Single Axis CCD Time Gated LADAR Sensor

INTRODUCTION
A CCD sensor device has columns and rows of masked pixels that form a charge storage matrix. A singular column of photosensitive pixels form a photosensitive region and are directly connected to the first column of the charge storage matrix. Photons received in the pixels of the photosensitive region are converted to an electrical charge over an integration period and are then shifted from the photosensitive region to the first column of the charge storage matrix. After a second integration period the integrated charge in the photosensitive region is shifted to the first column and the charges previously stored in the first column are shifted to the second column of the matrix. This process is repeated until all the columns of the storage region are full of charges at which time the charges are read out by a serial shift register.

CONCEPT
The invention produces a more efficient sensor device.

INVENTION OVERVIEW
The invention produces a more efficient sensor that can be applied to most technology using sensor applications.
- Reduces time.
- Expands storage.
- U.S. Patent Number: 7,688,374 B2
- Application Number: 11/017,545
- Date of Patent: 30 Mar 2010

POTENTIAL MARKET
- Sensor industries

BUSINESS WITH AMRDEC
AMRDEC is a leader in partnering with domestic firms. Successfully developed and implemented innovative tools to ease the technology transfer process such as:
- Patent License Agreements
- Cooperative Research and Development Agreements
- Test Services Agreements

CONTACT INFORMATION
If you would like more information about this technology or about AMRDEC’s technology program, contact:

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