FIG. 1

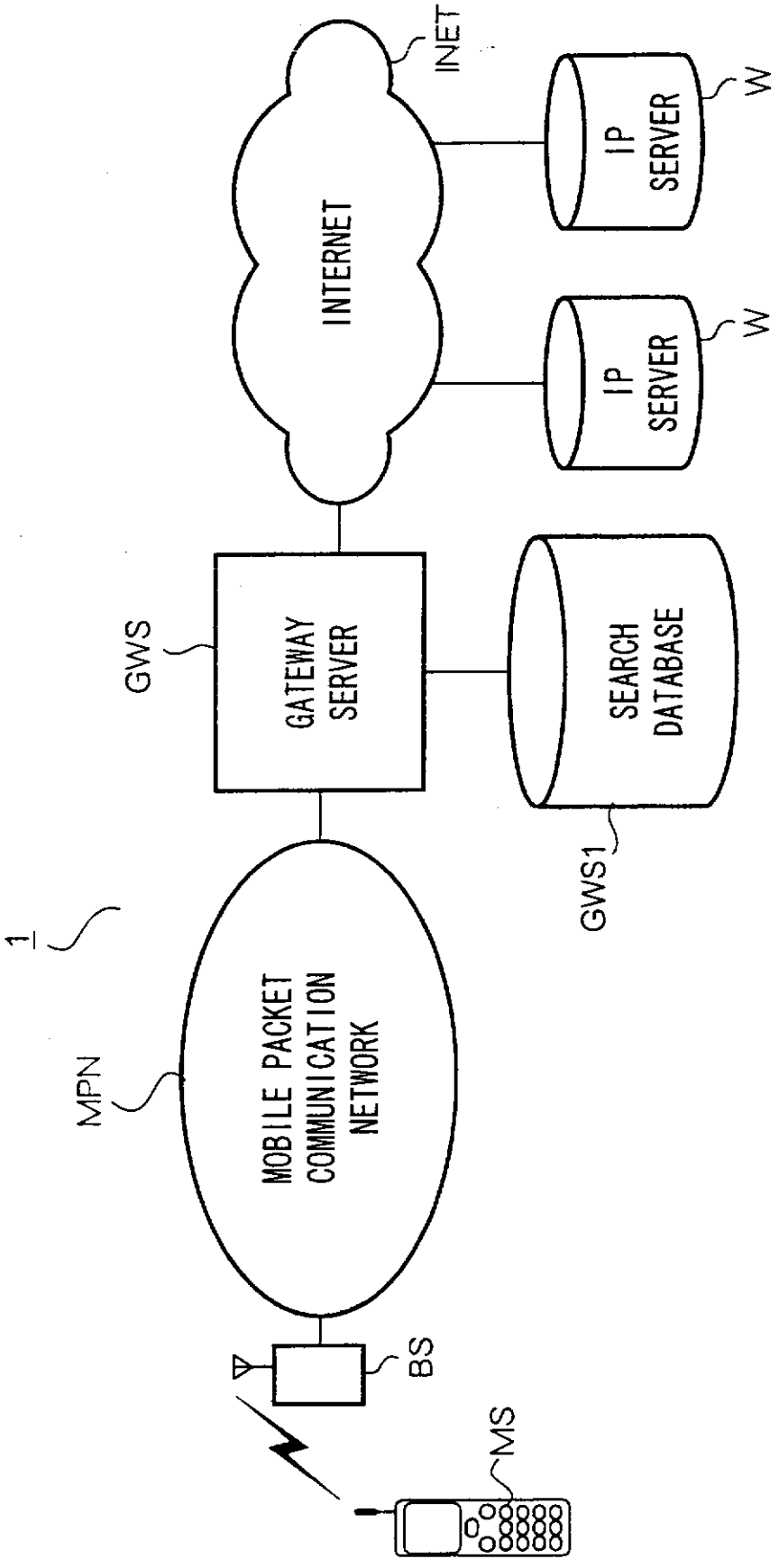

INET
INTERNET
IP SERVER
W
IP SERVER
W
GWS
GATEWAY SERVER
SEARCH DATABASE
GWS1
1
MPN
MOBILE PACKET COMMUNICATION NETWORK
BS
MS

