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**Dror et al.**

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(54) **MINIATURE TELEPHOTO LENS ASSEMBLY**

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(58) **Field of Classification Search**

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USPC ..... 359/708, 714, 713

See application file for complete search history.

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(57) **ABSTRACT**

An optical lens assembly includes five lens elements and provides a TTL/EFL<1.0. In an embodiment, the focal length of the first lens element  $f_1 < TTL/2$ , an air gap between first and second lens elements is smaller than half the second lens element thickness, an air gap between the third and fourth lens elements is greater than  $TTL/5$  and an air gap between the fourth and fifth lens elements is smaller than about 1.5 times the fifth lens element thickness. All lens elements may be aspheric.

**21 Claims, 6 Drawing Sheets**

