US009411122B2

(12) **United States Patent**
Bhat et al.

(10) **Patent No.: US 9,411,122 B2**
(45) **Date of Patent: Aug. 9, 2016**

(54) **LIGHT FIELD IMAGE CAPTURE DEVICE HAVING 2D IMAGE CAPTURE MODE**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **14/716,055**

(22) Filed: **May 19, 2015**

(65) **Prior Publication Data**

US 2015/0247986 A1 Sep. 3, 2015

Related U.S. Application Data

(63) Continuation of application No. 14/480,240, filed on Sep. 8, 2014, now Pat. No. 9,077,901.

(60) Provisional application No. 61/876,377, filed on Sep. 11, 2013.

(51) **Int. Cl.**

G02B 13/16	(2006.01)
H04N 5/225	(2006.01)
G02B 7/02	(2006.01)
H04N 5/232	(2006.01)
H04N 13/02	(2006.01)
G02B 27/00	(2006.01)
G02B 7/08	(2006.01)
G02B 3/12	(2006.01)
G02B 13/00	(2006.01)

(52) **U.S. Cl.**

CPC .. ***G02B 7/02*** (2013.01); ***G02B 3/12*** (2013.01); ***G02B 7/023*** (2013.01); ***G02B 7/08*** (2013.01); ***G02B 13/0015*** (2013.01); ***G02B 27/0075*** (2013.01); ***H04N 5/2254*** (2013.01); ***H04N 5/23245*** (2013.01); ***H04N 13/026*** (2013.01); ***H04N 13/0232*** (2013.01); ***H04N 13/0235*** (2013.01); ***H04N 13/0289*** (2013.01); *H04N 13/0296* (2013.01)

(58) **Field of Classification Search**

CPC H04N 5/2254; H04N 5/23212
USPC 348/335
See application file for complete search history.

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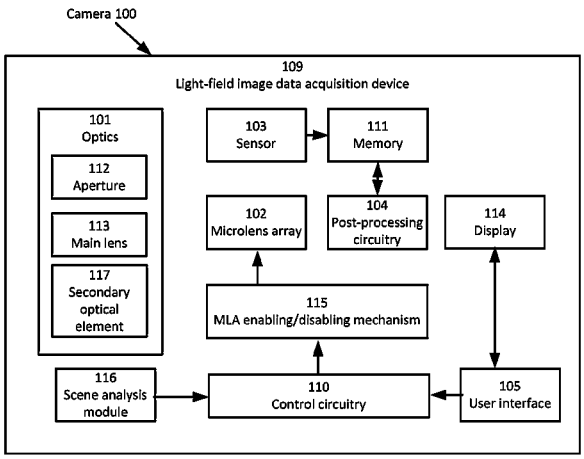
(57) **ABSTRACT**

A dual-mode light field camera or plenoptic camera is enabled to perform both 3D light field imaging and conventional high-resolution 2D imaging, depending on the selected mode. In particular, an active system is provided that enables the microlenses to be optically or effectively turned on or turned off, allowing the camera to selectively operate as a 2D imaging camera or a 3D light field camera.

7 Claims, 23 Drawing Sheets