FIG. 2

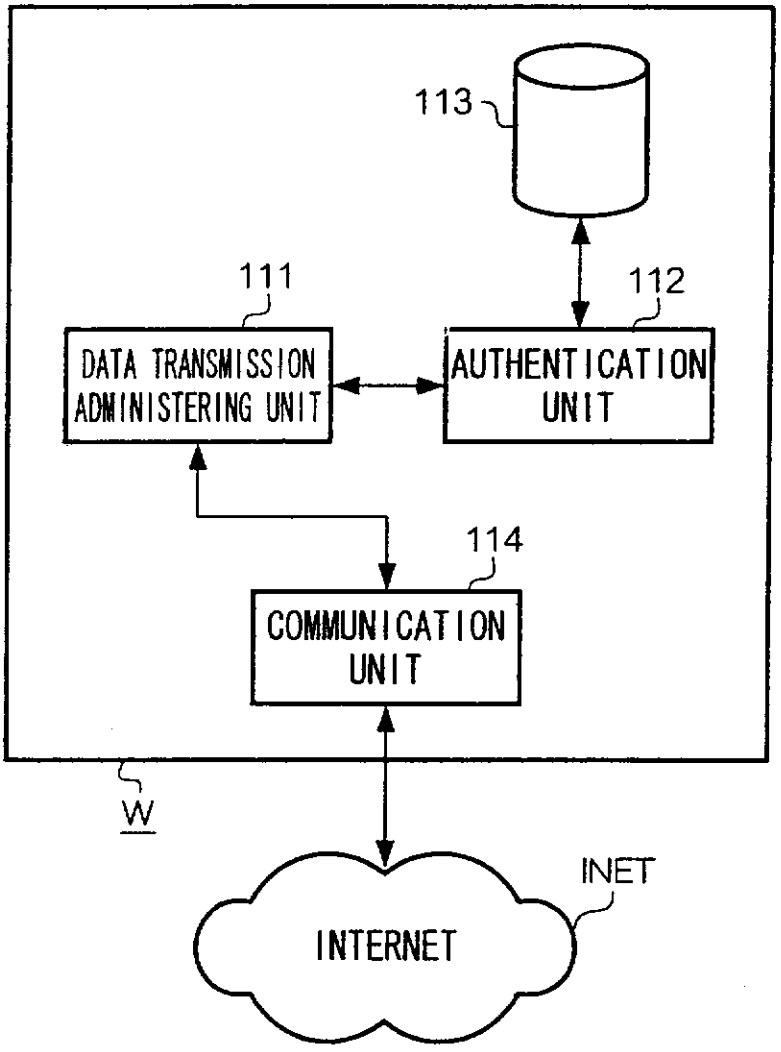

113
111
112
DATA TRANSMISSION ADMINISTERING UNIT
AUTHENTICATION UNIT
114
COMMUNICATION UNIT
W
INET
INTERNET

FIG. 3

```
<HTML>
<HEAD>
<TITLE>OO BANK</TITLE>
<META name="ΔΔ" content="ΔΔ">
</HEAD>
<CETNTER>
<H2><IMG src="ΔΔGIF" alt="OO BANK"
height="30" width="200"><FONT color="#004000">
OO BANK</FONT></H2>
</CENTER>
<BODY>
<BR>
<A href="http://www.OObank.co.jp/ΔΔ#utn">
1.BANK REMITTANCE</A>
<FONT size="-1"><BR>
<BR>
<A href="http://www.OObank.co.jp/××#utn">
2.BALANCE INQUIRY</A>
<FONT size="-1"><BR>
</BODY>
```

FIG. 4

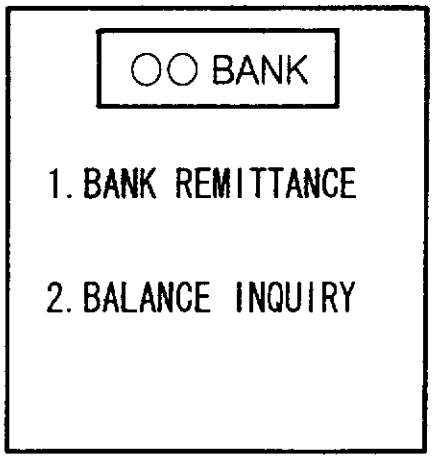


FIG. 5

USER ID	PERSONAL IDENTIFICATION INFORMATION
user.a	△△△△△△
user.b	■■■■■■
...	...

