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

CORRECTED VERSION

(19) World Intellectual Property Organization
International Bureau

G00002

(43) International Publication Date
4 July 2002 (04.07.2002)

PCT

(10) International Publication Number
WO 02/052352 A1

(51) International Patent Classification[7]: G03G 15/00

(21) International Application Number: PCT/US01/47574

(22) International Filing Date:
13 December 2001 (13.12.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/741,794 22 December 2000 (22.12.2000) US

(71) Applicant: **MITSUBISHI CHEMICAL AMERICA, INC.** [US/US]; One North Lexington Avenue, White Plains, NY 10601 (US).

(72) Inventors: **FRITZ, Richard**; 2004 Sunset Point, Virginia Beach, VA 23454 (US). **RUSSELL, Laurie, A.**; 614 Sea Oats Way, Virginia Beach, VA 23451 (US). **ZOGG, Jon**; 322 Sherwood Forest Road, Chesapeake, VA 23322 (US).

(74) Agent: **WEIHROUCH, Steven, P.**; Oblon, Spivak, McClelland, Maier & Neustadt, P.C., 1940 Duke Street, Alexandria, VA 22314 (US).

(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*

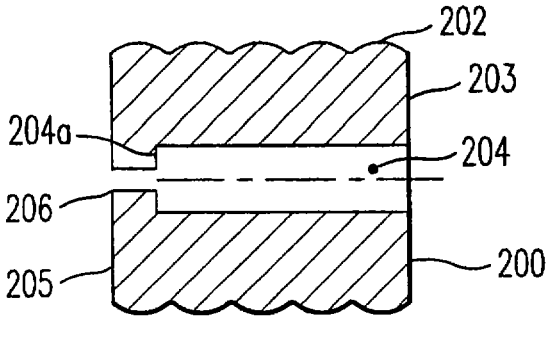
(48) Date of publication of this corrected version:
21 August 2003

(15) Information about Correction:
see PCT Gazette No. 34/2003 of 21 August 2003, Section II

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

162162

(54) Title: WEIGHTED NOISE REDUCING DEVICE FOR PHOTOSENSITIVE DRUM OF AN IMAGE FORMING APPARATUS



(57) Abstract: A device and method for reducing noise and/or vibration in an image forming apparatus. In a preferred form, an insert (200) is disposed inside of a photosensitive drum (1), and the insert (200) is an elastic member having, in a relaxed state, an outer diameter larger than an inner diameter of the inner surface of the photosensitive drum (1). The insert (200) is compressed to allow insertion, and once inserted, projections (202) on the insert (200) hold the insert (200) against the inner surface of the photosensitive drum (1). As such, the insert (200) can be anchored to the interior of the photosensitive drum (1) without using adhesive and can be easily removed for recycling purposes. The photosensitive drum (1) can optionally contain a pressurized gas.

WO 02/052352 A1