ment or may be an array of angled reflectors such as micromirrors embedded in an index-matching material. Optical combiners formed from holographic elements may be configured to reflect light at an angle of reflection that is different than the angle of incidence, thereby allowing light to reach a viewer's eyes even when the head-up display reflects light off of a side window on a vehicle door. A holographic optical element may include volume holographic media such as photopolymers or holographic polymer dispersed liquid crystal.

20 Claims, 7 Drawing Sheets

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

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