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United States Patent [19]

[11] Patent Number: **5,812,639**

Bartholomew et al.

[45] Date of Patent: **Sep. 22, 1998**

- [54] **MESSAGE COMMUNICATION VIA COMMON SIGNALING CHANNEL**
- [75] Inventors: **Dale L. Bartholomew**, Vienna; **Robert D. Farris**, Sterling, both of Va.
- [73] Assignee: **Bell Atlantic Network Services, Inc.**, Arlington, Va.
- [21] Appl. No.: **557,749**
- [22] Filed: **Nov. 13, 1995**

5,089,954	2/1992	Rago	379/229 X
5,095,480	3/1992	Fenner	379/22 X
5,134,647	7/1992	Pugh et al.	379/88
5,163,080	11/1992	Amoroso	379/89
5,193,110	3/1993	Jones et al.	379/89
5,195,128	3/1993	Knitl	379/88
5,199,062	3/1993	VonMeister et al.	379/89
5,237,604	8/1993	Ryan	379/220
5,260,986	11/1993	Pershan	379/67 X
5,263,080	11/1993	Jones et al.	379/88
5,274,696	12/1993	Perelman	379/89
5,278,897	1/1994	Mowery et al.	379/212
5,289,468	2/1994	Yoshida	370/401
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5,333,266	7/1994	Boaz	395/200
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5,361,399	11/1994	Linquist et al.	455/56.1
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5,375,159	12/1994	Williams	379/23
5,377,186	12/1994	Wegner et al.	379/201 X
5,381,465	1/1995	Carter et al.	379/67
5,386,467	1/1995	Ahmad	379/220
5,400,393	3/1995	Knuth	379/88

Related U.S. Application Data

- [63] Continuation-in-part of Ser. No. 353,281, Dec. 5, 1994, Pat. No. 5,680,442, and a continuation-in-part of Ser. No. 371,906, Jan. 12, 1995, Pat. No. 5,631,948, which is a continuation-in-part of Ser. No. 353,281, Dec. 5, 1994, Pat. No. 5,680,442, which is a continuation-in-part of Ser. No. 539,952, Oct. 6, 1995, Pat. No. 5,661,782.
- [51] Int. Cl.⁶ **H04M 3/50; H04M 7/06**
- [52] U.S. Cl. **379/89; 379/100.08; 379/207; 379/230**
- [58] Field of Search 379/89, 230, 67, 379/88, 207, 100.08, 100.12; 370/356, 354

(List continued on next page.)

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- Audio Messaging Interchange Specification (AMIS)—Analog Protocol, Version 1, Issue 2, Feb. 1992.
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Primary Examiner—Thomas W. Brown
Attorney, Agent, or Firm—McDermott, Will & Emery

[57] ABSTRACT

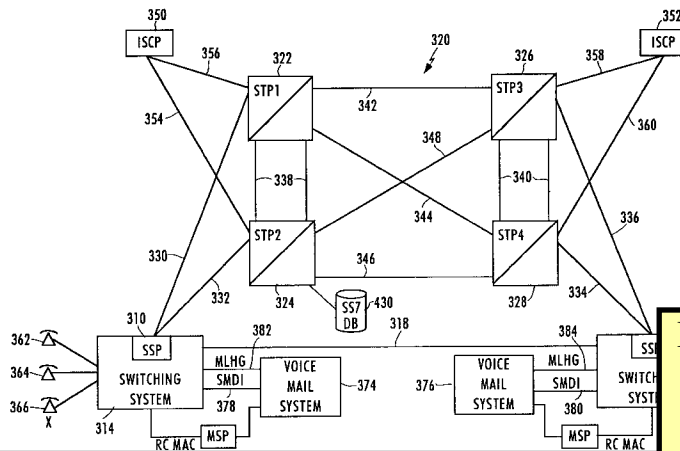
A system and method of effecting transfer of message information of varied types from one centralized messaging system to another messaging device in a switched communications network having a plurality of central offices connected to subscriber terminals and connected together by trunks wherein the transfer of the message is effected through a common channel signaling network without using the trunks.

