

Title (en)

A HIGH DEFINITION VOLUMETRIC DISPLAY SYSTEM

Title (de)

HOCHAUFLÖSUNGS-VOLUMETRISCHES ANZEIGESYSTEM

Title (fr)

SYSTEME D'AFFICHAGE VOLUMETRIQUE HAUTE DEFINITION

Publication

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Application

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Abstract (en)

[origin: WO9963512A1] A three-dimensional display system is described. An arrangement of optical emitters within the display is arranged so that they provide an isotropically distributed array of light emitting sources within the display volume. The display incorporates a solid optically transparent support structure which contains the optical sources and is rotated to provide an appropriately shaped display volume. The optical sources may be illuminated within the display volume in such a manner that a three-dimensional image is generated inside the display volume. In one embodiment, the optical sources are laid out on planes perpendicular to the axis of rotation of a support structure whereby for any single plane, the optical sources are located relative to one another on corresponding tracks so that the optical sources form a spiral when viewed along the axis of rotation. The planes may be arranged on top of one another and sequentially displaced around the axis of rotation so that the optical sources lie on the surface of a helix. The optical sources may be light emitting diodes or similar optoelectronic devices. The optical sources may be driven by means of parallel data which is multiplexed where the degree of serial/parallel mixing is controllable and dependent upon matching the display to the control electronics. Suitable applications include medical and similar imaging, traffic control and other applications where a three-dimensional representation of a particular image may be required.

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