FIG. 6

TITLE	KEYWORD	URL
○○ BANK	NET BANKING	https://www.○○ bank.co.jp/index.html#utn
	• • •	
×× Co., Ltd.	NET AUCTION	http://www.××.co.jp
	• • •	
△△ BANK	NET BANKING	http://www.△△ bank.co.jp/index.html#utn
	• • •	
• • •	• • •	• • •

FIG. 7

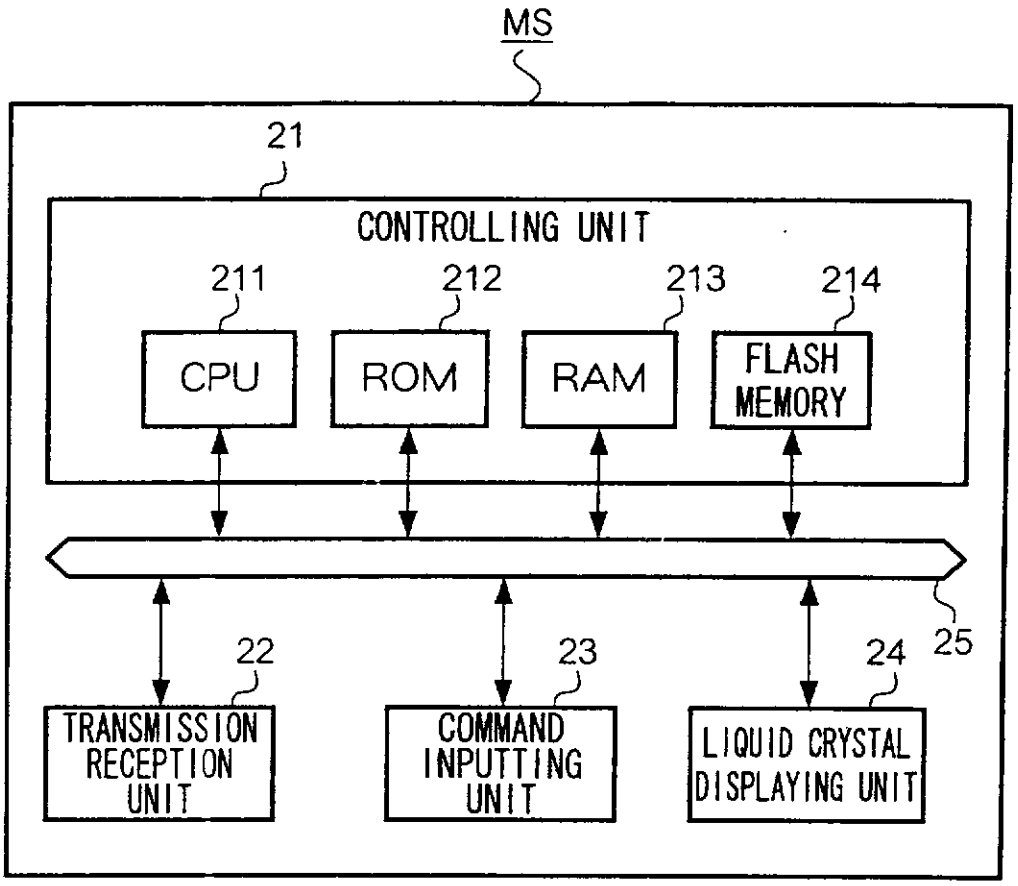


FIG. 8

F

URL	REQUEST DATA STRING FLAG
http//:△△.co.jp	1
http//:■■.co.jp	0
...	...

