

Title (en)  
TONER CARTRIDGE PRINTER DEVICES, SYSTEMS, AND METHODS FOR OVER PRINTING AND UNDER PRINTING

Title (de)  
TONERKARTUSCHENDRUCKERVORRICHTUNGEN, SYSTEME UND VERFAHREN ZUM ÜBERDRUCKEN UND UNTERDRUCKEN

Title (fr)  
DISPOSITIFS, SYSTÈMES ET PROCÉDÉS D'IMPRIMANTE À CARTOUCHE DE TONER POUR SURIMPRESSION ET SOUS-IMPRESSION

Publication  
**EP 3306408 A3 20180620 (EN)**

Application  
**EP 17195158 A 20171006**

Priority  
• US 201615286943 A 20161006  
• US 201715408186 A 20170117

Abstract (en)  
[origin: EP3306408A2] A method of converting a CMYK color toner printer to a CMYX color toner printer for under print printing in a single pass, comprising the steps: providing a color toner printer with four toner printing cartridges: a cyan toner printing cartridge, a magenta toner printing cartridge, a yellow toner printing cartridge, and a black toner printing cartridge; wherein the black toner printing cartridge is in a first toner cartridge position; removing the back toner printing cartridge from the first toner cartridge position; providing a non-standard toner printing cartridge; installing the non-standard toner printing cartridge into the first toner cartridge position; providing a raster image processor software; wherein the raster image processor software is 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 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.

IPC 8 full level  
**G03G 15/01** (2006.01); **G03G 15/00** (2006.01); **G03G 15/08** (2006.01)

CPC (source: EP)  
**G03G 15/0126** (2013.01); **G03G 15/556** (2013.01); **G03G 15/6585** (2013.01); **G03G 15/0863** (2013.01)

Citation (search report)  
• [X] US 9383684 B1 20160705 - JOSIAH MICHAEL RAYMOND [US], et al  
• [A] US 2014037307 A1 20140206 - KUO CHUNG-HUI [US], et al

Cited by  
US10990028B2

Designated contracting state (EPC)  
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 state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3306408 A2 20180411**; **EP 3306408 A3 20180620**; EP 3480662 A2 20190508; EP 3480662 A3 20190828; EP 3480662 B1 20220706; EP 3657260 A1 20200527; EP 3657260 B1 20230607; EP 3657260 C0 20230607; EP 4123384 A1 20230125; EP 4123384 B1 20231220; EP 4123384 C0 20231220; ES 2927764 T3 20221110; ES 2948771 T3 20230918; ES 2969282 T3 20240517

DOCDB simple family (application)  
**EP 17195158 A 20171006**; EP 18214641 A 20171006; EP 19219082 A 20171006; EP 22196275 A 20171006; ES 18214641 T 20171006; ES 19219082 T 20171006; ES 22196275 T 20171006