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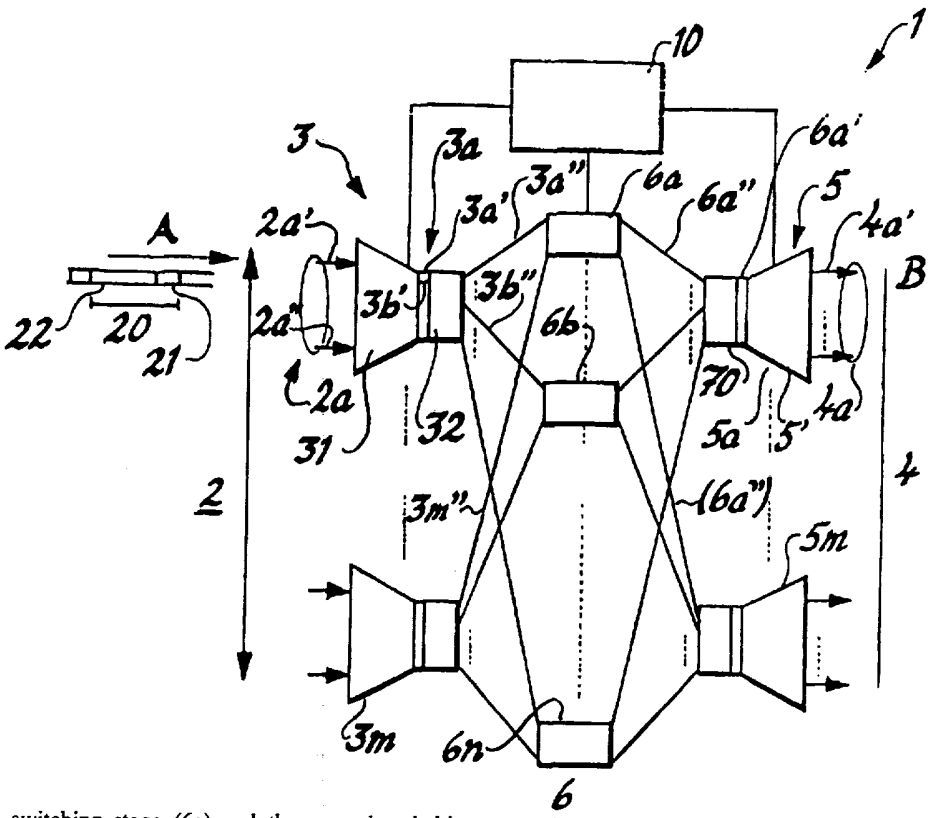
(54) Title: ATM-SYSTEM ADAPTED THREE STAGE SWITCHING UNIT

(57) Abstract

The invention comprises an ATM-SYSTEM adapted three-step switching unit (1), comprising a number of incoming group related conductors (2), every group connected to a first switching stage (3), formed as an input circuit, a number of outgoing group related conductors (4), every group connected to a second switching stage (5), formed as an output circuit and a third switching stage (6). A control unit (10) coacts with said switching stages in order to connect one of said incoming conductors (2a') with a selected outgoing conductor (4a') by means of a connecting path, pointed out through said between related third switching stage (6). Each of the outgoing conductors, belonging to said first switching stage (3), coacts with an electro-optical converter. Respective connection (3a") between the first switching stage (3) and the third switching stage (6) consists of an optical conductor. The third switching stage (6) is adapted to transfer optical information-carrying signals through said connecting path. The connections (6a") between the third switching stage (6a) and the second switching stage (5) consists of optical conductors and incoming conductors, belonging to said second switching stage, are pre-connected by an opto-electrical converter.



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INTERNATIONAL SEARCH REPORT

International application No.
PCT/SE 95/00643

A. CLASSIFICATION OF SUBJECT MATTER

IPC6: H04Q 11/04 // H04Q 3/68; H04Q 3/52
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)

IPC6: H04Q

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

SE,DK,FI,NO classes as above

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

INSPEC, WPIL, CLAIMS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5303078 A (CHARLES A. BRACKETT ET AL), 12 April 1994 (12.04.94), column 4, line 25 - column 5, line 60; column 8, line 28 - column 11, line 55	1,3-7,9-11
A	--	2,8
A	IEICE Trans. on Communication, Volume E75-B, No 4, April 1992, ., "Wavelength conversion laser diodes application to wavelength-division photonic cross-connect node with multistage configuration pp. 267-274", figures 1-3, see page 267-271	1-11
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[X] Further documents are listed in the continuation of Box C. [X] See patent family annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
5 December 1995	06-12-1995
Name and mailing address of the ISA/ Swedish Patent Office Box 5055, S-102 42 STOCKHOLM Facsimile No. +46 8 666 02 86	Authorized officer Lars Christerson Telephone No. +46 8 782 25 00

INTERNATIONAL SEARCH REPORT

International application No.
PCT/SE 95/00643

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	Electronic Letters, Volume 23, No 18, August 1987, ., "Crossconnection of wavelength-division-multiplexed high speed channels pp. 974-976", figure 1, see page 975 --	1,3-4,6,8,10
Y	IEICE Trans. on Communication, Volume E75-B, No 4, April 1992, ., "Trend of Photonic Switching Systems pp 235 -242", figures 7,15, see page 237 - 240	1,3-7,9-11
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INTERNATIONAL SEARCH REPORT

Information on patent family members

30/10/95

International application No.
PCT/SE 95/00643

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US-A- 5303078	12/04/94	US-A- 5130984	14/07/92