TBL

FIG. 9

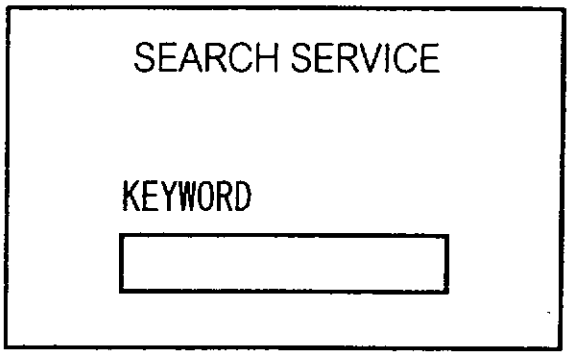

SEARCH SERVICE
KEYWORD

FIG. 10

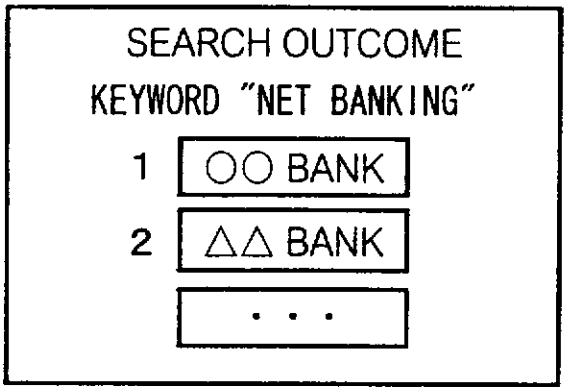

SEARCH OUTCOME
