

### US006317431B1

## (12) United States Patent Hodgkinson et al.

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### (54) ATM PARTIAL CUT-THROUGH

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Assignee: British Telecommunications public (73)limited company, London (GB)

(\*) Notice: Subject to any disclaimer, the term of this

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PCT Pub. Date: Dec. 31, 1997

#### (30)Foreign Application Priority Data

Jun. 21, 1996	(GB)	 9613020
,	· /	

(51) **Int. Cl.**<sup>7</sup> ...... **H04L 12/28**; H04L 12/56; H04J 3/22; H04J 3/24

(52) U.S. Cl. ...... 370/395; 370/392; 370/397; 370/466; 370/468

(58)	Field of Search	2,
	370/225, 256, 408, 409, 399, 466, 46	8,
	469, 471, 478, 355, 254, 397, 401, 35	51

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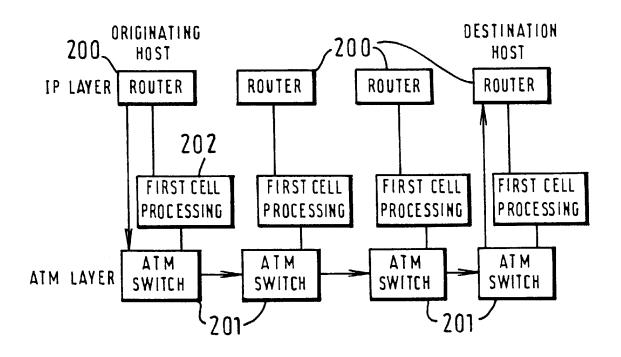
Primary Examiner—Wellington Chin Assistant Examiner—M. Phan

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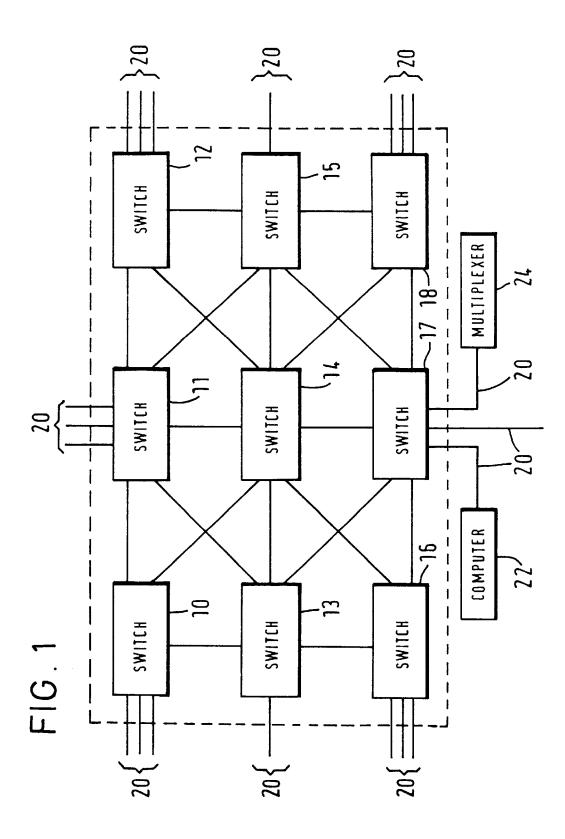
(57)**ABSTRACT** 

A method of transmitting across an ATM network a connectionless datagram in a cell structure having the form of a plurality of ATM cells the first cell of which carries in its payload the routing information of the connectionless datagram, and wherein at an intermediate node of the network a connectionless routing function is carried out on said first cell with the remaining cells remaining in the ATM layer.

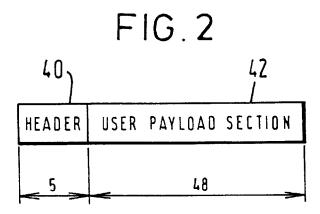
### 10 Claims, 5 Drawing Sheets











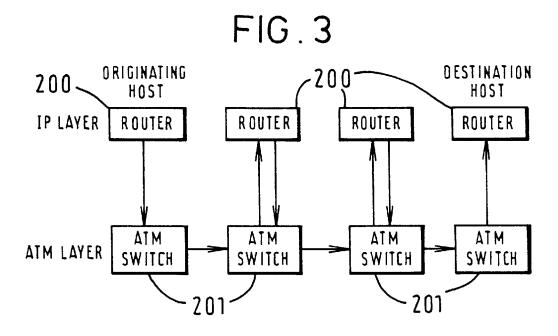




FIG. 4

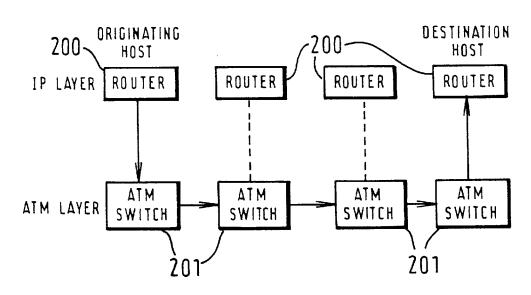
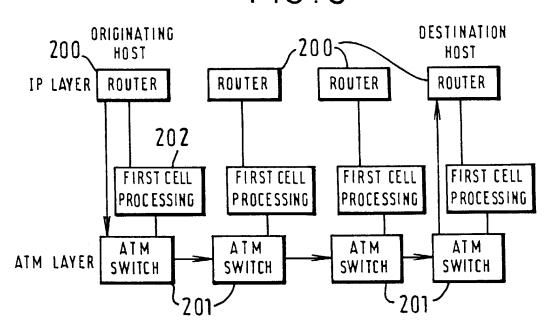


FIG.5





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FIG.6

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Y	HL	ST		TL		
	Id				FO	
	TtL	Pr		HC		
		SIP	Δ			
		OIP	Δ	-		
	0					Р
==:		IPO	P			::==

FIG. 7

V	P		FL				
	PL		Ру	HL			
		SIF	Δ				
		SIF	ΡΔ				
		SI	PA				
		SI	ΡΔ				
		01	ΡΔ				
		01	ΡΔ				
		10	ΡΔ				
		01	ΡΔ				
	•	1 P	OP	3333	:==		

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