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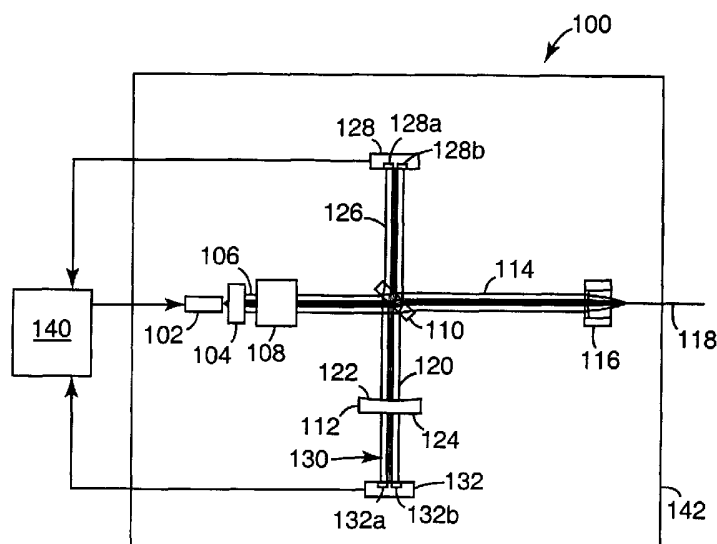
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(54) Title: APPARATUS AND METHOD FOR CONTROLLING THE OPERATING WAVELENGTH OF A LASER



(57) Abstract: The present invention relates to an approach to locking the output wavelength of a laser (102) that uses an etalon (112) having non-parallel surfaces (122, 124). Under this approach, the non-parallel etalon (112) is formed from a readily available, low cost optical component, and may include an etalon with a wedged shape or with at least one curved surface. This approach offers significant advantages over the use of a planar etalon. It provides two degrees of freedom in alignment of the device, and so both the absolute wavelength and the spacing between the interference fringes can be independently adjusted. It also reduces the cost and difficulty of assembly, since it utilizes standard optical parts with wide tolerances. The invention may be used within a standard laser package. The invention also permits the laser to be tuned to a precise operating wavelength by setting various tuning signals according to values stored in memory.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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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, WPI Data, PAJ, IBM-TDB, INSPEC, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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X	WO 95 20144 A (BRITISH TELECOMM ; PRATT DAVID JOHN (GB)) 27 July 1995 (1995-07-27) page 2, line 9-20 page 4, line 26 -page 6, line 14; figures 1,2	1-3, 41, 49
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☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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