KEYWORD "NET BANKING"
1
○○ BANK
2
△△ BANK
• • •

FIG. 11

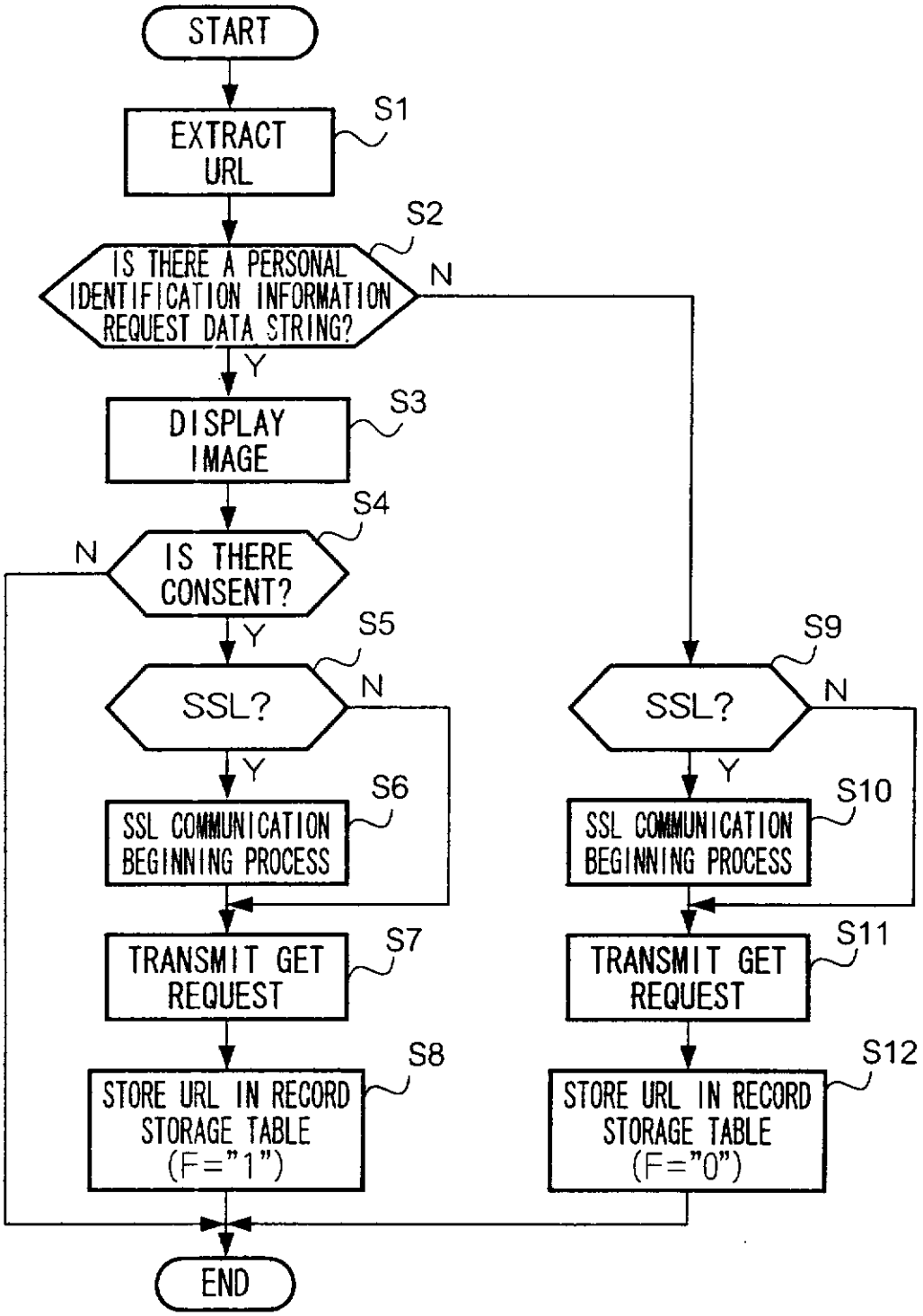
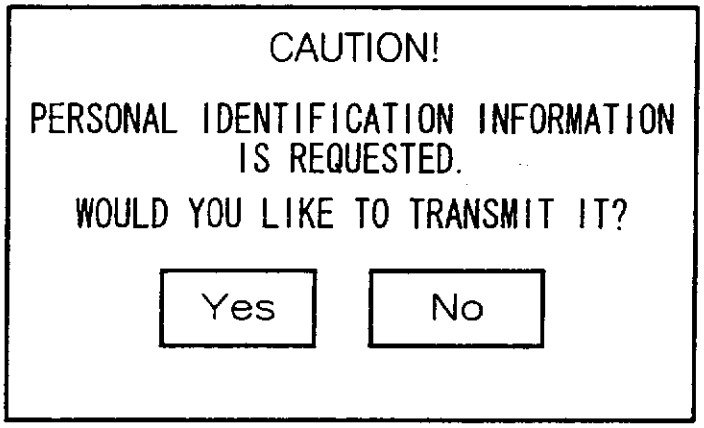

