FIG.1

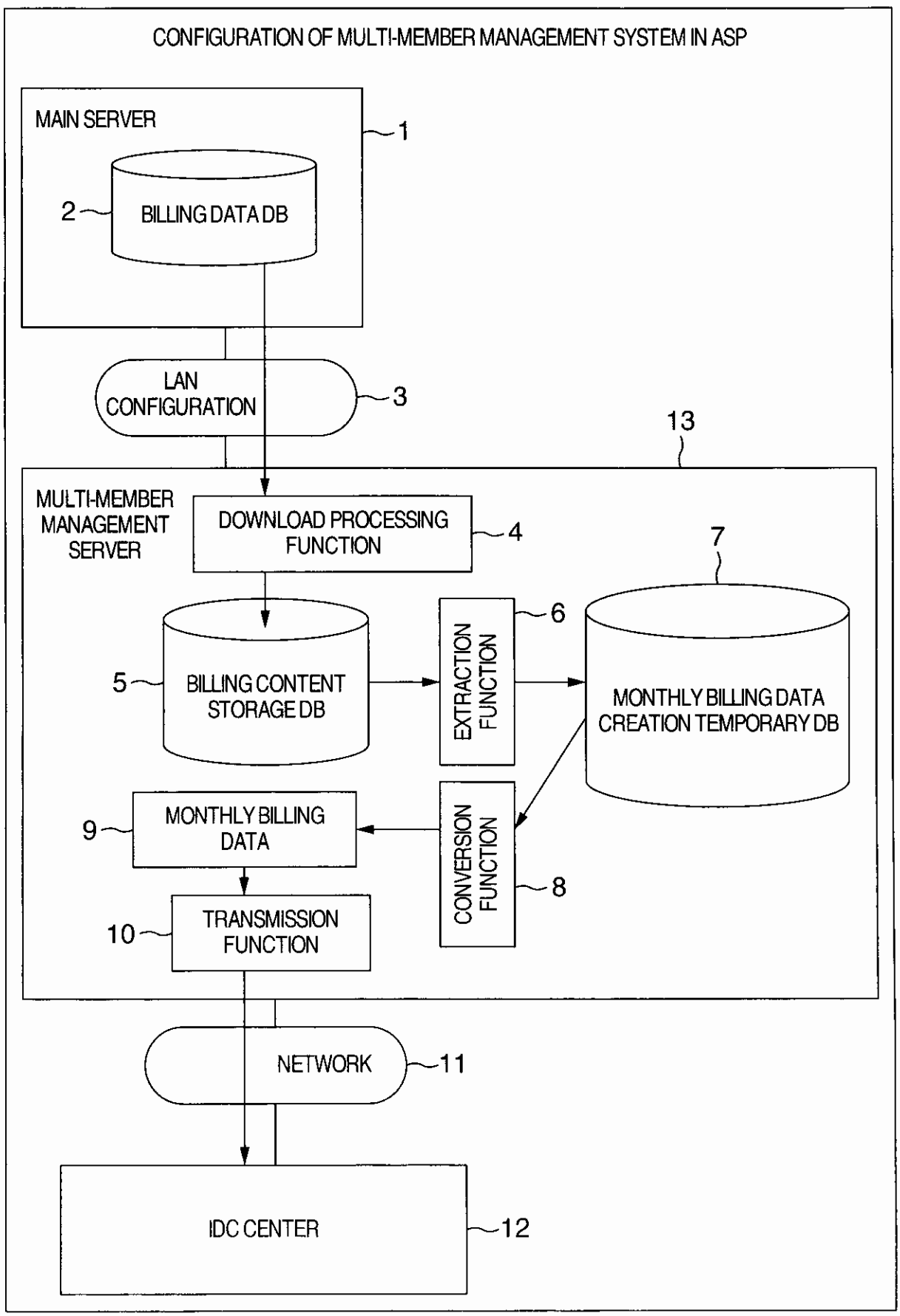

CONFIGURATION OF MULTI-MEMBER MANAGEMENT SYSTEM IN ASP
MAIN SERVER
1
2
BILLING DATA DB
LAN CONFIGURATION
3
13
MULTI-MEMBER MANAGEMENT SERVER
DOWNLOAD PROCESSING FUNCTION
4
7
5
BILLING CONTENT STORAGE DB
EXTRACTION FUNCTION
6
MONTHLY BILLING DATA CREATION TEMPORARY DB
9
MONTHLY BILLING DATA
CONVERSION FUNCTION
8
10
TRANSMISSION FUNCTION
NETWORK
11
IDC CENTER
12