20 Claims, 17 Drawing Sheets

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4,585,906	4/1986	Mathews et al.	379/89
4,602,129	7/1986	Mathews et al.	379/89
4,609,778	9/1986	Franklin et al.	379/246
4,625,081	11/1986	Lotito et al.	379/88
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4,766,604	8/1988	Axberg	379/67
4,790,003	12/1988	Kepley et al.	379/88
4,932,042	6/1990	Baral et al.	379/67
5,008,926	4/1991	Misholi	379/89
5,012,511	4/1991	Hanle et al.	379/21.1
5,018,191	5/1991	Catron et al.	379/100
5,029,199	7/1991	Jones et al.	379/67
5,029,200	7/1991	Haas	379/89
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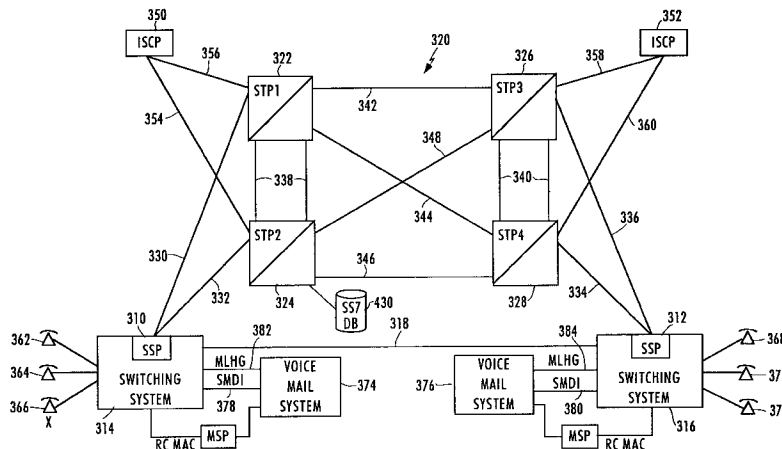
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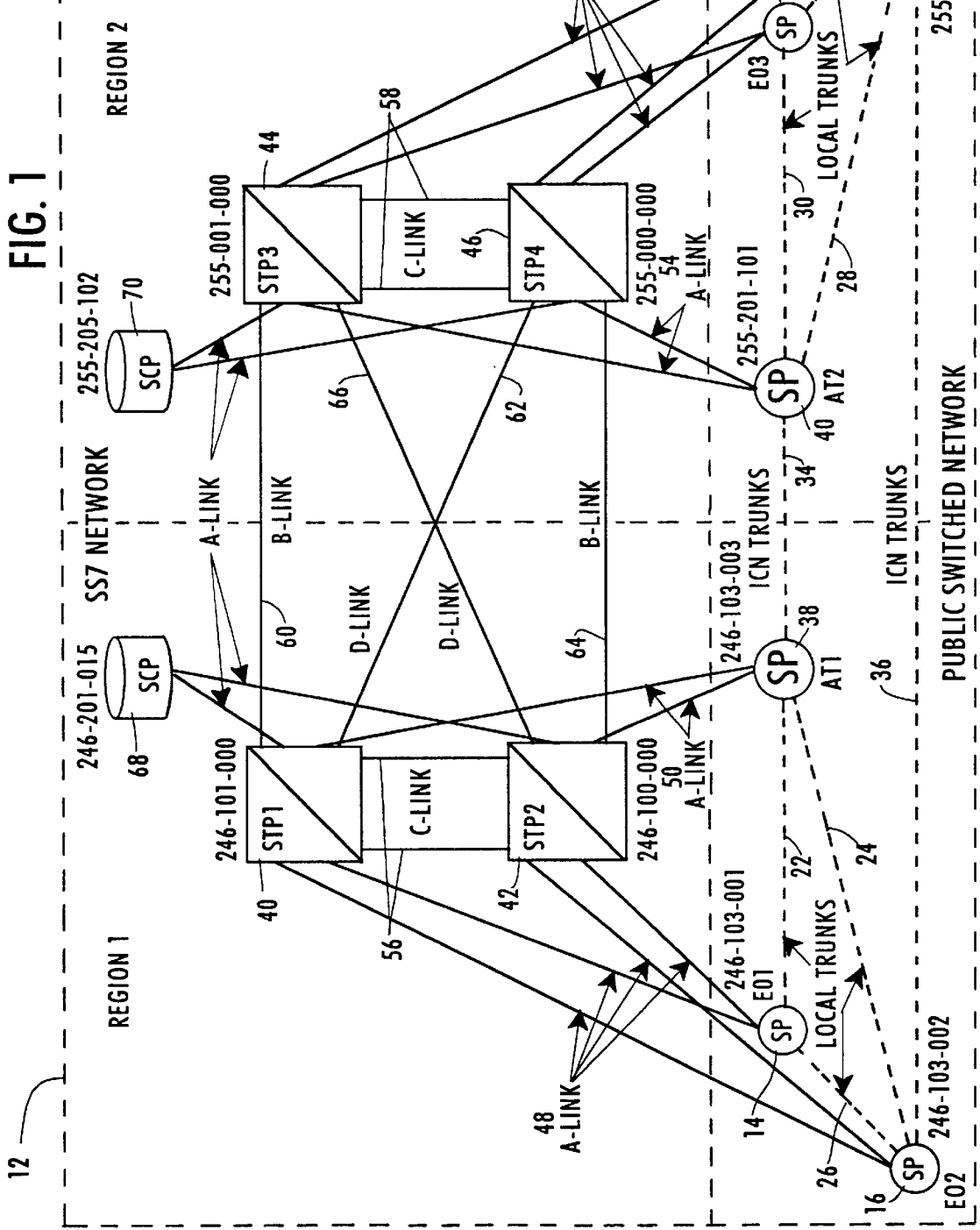
20 Claims, 17 Drawing Sheets



