



(1) Publication number:

0 539 755 A3

(2) EUROPEAN PATENT APPLICATION

(21) Application number: **92116871.2**

(51) Int. Cl.5: **H04Q** 3/52

2 Date of filing: 02.10.92

③ Priority: 31.10.91 US 785730

Date of publication of application: 05.05.93 Bulletin 93/18

Designated Contracting States:
DE FR GB IT

Bate of deferred publication of the search report: 18.05.94 Bulletin 94/20

7) Applicant: INTERNATIONAL BUSINESS MACHINES CORPORATION
Old Orchard Road

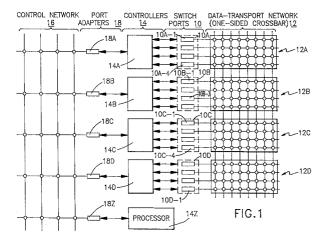
Armonk, N.Y. 10504(US)

Inventor: Franaszek, Peter A. Box 704 Yorktown Heights New York 10598(US) Inventor: Georgiou, Christos John 14 Nosband Avenue, No. 6H White Plains, New York 10605(US)

Representative: Schäfer, Wolfgang, Dipl.-Ing. IBM Deutschland Informationssysteme GmbH,
Patentwesen und Urheberrecht
D-70548 Stuttgart (DE)

- (54) Very large scale modular switch.
- © Switch resources for a one-sided crosspoint switch with distributed control (i.e., switch ports, internal busses and controllers) have been organized so that modular growth is facilitated by: (1) assigning each switch port uniquely to one of the controllers; (2) making each controller handle only the crosspoints connected to the switch ports assigned to it; (3) assigning each internal bus uniquely to one of the controllers; and (4) providing a means for the controllers to communicate with each other. Modular growth of any of the switch resources (i.e., switch

ports, internal busses and/or controllers) is accommodated by effectively reallocating (i.e., modifying the assignment of) some or all of the resources. Failure of a switch resource is accommodated also by effectively reallocating (i.e., modifying the assignment of) some or all of the remaining usable resources. It is contemplated that modification of resource allocation can be done in various alternative ways, either physically or electronically, including automatically and even dynamically.



DOCUMENTS CONSIDERED TO BE RELEVANT					
Category	Citation of document with indication of relevant passages	, where appropriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CL5)	
X	US-A-3 974 343 (CHENEY E * abstract * * column 2, line 62 - co * column 4, line 28 - li * column 8, line 17 - li * column 25, line 15 - l 1-4,12 *	lumn 3, line 3 * ne 33 * ne 28 *	1-15	H04Q3/52	
A,D	EP-A-0 425 807 (IBM) * the whole document *	· -	1-15		
				TECHNICAL FIELDS SEARCHED (Int.Cl.5)	
				Н04Q	
	The present search report has been draw	vn up for all claims			
Place of search THE HAGUE		Date of completion of the search 18 March 1994	חים	O'Reilly, D	
X : part Y : part doc A : tecl O : nor	CATEGORY OF CITED DOCUMENTS ticularly relevant if taken alone ticularly relevant if combined with another ument of the same category anological background anywitten disclosure ermediate document	T: theory or princi E: earlier patent de after the filing c D: document cited L: document cited	ple underlying the cument, but pub- late in the application for other reasons	e invention lished on, or n	