FIG.2

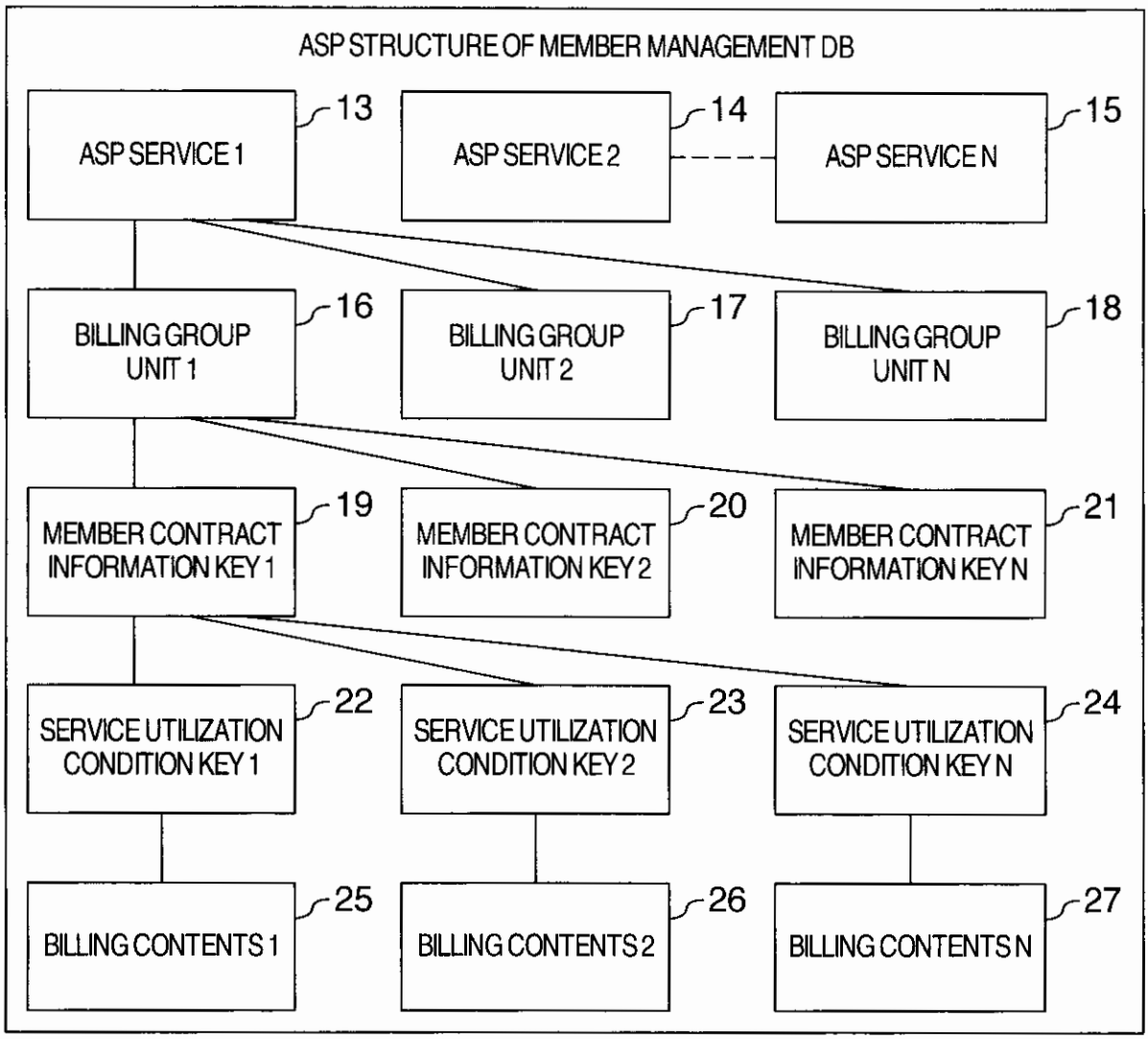

ASP STRUCTURE OF MEMBER MANAGEMENT DB
ASP SERVICE 1
13
ASP SERVICE 2
14
ASP SERVICE N
15
BILLING GROUP UNIT 1
16
BILLING GROUP UNIT 2
17
BILLING GROUP UNIT N
18
MEMBER CONTRACT INFORMATION KEY 1
19
MEMBER CONTRACT INFORMATION KEY 2
20
MEMBER CONTRACT INFORMATION KEY N
21
SERVICE UTILIZATION CONDITION KEY 1
22
SERVICE UTILIZATION CONDITION KEY 2
23
SERVICE UTILIZATION CONDITION KEY N
24
BILLING CONTENTS 1
25
BILLING CONTENTS 2
26
BILLING CONTENTS N
27

