

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau



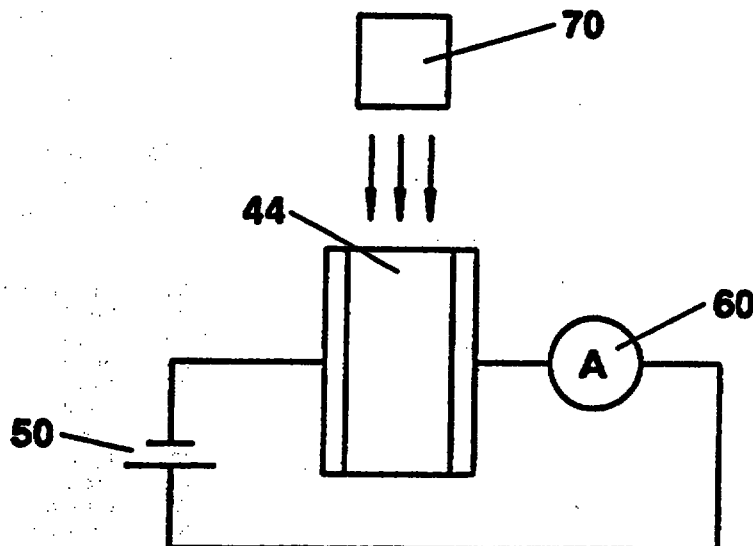
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : G01T 1/24	A1	(11) International Publication Number: WO 96/05521 (43) International Publication Date: 22 February 1996 (22.02.96)
(21) International Application Number: PCT/US95/09965 (22) International Filing Date: 7 August 1995 (07.08.95) (30) Priority Data: 110,637 11 August 1994 (11.08.94) IL (71) Applicant (for MW only): HELFGOTT & KARAS, P.C. [US/US]; Empire State Building, 60th floor, New York, NY 10118 (US). (71) Applicant (for all designated States except US): URIGAL TECHNOLOGIES LTD. [IL/IL]; Kiryat Weizmann, P.O. Box 2421, 76123 Rehovot (IL). (72) Inventors; and (75) Inventors/Applicants (for US only): EL-HANANY, Uri [IL/IL]; 43c Gordon Street, 76287 Rehovot (IL). LACHISH, Uri [IL/IL]; 40 Hanassi Harishon Street, 76302 Rehovot (IL). TISGELMAN, Alex [IL/IL]; 10 Maklis Street, 49558 Petach Tikva (IL). (74) Agents: KARAS, Aaron, B. et al.; Helfgott & Karas, P.C., Empire State Building, 60th floor, New York, NY 10118 (US).		(81) Designated States: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT, UA, UG, US, UZ, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG), ARIPO patent (KE, MW, SD, SZ, UG). Published With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

(54) Title: APPARATUS, SYSTEM AND METHOD FOR GAMMA RAY AND X-RAY DETECTION

(57) Abstract

This invention discloses a method for determining gamma ray photon energy comprising irradiating a high resistance n-type or p-type cadmium telluride alloy crystal (10) with gamma ray photons, providing first and second electrical contacts (20, 30, 40) which are in electrical communication with the crystal (10), which are respectively negatively and positively biased and which provide free flow of electrons from the negatively biased contact to the crystal and wherein holes, generated by absorption of the photons in the crystal, recombine with said electrons and determining the photon energy by measuring the amount of charge generated per photon absorbed by the crystal.



FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AT	Austria	GB	United Kingdom	MR	Mauritania
AU	Australia	GE	Georgia	MW	Malawi
BB	Barbados	GN	Guinea	NE	Niger
BE	Belgium	GR	Greece	NL	Netherlands
BF	Burkina Faso	HU	Hungary	NO	Norway
BG	Bulgaria	IE	Ireland	NZ	New Zealand
BJ	Benin	IT	Italy	PL	Poland
BR	Brazil	JP	Japan	PT	Portugal
BY	Belarus	KE	Kenya	RO	Romania
CA	Canada	KG	Kyrgyzstan	RU	Russian Federation
CF	Central African Republic	KP	Democratic People's Republic of Korea	SD	Sudan
CG	Congo	KR	Republic of Korea	SE	Sweden
CH	Switzerland	KZ	Kazakhstan	SI	Slovenia
CI	Côte d'Ivoire	LI	Liechtenstein	SK	Slovakia
CM	Cameroon	LK	Sri Lanka	SN	Senegal
CN	China	LU	Luxembourg	TD	Chad
CS	Czechoslovakia	LV	Latvia	TG	Togo
CZ	Czech Republic	MC	Monaco	TJ	Tajikistan
DE	Germany	MD	Republic of Moldova	TT	Trinidad and Tobago
DK	Denmark	MG	Madagascar	UA	Ukraine
ES	Spain	ML	Mali	US	United States of America
FI	Finland	MN	Mongolia	UZ	Uzbekistan
FR	France			VN	Viet Nam
GA	Gabon				

9700577-1