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(54) **LOW PROFILE TRI-AXIS ACTUATOR FOR FOLDED LENS CAMERA**

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(58) **Field of Classification Search**
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See application file for complete search history.

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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.

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(57) **ABSTRACT**
Folded camera modules in which the camera module height is determined by a folded lens module diameter and by the lens module movement in a direction perpendicular to the lens optical axis, and dual-aperture cameras including such folded camera modules. A folded camera module includes OIS and AF actuators having dimensions smaller than the camera module height and therefore not adding to the camera module height.

19 Claims, 4 Drawing Sheets

