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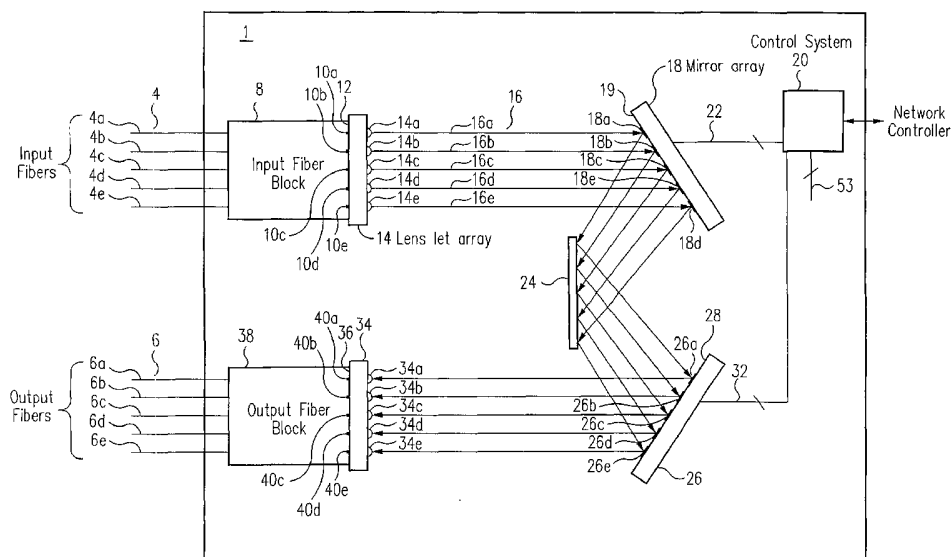
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(54) Title: **FEEDBACK CONTROL SYSTEM FOR A MEMS BASED OPTICAL SWITCHING FABRIC**



(57) Abstract: A control system for controlling individual mirrors in a MEMS-based optical switching fabric is presented. The control system includes a position sensitive detector positioned to receive a control beam reflected from individual mirrors of a first mirror array. In some embodiments, the control beam can be time-multiplexed with a calibration beam. The position of the control beam corrected in response to the position of the calibration beam can be compared with a position calculated on the port assignment of the individual mirrors in order to provide feedback to a feed-back based control system for the individual mirrors.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, COMPENDEX, INSPEC, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	WO 01 24384 A (ASTARTE FIBER NETWORKS INC) 5 April 2001 (2001-04-05) the whole document ---	1-5,13, 14 6-12,15
A	WO 01 53875 A (OPTICAL SWITCH CORP) 26 July 2001 (2001-07-26) page 6, line 18 -page 8, line 19 ---	1,13
A	US 4 692 883 A (HWANG TZONG ET AL) 8 September 1987 (1987-09-08) column 1, line 13 - line 62; figures 1,5 --- -/--	6-12,15

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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