

[54] X-RAY IMAGING APPARATUS

4,268,750 5/1981 Cowart 358/111

[75] Inventors: Joseph K. Adlerstein, Kew Gardens; Heinz F. Nitka, Binghamton, both of N.Y.; Charles S. Naiman, Brookline; Aryeh Weiss, Cambridge, both of Mass.

Primary Examiner—Robert L. Griffin
Assistant Examiner—Edward L. Coles
Attorney, Agent, or Firm—Hopgood, Calimafde, Kalil, Blaustein & Judlowe

[73] Assignee: Xyram Corporation, Tuckahoe, N.Y.

[21] Appl. No.: 249,909

[22] Filed: Apr. 1, 1981

[51] Int. Cl.³ H04M 5/32

[52] U.S. Cl. 358/111; 358/213; 357/24; 378/99

[58] Field of Search 358/111, 213; 250/416 TV, 213 VT; 357/24 LR, 29; 378/99

[56] References Cited

U.S. PATENT DOCUMENTS

4,119,841 10/1978 Jantsch 250/213 VT
4,140,909 2/1979 Brown et al. 357/24

[57] ABSTRACT

An X-ray imaging apparatus includes a transducer for converting incident X-radiation to a corresponding pattern of electrical charges. The charges generated by the transducer are accelerated onto an array of charge-detecting or charge-storing devices which store the charges in the form of an electrical signal corresponding to the charge pattern. The electrical signal may be transferred out of the array of charge-storing devices to an external signal-processing apparatus, such as one employing digital processing techniques, at which the signal may be stored or displayed as an X-ray image.

16 Claims, 3 Drawing Figures