FIG.3

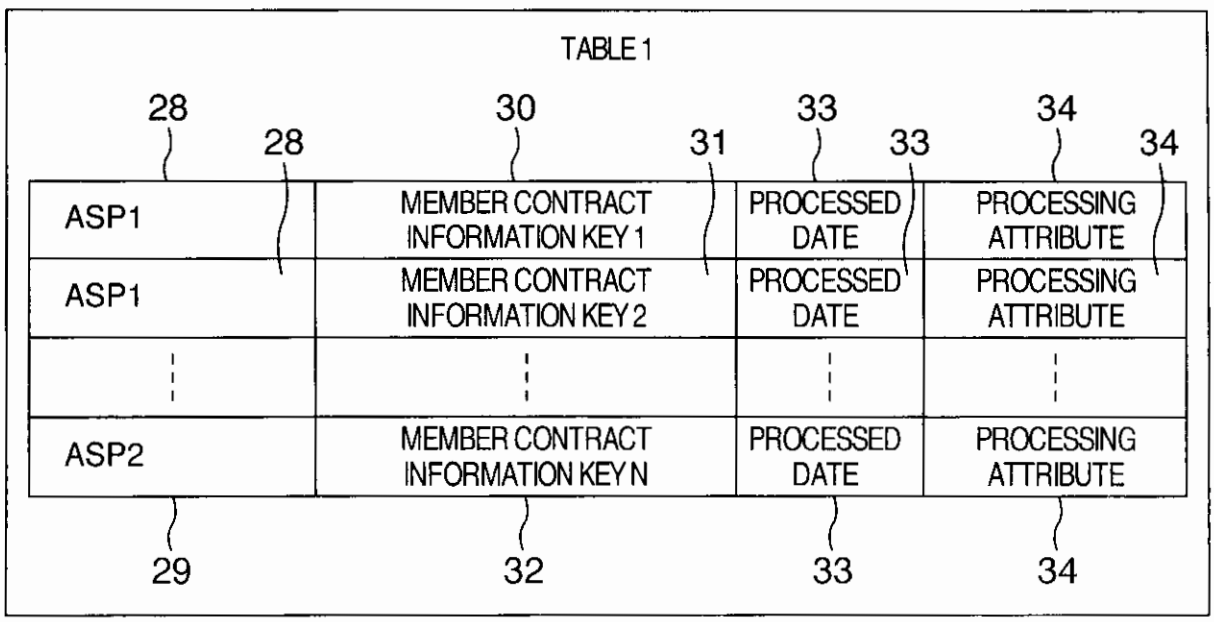

TABLE 1
28
28
30
31
33
33
34
34
ASP1
MEMBER CONTRACT INFORMATION KEY 1
PROCESSED DATE
PROCESSING ATTRIBUTE
ASP1
MEMBER CONTRACT INFORMATION KEY 2
PROCESSED DATE
PROCESSING ATTRIBUTE
ASP2
MEMBER CONTRACT INFORMATION KEY N
PROCESSED DATE
PROCESSING ATTRIBUTE
29
32
33
34

