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(54) Title: SENSOR SYSTEM WITH ACTIVE ILLUMINATION

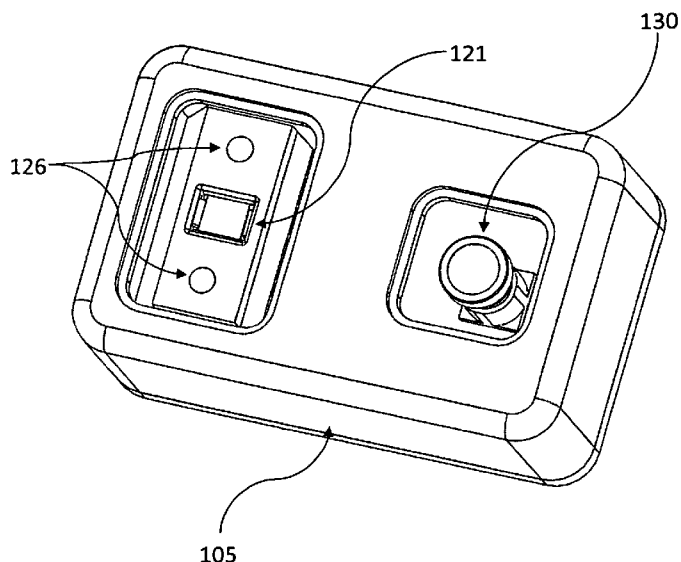


Fig. 8

(57) Abstract: The present invention relates to vision sensors based on an active illumination. An imaging system includes an imaging sensor and is adapted to process an image of a scene being illuminated by at least two different illumination sources each having a wavelength in the near infrared range. In a variant, the imaging system is adapted to use an illumination source having a modulation frequency below the modulation frequency used to perform a three dimensional time of flight measurement. In a variant, the imaging system is adapted to acquire a reduced number of samples per frame than used in time of flight measurements.