START
EXTRACT URL
S1
IS THERE A PERSONAL IDENTIFICATION INFORMATION REQUEST DATA STRING?
S2
N
Y
DISPLAY IMAGE
S3
IS THERE CONSENT?
S4
N
Y
SSL?
S5
N
Y
SSL COMMUNICATION BEGINNING PROCESS
S6
TRANSMIT GET REQUEST
S7
STORE URL IN RECORD STORAGE TABLE (F="1")
S8
SSL?
S9
N
Y
SSL COMMUNICATION BEGINNING PROCESS
S10
TRANSMIT GET REQUEST
S11
STORE URL IN RECORD STORAGE TABLE (F="0")
S12
END

FIG. 12


CAUTION!
PERSONAL IDENTIFICATION INFORMATION IS REQUESTED.
WOULD YOU LIKE TO TRANSMIT IT?
Yes
No

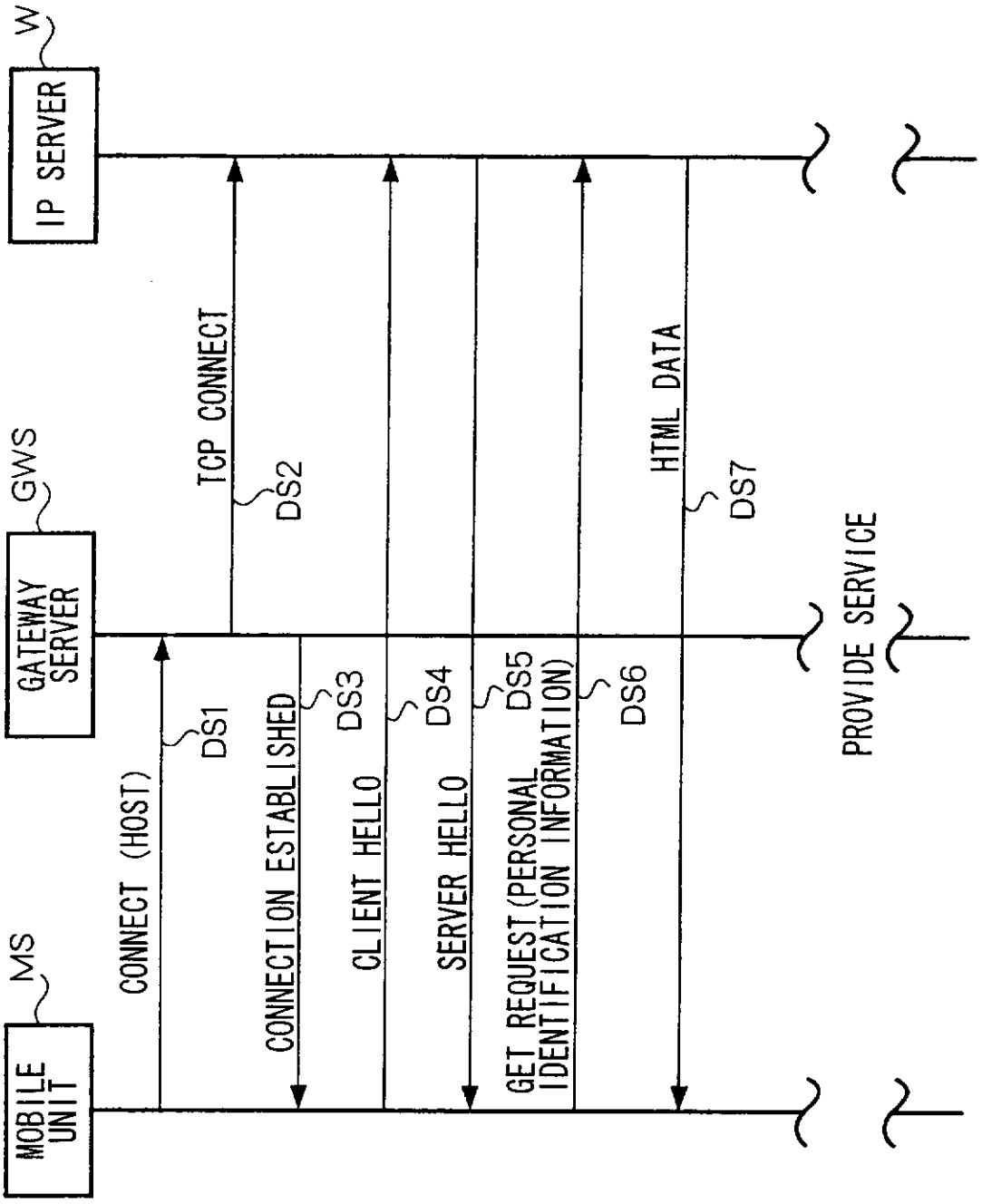

MOBILE UNIT
MS
GATEWAY SERVER
GWS
IP SERVER
W
CONNECT (HOST)
DS1
TCP CONNECT
DS2
CONNECTION ESTABLISHED
DS3
CLIENT HELLO
DS4
SERVER HELLO
DS5
GET REQUEST (PERSONAL IDENTIFICATION INFORMATION)
DS6
HTML DATA
DS7
PROVIDE SERVICE

