

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
31 May 2001 (31.05.2001)

PCT

(10) International Publication Number
WO 01/39210 A1

(51) International Patent Classification⁷: **G21K 1/06, 1/10**

(21) International Application Number: **PCT/GB00/04494**

(22) International Filing Date:
24 November 2000 (24.11.2000)

(25) Filing Language: **English**

(26) Publication Language: **English**

(30) Priority Data:
9927631.3 24 November 1999 (24.11.1999) **GB**
0018332.7 26 July 2000 (26.07.2000) **GB**

(71) Applicant (for all designated States except US): **BTG INTERNATIONAL LIMITED** [GB/GB]; 10 Fleet Place, Limeburner Place, London EC4M 7SB (GB).

(74) Agent: **JOHNSON, Reginald, George**; BTG International Limited, 10 Fleet Place, Limeburner Lane, London EC4M 7SB (GB).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, 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, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, 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, GW, ML, MR, NE, SN, TD, TG).

(72) Inventors; and

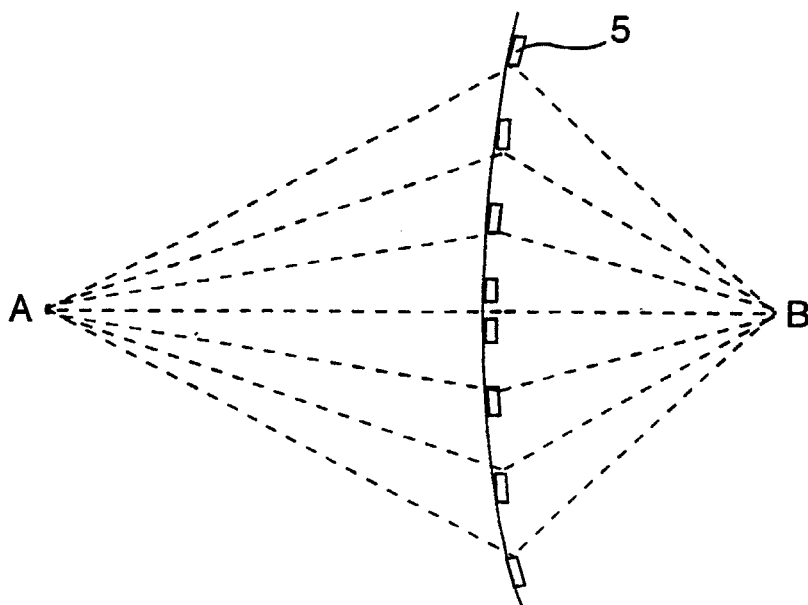
(75) Inventors/Applicants (for US only): **MICHETTE, Alan, George** [GB/GB]; King's College London, Dept. of Physics, Strand WC2R 2LS (GB). **PREWETT, Philip, Doughty** [GB/GB]; The University of Birmingham, School of Manufacturing and Mechanical Engineering, Edgbaston, Birmingham B15 2TT (GB).

Published:

— With international search report.

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.

(54) Title: **X-RAY ZOOM LENS**



(57) Abstract: An optical array for focussing X-rays comprises a plate e.g. made of silicon, on which are etched a series of concentric gaps to form channels through the plate, when X-rays are incident on the plate they are reflected from the inside of the channels to a focus. Preferably the plate can be curved to increase the magnification.

WO 01/39210 A1