Ultra-High Sensitivity Photodetector for Image Sensors

Tech ID: 21156 / UC Case 2007-152-0

TECHNOLOGY DESCRIPTION

Researchers in the School of Engineering, University of California, San Diego, have developed an ultra-high sensitivity photodetector and photodetector array with a photocurrent to dark current ratio > 106, The photodetectors are CMOS-fabricated nanostructures that require less power than CCD type sensors, and can be manufactured less expensively as most image-sensor support circuitry is CMOS-based and can be integrated on the same chip as the CMOS image sensor.

APPLICATIONS

Digital cameras and cell phone cameras, camcorders, aerospace, security and military use.

STATE OF DEVELOPMENT

This technology is in early stage development, and is presently available for licensing. Patents pending.

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	9,024,295	05/05/2015	2007-152
United States Of America	Issued Patent	8,440,997	05/14/2013	2007-152

CONTACT
University of California, San Diego
Office of Innovation and Commercialization
innovation@ucsd.edu
tel: 858.534.5815.

OTHER INFORMATION

CATEGORIZED AS

- Optics and Photonics
  - All Optics and Photonics

RELATED CASES

2007-152-0