Field Steering ASLM

**Title:** Field Steering ASLM

**Invention:** Researchers at the University of Arizona have developed an apparatus and means of using DMDs and DLP chips in more than just a binary manner. The novel apparatus and means produces a spatial light modulator that also acts as an angular light modulator. One set of embodiments allows an entire field of an image to be steered for illumination or detection.

**Background:** The Digital Micromirror Device (DMD) is a type of Spatial Light Modulator (SLM) composed of an array of micromirrors. Each mirror, acting as a pixel in a display, is a binary switch rotating between two states located at +12 degrees and -12 degrees (specific product dependent), effectively “on” and “off” states. The DMD is typically used as a binary device.

**Applications:**

* LiDAR

* Beam steering

**Advantages:**

* High speed with a wide angular range

* Inexpensive compared to conventional devices

**Contact:** Amy Phillips

amyp@tla.arizona.edu

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The University of Arizona, Tucson, Arizona
Inventors

Guanghao Chen
Graduate Assistant, Teaching, Optical Sciences

Brandon Hellman
PhD student, Optical Sciences

Yuzuru Takashima
Associate Professor, Optical Sciences