

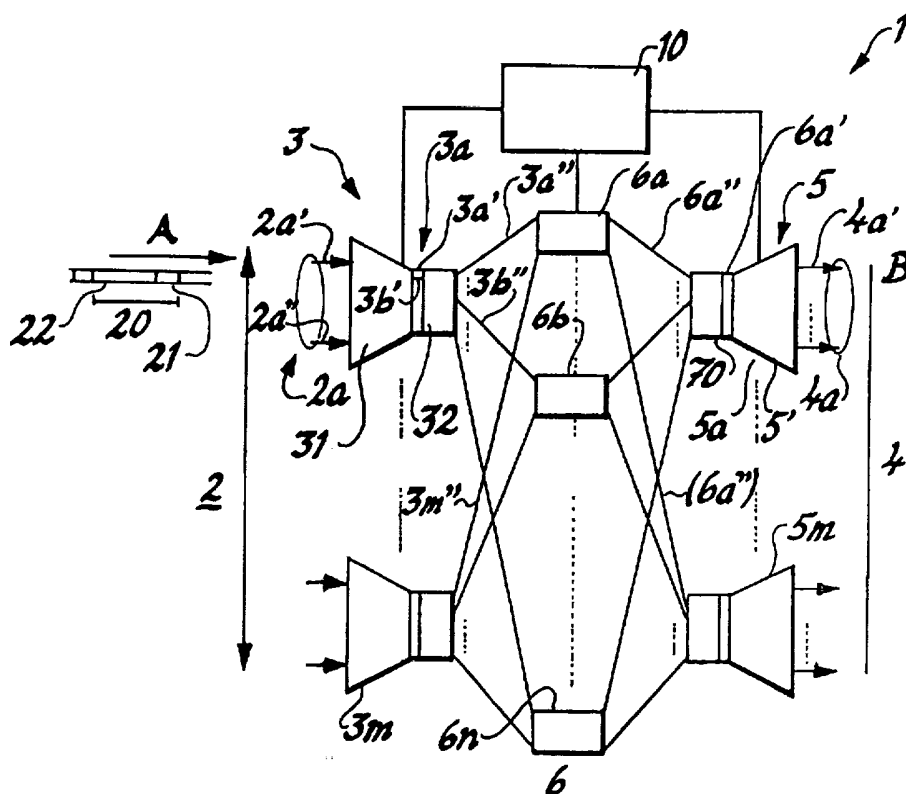


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(21) International Application Number: PCT/SE95/00642 (22) International Filing Date: 2 June 1995 (02.06.95) (30) Priority Data: 9402019-5 10 June 1994 (10.06.94) SE (71) Applicant: TELEFONAKTIEBOLAGET L.M. ERICSSON [SE/SE]; S-126 25 Stockholm (SE). (72) Inventor: BUHRGARD, Magnus, Karl, Sven; Stenhammarsvägen 15, S-161 52 Bromma (SE). (74) Agent: LINDBLOM, Erik, J.; Flotthamn, S-150 23 Enhörna (SE).	(81) Designated States: AU, BR, CA, CN, FI, JP, KR, MX, NO, European patent (BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, NL). Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 18 January 1996 (18.01.96)	

(54) Title: THREE STAGE SWITCHING UNIT**(57) Abstract**

The invention comprises a 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 95/00642

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 2, line 12 - line 65; column 4, line 25 - column 6, line 22; column 21, line 20 - line 43, figure 1 --	1-9
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", page 267 - page 271, figures 1-3 --	1-9
Y	IEICE Trans. on Communication, Volume E75-B, No 4, April 1992, ., "Trend of Photonic Switching Systems pp. 235-242", page 237 - page 240, figures 7,11,14,15 --	1-9

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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International application No.

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	Electronics Letters, Volume 23, No 18, August 1987, ., "Crossconnection of wavelength-division-multiplexed high-speed channels pp. 974-976", page 975, figures 1,3 -- -----	1-3,6,8-9

Information on patent family members

International application No.

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Form PCT/ISA/210 (patent family annex) (July 1992)