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(54) **UNDERWATER IMAGING SYSTEMS
HAVING PANORAMIC CONVERTERS**

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See application file for complete search history.

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ABSTRACT

A photography or videography imaging system includes a panoramic converter that can be used with a user-selected camera lens. The panoramic converter includes a dome port and a corrector group of lenses that corrects the aberrations caused by the dome port when the imaging system is placed in a liquid. The corrector group compensates a field curvature produced by dome port while preserving the angles, relative to an optical axis of the panoramic converter, of propagation paths of light rays entering the dome port. The angle, relative to the optical axis, of the propagation path of a light ray in the liquid prior to entering the dome port is approximately the same as the angle, relative to the optical axis, of the propagation path of the light ray propagating toward the camera lens after exiting the corrector group of lenses.

86 Claims, 67 Drawing Sheets

