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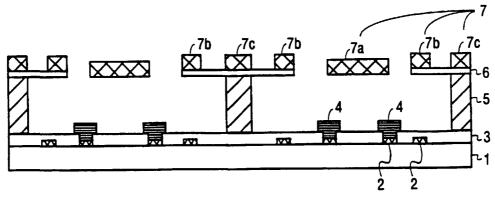
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(54) Title: MICRO-ELECTRO-MECHANICAL-SYSTEM (MEMS) MIRROR DEVICE AND METHODS FOR FABRICATING THE SAME



(57) Abstract: A micro-electro-mechanical-system (MEMS) mirror device and methods for fabricating the same allow for a large range of angular motion for a center mirror component. The large range of angular motion for a center mirror component is dictated simply by a thickness of a substrate used or a thickness of a thick film used in making a support structure to support the center mirror component. The MEMS mirror device and methods for fabricating the same allow a large number mirror devices to be fabricated on a substrate. The MEMS mirror device includes a substrate. Electrodes are formed supported by the substrate. A support structure is formed adjacent to the electrodes. A hinge pattern and a mirror pattern having a center mirror component are formed such that the support structure supports the hinge pattern and mirror pattern. The support structure also supports the hinge pattern and mirror pattern such that a bottom surface of the center mirror component in a stationary non-rotating position is capable of exceeding a height of 50 µm above the electrodes.



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A CLASSI	IFICATION OF SUBJECT MATTER	PCT/US 01/03357	02 01/0322/	
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Documenta	ition searched other than minimum documentation to the extent that	t such documents are incl	uded in the fields searched	
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Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2		Authorized officer		
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