

Title (en)

THREE-DIMENSIONAL LIGHT MODULATION ARRANGEMENT FOR MODULATING A WAVE FIELD HAVING COMPLEX INFORMATION

Title (de)

RÄUMLICHE LICHTMODULATIONSEINRICHTUNG ZUM MODULIEREN EINES WELLENFELDES MIT KOMPLEXER INFORMATION

Title (fr)

DISPOSITIF DE MODULATION DE LA LUMIÈRE SPATIAL SERVANT À MODULER UN CHAMP D'ONDES AU MOYEN D'INFORMATIONS COMPLEXES

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Application

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Abstract (en)

[origin: CA2766697A1] The present invention relates to a three-dimensional light modulator (SLM), of which the pixels (P01, P02) are combined to form modulation elements (ME). Each modulation element (ME) can be coded with a preset discrete value such that three-dimensionally arranged object points can be holographically reconstructed. The light modulator according to the invention is characterized in that assigned to the pixels (P01, P02) of the modulator are beam splitters or beam combiners which, for each modulation element (ME), combine the light wave parts modulated by the pixels (P01, P02) by means of refraction or diffraction on the output side to form a common light beam which exits the modulation element (ME) in a set propagation direction.

IPC 8 full level

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