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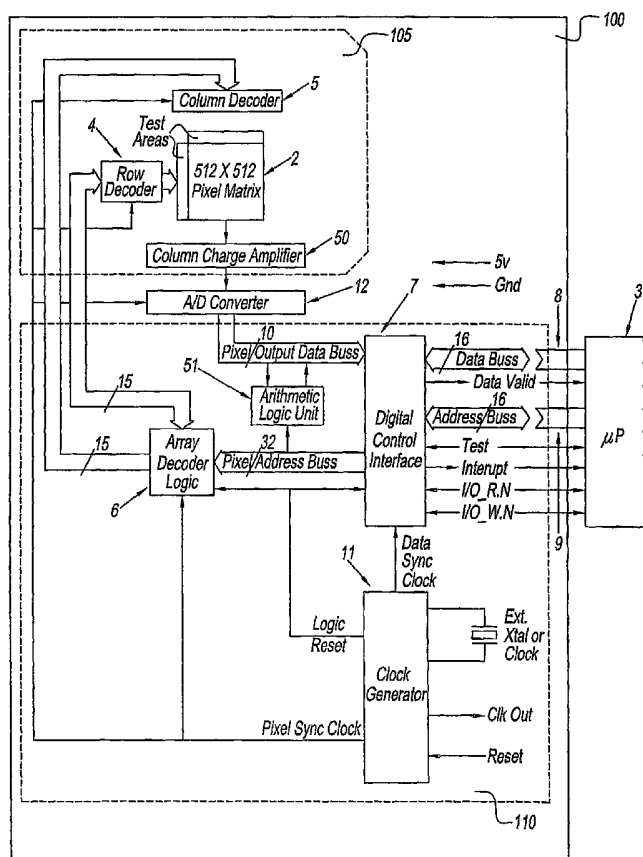
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[Continued on next page]

(54) Title: RANDOM ACCESS IMAGING SENSOR



(57) Abstract: A circuit includes a decoder for re-
ceiving an address within an address space of a pro-
cessor and for accessing a pixel in an active pixel sen-
sor array based on the address. The decoder maps the
active pixel sensor array to the address space. The cir-
cuit can also provide sequencing of these addresses
such that a group of pixels can be read out without
additional addressing from a processor. There is also
provided a method of processing pixel imperfections
in real time. Pixel integration can be programmed on
any single pixel or group of pixels in the array as well
as windowed readout. A method of target discrimina-
tion is also disclosed.



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INTERNATIONAL SEARCH REPORT

 Int. Application No
 PCT/US2004/002963

 A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 H04N3/15

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02/073951 A (FASTCOM TECHNOLOGY SA ; SCHIBLI NIKOLAUS (CH)) 19 September 2002 (2002-09-19) page 6, line 21 - line 22 page 12, line 23 - line 25	1-6, 11-21, 32-45
Y	-----	7-10, 25
Y	WO 01/38825 A (CALIFORNIA INST TO TECHNOLOGY ; PAIN BEDABRATA (US); YANG GUANG (US)) 31 May 2001 (2001-05-31) page 10, line 14 - line 16 page 11, line 5 - line 21	7-10, 28, 30
X	US 2001/040635 A1 (FOSSUM ERIC R ET AL) 15 November 2001 (2001-11-15) paragraphs '0013!, '0014!, '0076!, '0077! ----- -/--	1-3, 11, 13-21



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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- *E* earlier document but published on or after the international filing date
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- *&* document member of the same patent family

Date of the actual completion of the international search

5 October 2004

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17. 12. 2004

Name and mailing address of the ISA

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INTERNATIONAL SEARCH REPORT

Int al Application No
PCT/US2004/002963

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 509 927 B1 (CHRISTIAN KEVIN G ET AL) 21 January 2003 (2003-01-21) column 6, line 18 - column 7, line 54 -----	1-4,11, 32
X	DE 37 44 128 A (HEERING W PROF DR ; BRANDENBUSCH M DIPL PHYS (DE)) 13 July 1989 (1989-07-13) column 1, line 42 - line 43 column 1, line 11 - line 25	22-24, 26,27,29
Y	-----	25,28,30

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2004/002963

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International Application No. PCT/US2004 /002963

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-10,11-21,32-45

Sectective scanning

2. claims: 22-31

DMA transmission aspect

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/JP2004/002963

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