

Title (en)
MINIATURIZED IMAGING DEVICE

Title (de)
MINIATURISIERTE ABBILDUNGSEINRICHTUNG

Title (fr)
DISPOSITIF D'IMAGERIE MINIATURISE

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Abstract (en)
[origin: WO03081831A2] The present invention is drawn toward miniaturized imaging devices. In one embodiment, the device can include a utility guide (36) having at least one aperture (60) configured for supporting utilities, and an SSID (38) carried by the utility guide. The SSID can include an imaging array (48) on a top surface (72), and a conductive element (56) on a side surface (74), wherein the imaging array is electrically coupled to the conductive element. Further, a lens (40), such as a GRIN lens, can be optically coupled to the imaging array, and an umbilical (30), including a conductive line (32), can be carried by the at least one aperture. The conductive line can be electrically coupled to the conductive element on the side surface of the SSID. Alternatively, the device can include an SSID having, as an integral structure, an imaging array electrically coupled to a conductive pad, wherein the SSID further includes at least one utility aperture (82) passing therethrough. Further, a lens can be optically coupled to the imaging array, and an umbilical, including a conductive line carried by the at least one aperture, can be configured such that the conductive line is directly electrically coupled to the conductive pad. In another embodiment, electrical communication between a conductive line and an SSID can be through an adaptor (52) or connector block, which can optionally also support the lens.

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