FIG.4

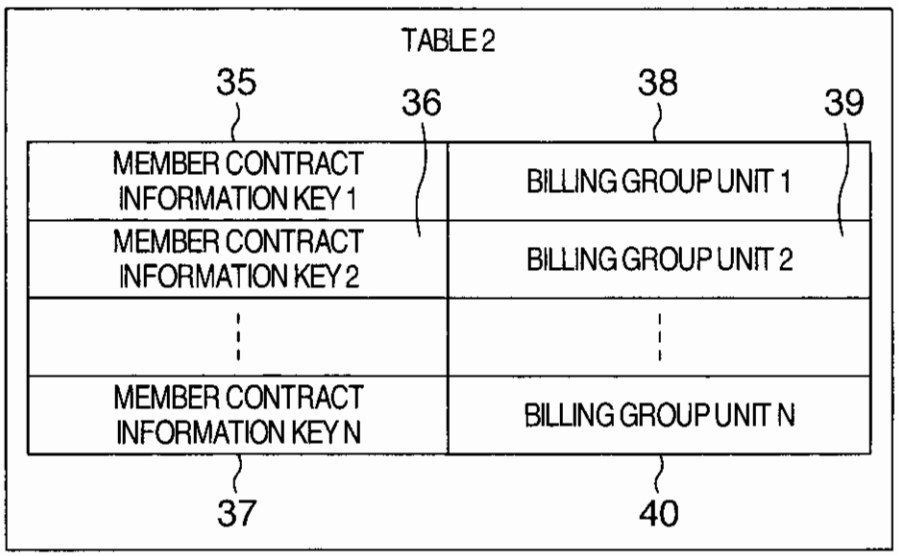


FIG.5

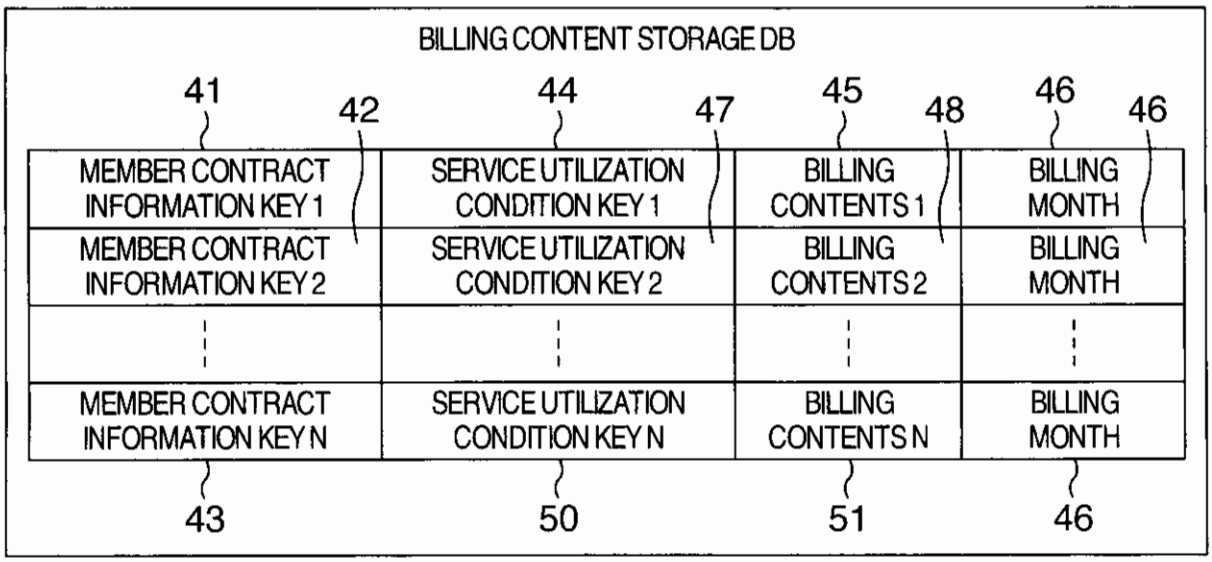


FIG.6

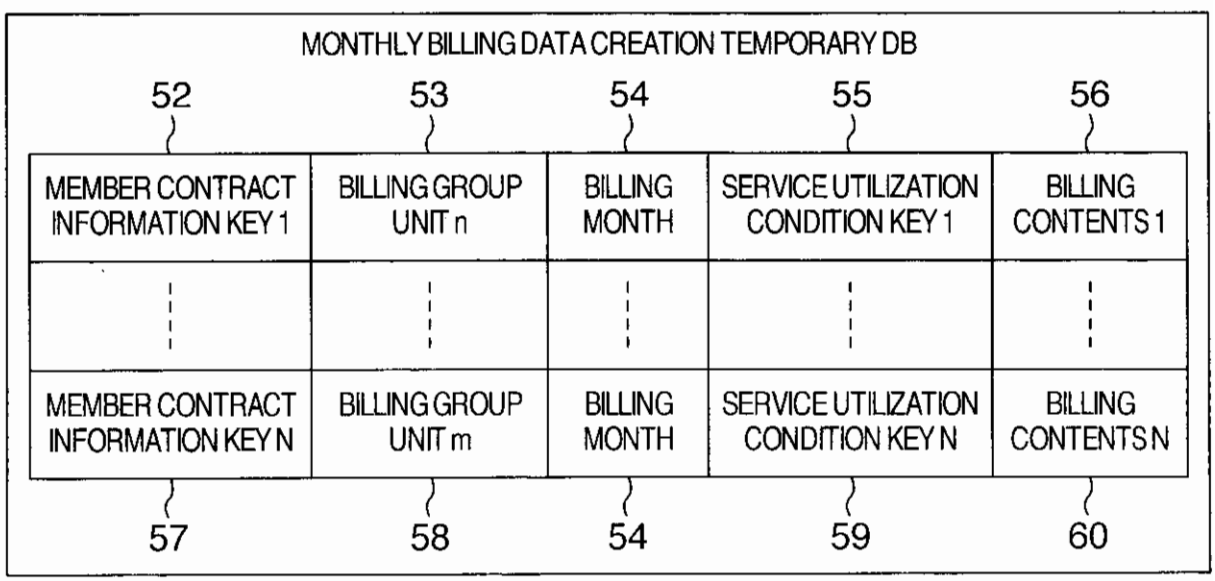


FIG.7

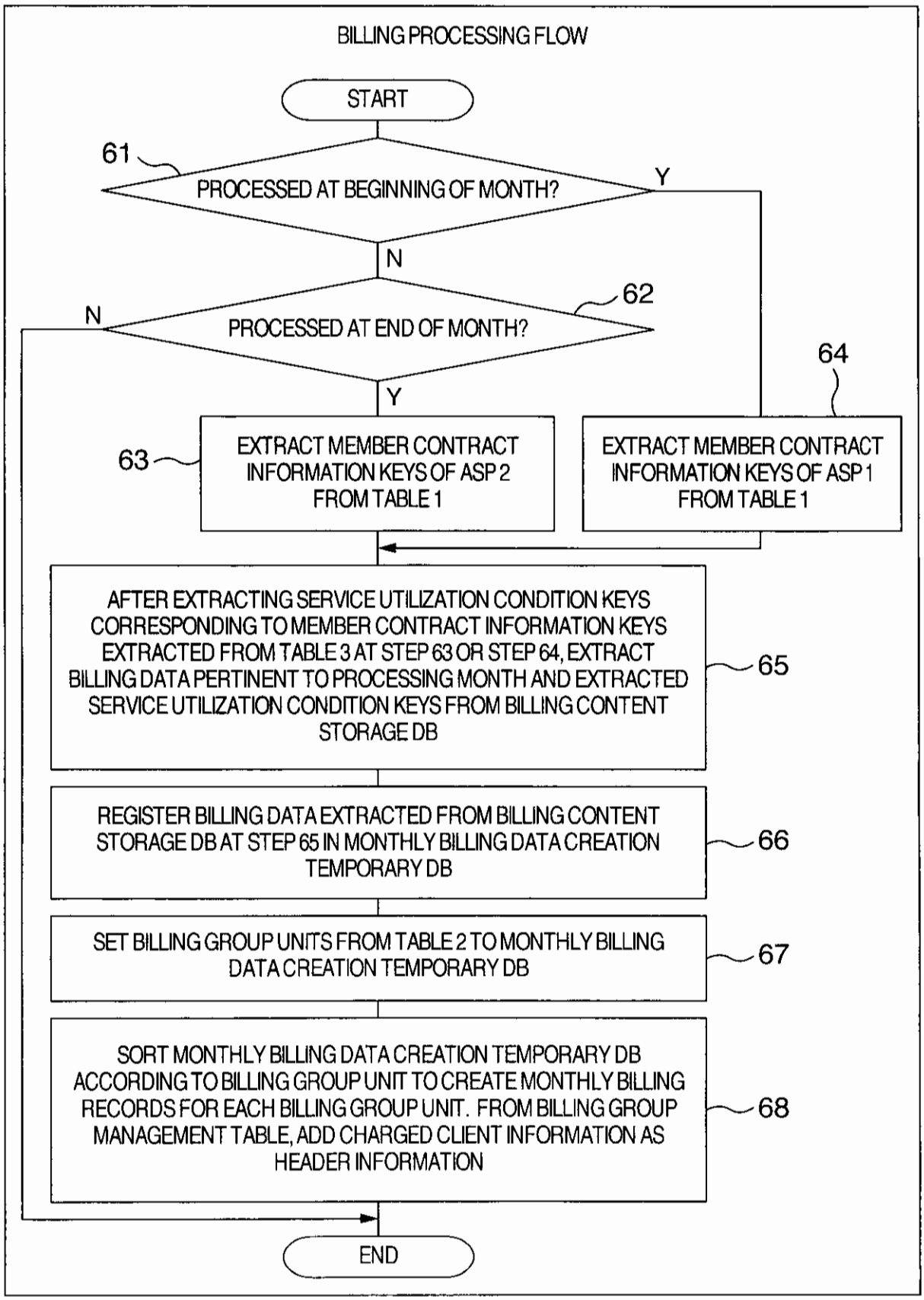

BILLING PROCESSING FLOW
START
61
PROCESSED AT BEGINNING OF MONTH?
Y
N
62
PROCESSED AT END OF MONTH?
N
Y
64
63
