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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
5 January 2012 (05.01.2012)

PCT

(10) International Publication Number
WO 2012/003400 A1

(51) **International Patent Classification**:
*G03G 15/00* (2006.01)

(21) **International Application Number**:
PCT/US2011/042710

(22) **International Filing Date**:
30 June 2011 (30.06.2011)

(25) **Filing Language**: English

(26) **Publication Language**: English

(30) **Priority Data**:
12/877,775 30 June 2010 (30.06.2010) US

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

(72) **Inventors; and**

(75) **Inventors/Applicants** *(for US only)*: **GAYNE, Jarrett, Clark** [US/US]; 1041 Marco Lane, Lexington, KY 40509 (US). **SCHATTNER, David, Keith** [US/US]; 2378 Harrods Pointe Trace, Lexington, KY 40514 (US).

(74) **Agent**: **PEZDEK, John, Victor**; Lexmark International, Inc., 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, 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, PE, PG, PH, PL, PT, RO, RS, RU, 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, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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).

**Published**:

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

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

WO 2012/003400 A1

(54) **Title**: CENTER-REFERENCED PHOTOCONDUCTOR BEARING PLATE AND ASSEMBLY FOR ELECTRO-PHOTOGRAPHIC CARTRIDGE

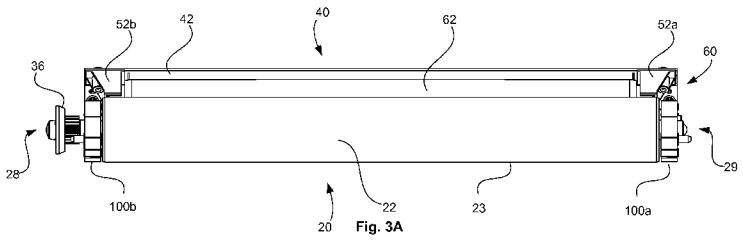



Fig. 3A

(57) **Abstract**: A bearing plate for rotably supporting a photoconductor drum having a center shaft according to one exemplary embodiment includes a body having a first side, a second side, and an edge surface between the first and second sides. A center hole extends through the body for rotably receiving an end of the center shaft and positionally referencing an outer surface of the photoconductor drum to a center axis of the center hole. A support arm extends from the body in a non-radial direction. The support arm has a mounting surface for receiving an additional component positionally referenced to the center axis. An assembly for use in an image forming device according to one embodiment includes a photoconductor drum having a center shaft and a pair of substantially identical bearing plates mounted on opposite ends of the photoconductor drum. The bearing plates are translated from one another and have identical orientations.