2009 (2009-11-26) * paragraphs [0044] - [0071]; figure 5 *	1-9	INV. G03G15/20
A	JP 2003 345164 A (SHARP KK) 3 December 2003 (2003-12-03) * abstract; figures *	1-9	
A	JP H11 133791 A (CANON KK) 21 May 1999 (1999-05-21) * abstract; figures *	1-9	
A	US 6 246 843 B1 (NANATAKI HIDEO [JP] ET AL) 12 June 2001 (2001-06-12) * column 9, line 32 - column 10, line 60; figures 5,11a,11b * * column 14, line 14 - column 15, line 7; figure 13 *	1-9	
			TECHNICAL FIELDS SEARCHED (IPC)
			G03G
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 13 November 2017	Examiner Urbaniec, Tomasz
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			

 1
 EPO FORM 1503 03.02 (P04C01)

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

EP 13 16 8004

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

13-11-2017

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2009290893 A1	26-11-2009	JP 5339117 B2	13-11-2013
		JP 2009282162 A	03-12-2009
		US 2009290893 A1	26-11-2009
JP 2003345164 A	03-12-2003	NONE	
JP H11133791 A	21-05-1999	NONE	
US 6246843 B1	12-06-2001	NONE	