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				5,631,948	5/1997	Bartholomew et al.	379/67

FIG. 1



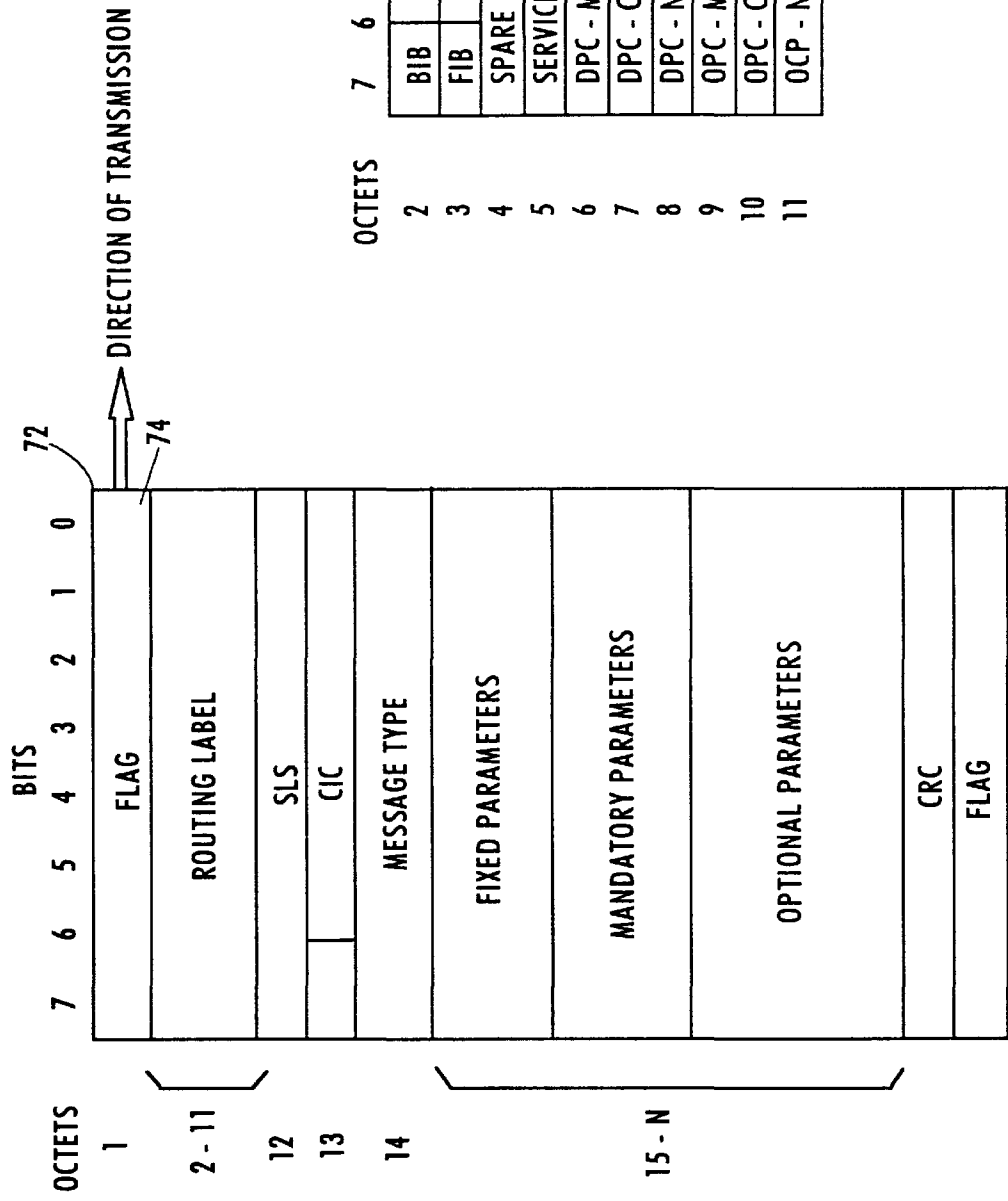


FIG. 2

OCTETS	7	6	5	4	3	BITS
2	BIB	BSN				
3	FIB	FSN				
4	SPARE	LENGTH				
5	SERVICE INFORMATION					
6	DPC - MEMBER					
7	DPC - CLUSTER					
8	DPC - NETWORK ID					
9	OPC - MEMBER					
10	OPC - CLUSTER					
11	OCP - NETWORK ID					

ROUTING LABEL

FIG.

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