(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
4 July 2013 (04.07.2013)

WIPO | PCT

(10) International Publication Number
WO 2013/101350 A3

(51) International Patent Classification:
G03G 15/08 (2006.01)

(21) International Application Number:
PCT/US2012/065149

(22) International Filing Date:
15 November 2012 (15.11.2012)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
13/340,935 30 December 2011 (30.12.2011) US

(71) Applicant: **LEXMARK INTERNATIONAL, INC.** [US/US]; IP Law Department, Bldg. 082-1, 740 West New Circle Road, Lexington, KY 40550 (US).

(72) Inventors: **ACOSTA, Benjer, Albaran**; Mondragon Subdivision, Poblacion, Kiamba, Sarangani Province (PH). **AMANN, Mark, William**; 872 Eastmont Road, Lexington, KY 40509 (US). **CARTER, James, Anthany**; 556 Meadowcrest Park, Lexington, KY 40515 (US). **HACKNEY, Gary, Neal**; 127 Knight Court, Georgetown, KY 40324 (US). **LACTUAN, Katrina, Rosit**; Hillside Talamban, Cebu City (PH). **LEEMHUIS, James, Richard**; 857 Lauderdale Drive, Lexington, KY 40515 (US). **NEWMAN, Benjamin, Keith**; 1181 Aldridge Way, Lexington, KY 40515 (US). **ROGERS, Matthew, Lee**; 653 Estrella Drive, Lexington, KY 40511 (US). **SPROUL, Rodney, Evan**; 2597 Cashel Court, Lexington, KY 40509 (US). **HALE, Jason**; 134 Primrose Circle, Richmond, KY 40475 (US). **PORTIG, Harald**; 400 Tincher Drive, Versailles, KY 40383 (US). **SEAMAN, Keith**; 2969 Majestic View Walk, Lexington, KY 40511 (US). **SCHARF, Bryan, Christopher**; 475 Three Forks Road, Richmond, KY 40475 (US). **VOWELS, Christopher, Gene**; 3126 Nat Rogers Road, Boston, KY 40107 (US).

(74) Agent: **TROMP, Justin, Michael**; IP Law Department, Bldg. 082-1, 740 West New Circle Road, Lexington, KY 40550 (US).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: TONER CARTRIDGE FOR USE IN AN IMAGE FORMING DEVICE

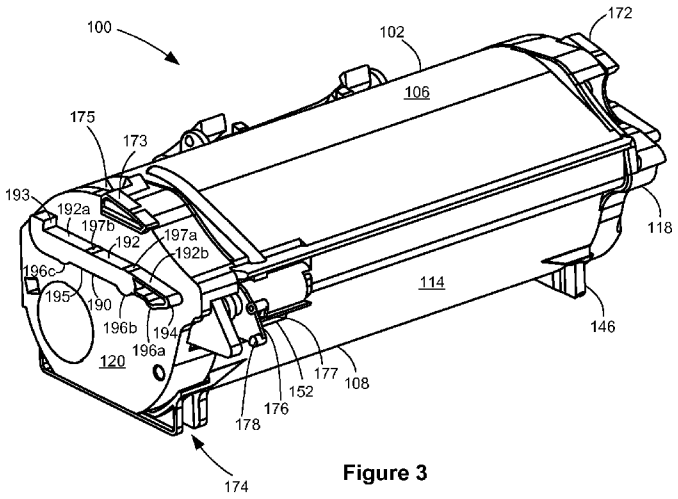


Figure 3

(57) Abstract: A toner cartridge according to one example embodiment includes a housing that defines a reservoir for containing toner. An exit port in fluid communication with the reservoir faces downward on the front of the housing near a first side. A shutter positioned at the exit port is movable between an open position and a closed position. A toner delivery system for transferring toner from the reservoir includes a main interface gear exposed on the front of the housing near the top of the second side. A rearward facing opening is positioned near the first side of the housing for receiving a first engagement feature in an image forming device for opening and closing the shutter. A forward facing slot is positioned near the first side of the housing for receiving a second engagement feature in the image forming device for locking and unlocking the shutter.

WO 2013/101350 A3

WO 2013/101350 A3

Published:

— *with international search report (Art. 21(3))*

(88) Date of publication of the international search report:
8 January 2015