Title (en)

IMAGING LIDAR WITH MICROMECHANICAL COMPONENTS

Title (de)

BILDERZEUGENDES LIDAR MIT MIKROMECHANISCHEN KOMPONENTEN

Title (fr)

PROCEDE ET APPAREIL MICROMECANIQUE ET LIES LIDAR, ET COMPOSANTS DE CONDUCTION RAPIDE DE LUMIERE

Publication

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Application

EP 03731303 A 20030516

Priority

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Abstract (en)

[origin: WO03098263A2] Several systems and a method are taught for rapid modulation of a light beam in lidar and other imaging. Most of these involve micromechanical and other very small control components. One such unit is a light-switching fabric, based on displacement of liquid in a tube that crosses a junction of two optical waveguides. In some forms, the fabric is preferably flexible to enable folding or coiling to form a two-dimensional face that interacts with optical-fiber ends an opposed fiber bundle. The rapid operation of the switch fabric enables it to be used as a beam-splitter, separating incoming and return beams; and also to form pulses from supplied CW light. Other control components include micromechanical mirrors (e. g. MEMS mirrors) operated in arrays or singly, liquid-crystal devices, and other controlled-birefringence cells. Some of these devices are placed within an optical system for directional light-beam steering.

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G01S 17/89; G01S 7/481

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 03098263A2

Cited by

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