

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
18 December 2003 (18.12.2003)

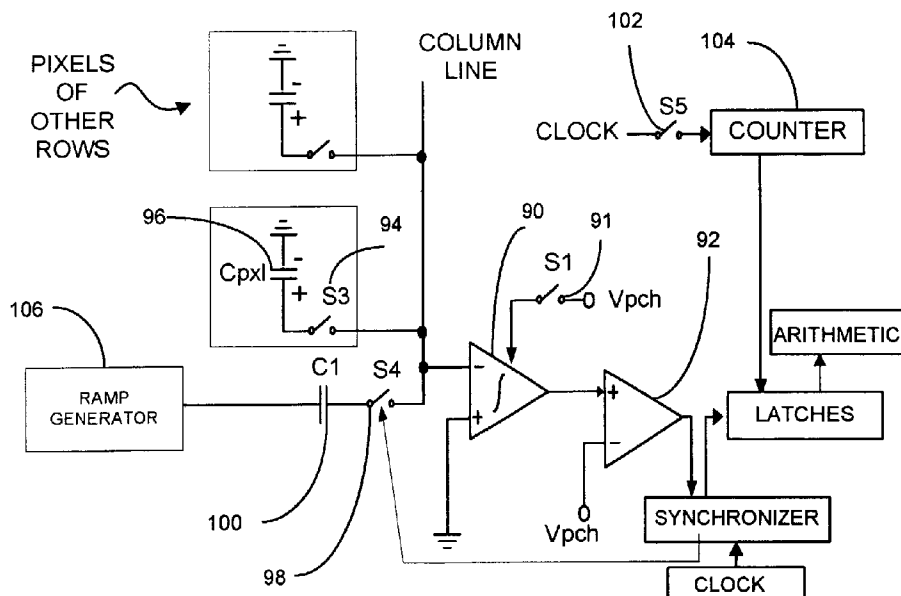
PCT

(10) International Publication Number
WO 2003/103364 A3

- (51) International Patent Classification: **G01J 5/30**, H01L 31/00 (74) Agent: TSIVION, Yoram; P.O.Box 1307, 37111 Pardes Hanna (IL).
- (21) International Application Number: PCT/IL2003/000414 (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, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (22) International Filing Date: 21 May 2003 (21.05.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 150058 6 June 2002 (06.06.2002) IL (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, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
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- Published: — with international search report

[Continued on next page]

(54) Title: FOCAL PLANE PROCESSOR FOR IR DETECTION



(57) Abstract: A focal plane array detector in a sensor for IR imaging. Pixel readout and analog to digital conversion is performed in an integrated circuit which includes the imaging array. The charge of each pixel is accumulated in a capacitor (16) and a digital to analog charge converter cancels this charge. A controller controls this charge converter providing the appropriate amount of charge. An analog to digital converter incorporating a comparator (92) switches the controller on/off. In some embodiment a programmable device external to the sensor participates in the control of the analog to digital converter. In a typical embodiment of the invention a cycle generator controls the charge output of the digital to analog converter. In a preferred embodiment the analog to digital converters are grouped wherein all such converters group operate simultaneously.



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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.

(88) Date of publication of the international search report:

29 January 2004