EXTRACT MEMBER CONTRACT INFORMATION KEYS OF ASP 2 FROM TABLE 1
EXTRACT MEMBER CONTRACT INFORMATION KEYS OF ASP 1 FROM TABLE 1
AFTER EXTRACTING SERVICE UTILIZATION CONDITION KEYS CORRESPONDING TO MEMBER CONTRACT INFORMATION KEYS EXTRACTED FROM TABLE 3 AT STEP 63 OR STEP 64, EXTRACT BILLING DATA PERTINENT TO PROCESSING MONTH AND EXTRACTED SERVICE UTILIZATION CONDITION KEYS FROM BILLING CONTENT STORAGE DB
65
REGISTER BILLING DATA EXTRACTED FROM BILLING CONTENT STORAGE DB AT STEP 65 IN MONTHLY BILLING DATA CREATION TEMPORARY DB
66
SET BILLING GROUP UNITS FROM TABLE 2 TO MONTHLY BILLING DATA CREATION TEMPORARY DB
67
SORT MONTHLY BILLING DATA CREATION TEMPORARY DB ACCORDING TO BILLING GROUP UNIT TO CREATE MONTHLY BILLING RECORDS FOR EACH BILLING GROUP UNIT. FROM BILLING GROUP MANAGEMENT TABLE, ADD CHARGED CLIENT INFORMATION AS HEADER INFORMATION
68
END

FIG.8

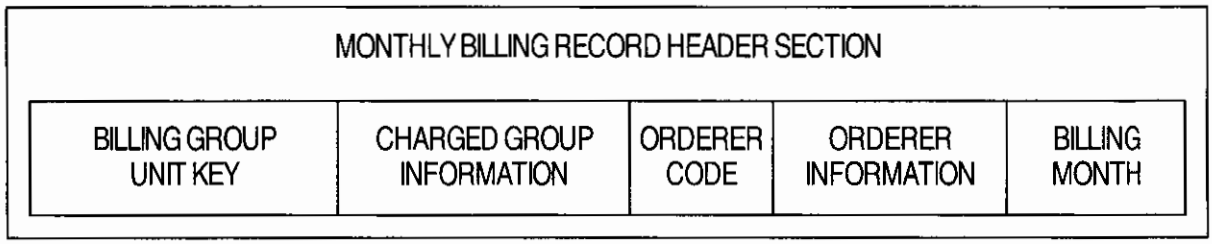


FIG.9

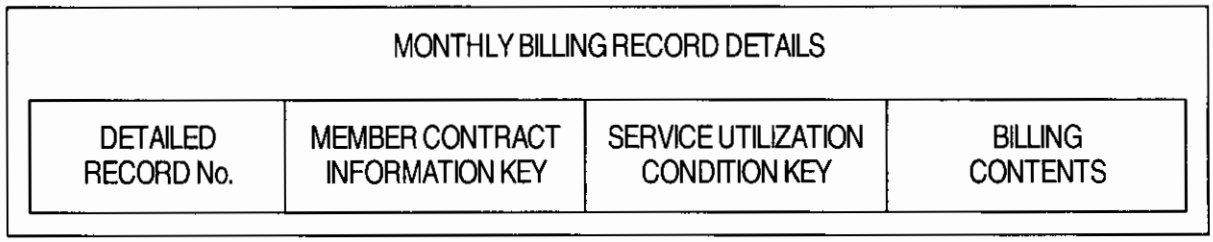


FIG.10

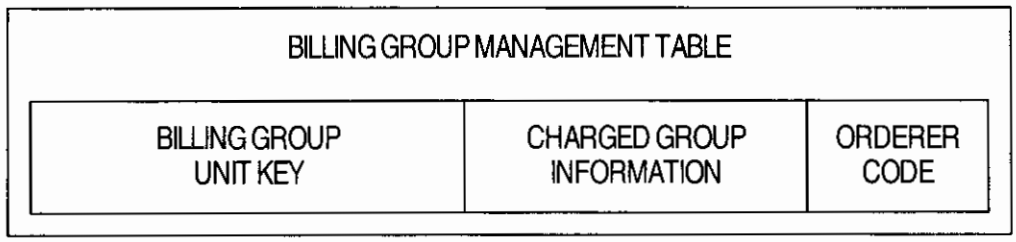


FIG.11

