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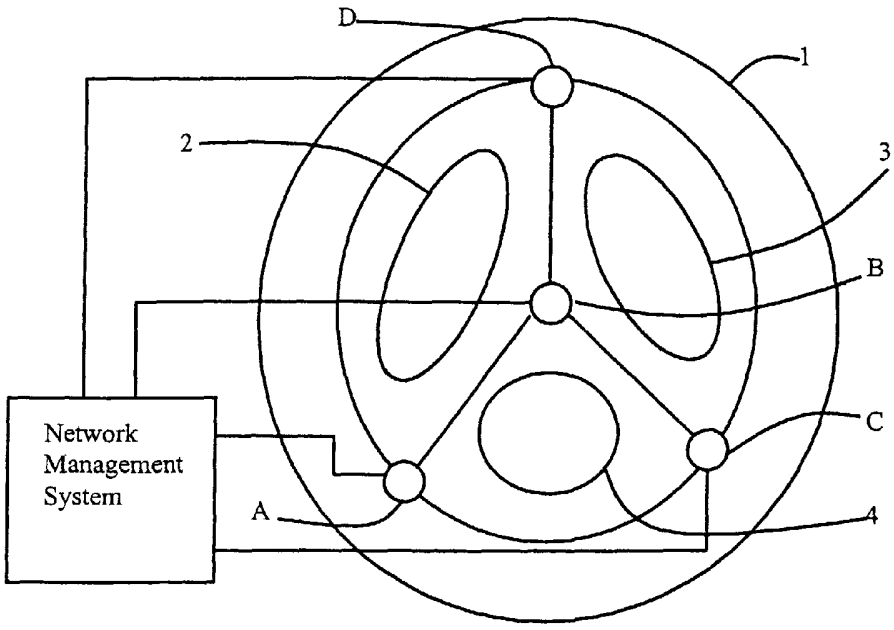
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[Continued on next page]

(54) Title: OPTICAL COMMUNICATIONS NETWORK WITH PROTECTION PATHS



(57) Abstract: The working fibre and protection fibre between pairs of nodes are shared between adjacent rings in a network, such that working traffic on the working fibre between the pair of nodes can be protected by the ring architecture of either of adjacent rings. A network management system routes signals across the network and dictates which rings within the network provide protection for the signal route. The ring structure enables protection for signal traffic on a ring to be protected by the ring protocols, providing rapid protection switching. It is also possible to select the location of protection bandwidth for a signal path across the network. In this way, protection bandwidth is shared, and can also be configured to optimise the use of the total available protection bandwidth.

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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

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	EP 0 994 635 A (NORTEL NETWORKS CORP) 19 April 2000 (2000-04-19) column 5, paragraphs 14,15 column 6, paragraph 17 column 19, paragraphs 45,46 ---	1,5-7,9, 11 2-4,8, 10,12
Y	US 5 537 393 A (SHIODA MASAHIRO ET AL) 16 July 1996 (1996-07-16) figure 1 column 2, line 57 - line 60 column 3, line 13 - line 32 --- -/--	2-4

[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
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International Application No
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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Y	MAYER M: "FIRST DRAFT OF G.ASON" CONTRIBUTION TO T1 STANDARDS PROJECT, XX, XX, 21 March 2000 (2000-03-21), pages 1-14, XP000931271 page 3, paragraph 1 ---	8,10,12
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