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(62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC: 17195158.5 / 3 306 408 (71) Applicant: UI Technologies, Inc. Las Vegas, NV 89141 (US)

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(54) CONVERTING A COLOR TONER PRINTER TO UNDER OR OVER PRINTING IN A SINGLE PASS WITH NON-STANDARD TONER

(57) A method of converting a CMYK color toner printer to a CMYX color toner printer for under or over print printing in a single pass, comprising removing the black toner printing cartridge from the first toner cartridge position of a color toner printer with four toner printing cartridges; providing a non-standard toner printing cartridge and installing it into the first toner cartridge position for under print printing or the fourth toner cartridge posi-

tion for over print printing; providing a raster image processor software configured to remap the four toner printing cartridges of the color toner printer and allows the color toner printer to print a layer of non-standard toner under or over, respectively, an image in a single pass; and wherein the image is printed from at least one of a cyan toner, a yellow toner, and a magenta toner.

DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document with indication, where appropriate, of relevant passages



Category

EUROPEAN SEARCH REPORT

Application Number

EP 18 21 4641

CLASSIFICATION OF THE APPLICATION (IPC)

Relevant

to claim

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X A	US 9 383 684 B1 (J0 [US] ET AL) 5 July * column 6, line 50		1,2, 9-13, 3-8,1	4 G03G15/08	
Т	Anonymous: "Raster Wikipedia",	image processor -		G03G15/00	
	Retrieved from the URL:https://en.wik	06-10), XP055574600 Internet: pedia.org/w/index.p processor&oldid=7247	hp?t		
	[retrieved on 2019- * page 1 *	03-26]			
E	EP 3 373 076 A1 (UI 12 September 2018 (* claim 1; figure 7	[2018-09-12]	1-8, 10-13		
Α		KOMORI TAKATSUGU [J	P] 1-15	TEQUINIQAL FIELDO	
	ET AL) 16 June 2016 * figure 1 *	0 (2010-00-10)		TECHNICAL FIELDS SEARCHED (IPC)	
	* paragraph [0069] * paragraph [0068] * paragraph [0067] * paragraph [0070] * paragraph [0050] * paragraph [0051] * paragraph [0049]	* * *		G03G	
	The present search report has	<u> </u>			
	Place of search Munich	Date of completion of the se		Thieme, Markus	
C.	ATEGORY OF CITED DOCUMENTS	<u>·</u>	principle underlying		
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		E : earlier pa after the fi	E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons		
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	CLAIMS INCURRING FEES				
	The present European patent application comprised at the time of filing claims for which payment was due.				
10	Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):				
15	No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.				
20	LACK OF UNITY OF INVENTION				
	The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:				
25					
	see sheet B				
30					
	All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.				
35	As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.				
40	Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:				
45	None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention				
50	first mentioned in the claims, namely claims:				
55	The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).				



LACK OF UNITY OF INVENTION SHEET B

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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-15(partially)

Method of converting a printer to print with non-standard toner. Special technical feature: providing a raster image processor software configured to allow the color toner printer to print a layer of non-standard toner under an image. Corresponding technical effect and solved problem: allow printing on dark media.

2. claims: 1-15(partially)

Method of converting a printer to print with non-standard toner. Special technical feature: providing a raster image processor software configured to allow the color toner printer to print a layer of non-standard toner over an image. Corresponding technical effect and solved problem: allows for a heat transfer print operation to a darker.

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

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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.

19-07-2019

10	Patent document cited in search report	Publication date	Patent family member(s)	Publication date
	US 9383684 B1	05-07-2016	NONE	
15	EP 3373076 A1	12-09-2018	EP 3304209 A1 EP 3373076 A1 US 9488932 B1 WO 2016197040 A1	11-04-2018 12-09-2018 08-11-2016 08-12-2016
20	US 2016170321 A1	16-06-2016	JP 2016114817 A US 2016170321 A1	23-06-2016 16-06-2016
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55	FORM P0459			

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82