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(71) Applicant (for all designated States except US): **MICRON TECHNOLOGY, INC.** [US/US]; 8000 S. Federal Way, Boise, ID 83707-0006 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **MOULI, Chandra** [US/US]; 727 South Granite Way, Boise, ID 83712 (US).

(74) Agent: **D'AMICO, Thomas, J.**; Dickstein Shapiro Morin & Oshinsky LLP, 2101 L Street NW, Washington, DC 20037-1526 (US).

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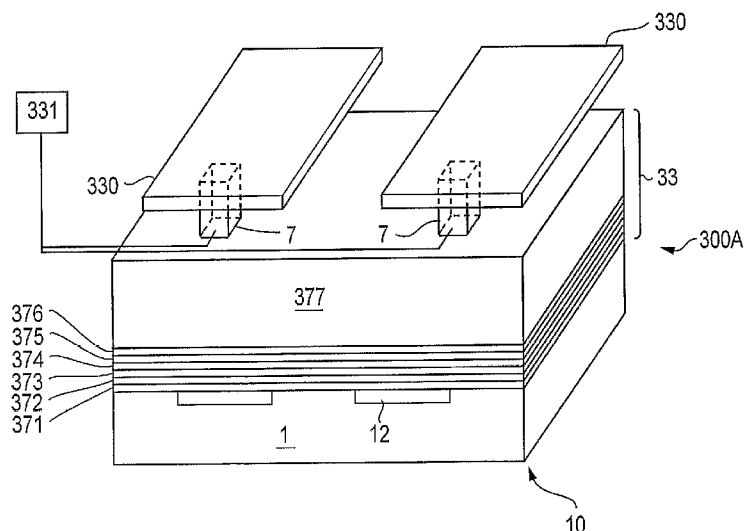
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(54) Title: IMAGER METHOD AND APPARATUS EMPLOYING PHOTONIC CRYSTALS



(57) Abstract: An image sensor and a method of forming an image sensor. The image sensor includes an array of pixel cells (100) at a surface of a substrate. Each pixel cell has a photo-conversion device (12). At least one a micro-electro-mechanical system (MEMS) element (330) including a photonic crystal structure is provided over at least one of the pixel cells. The MEMS-based photonic crystal element (330) is supported by a support structure (7) and configured to selectively permit electromagnetic wavelengths to reach the photo-conversion device upon application of a voltage. As such, the MEMS-based photonic crystal element of the invention can replace or compliment conventional filters, e.g., color filter arrays.

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