FIG. 13

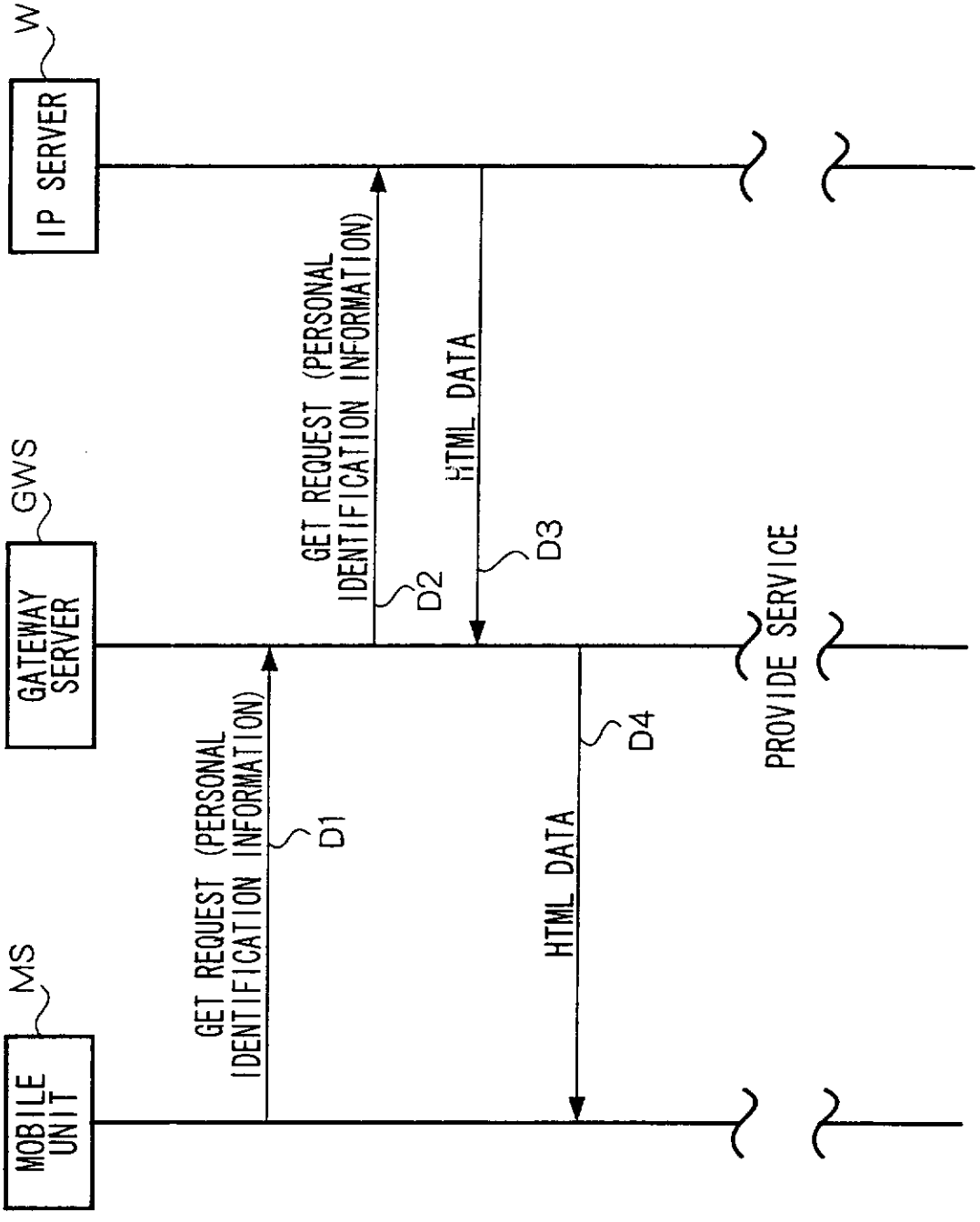

W
IP SERVER
GWS
GATEWAY SERVER
MS
MOBILE UNIT
GET REQUEST (PERSONAL IDENTIFICATION INFORMATION)
D1
GET REQUEST (PERSONAL IDENTIFICATION INFORMATION)
D2
HTML DATA
D3
HTML DATA
D4
PROVIDE SERVICE

FIG. 14

FIG. 15

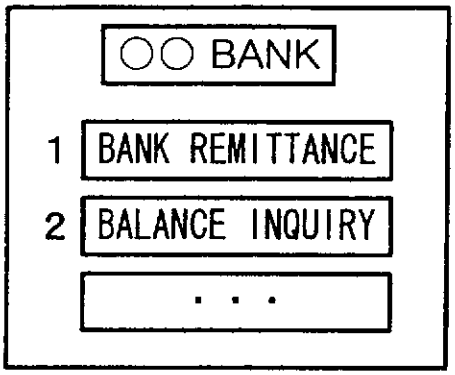

○○ BANK
1 BANK REMITTANCE
2 BALANCE INQUIRY
. . .

FIG. 16

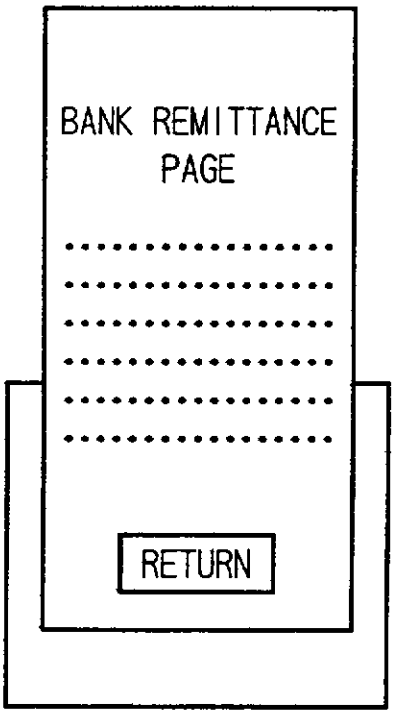

BANK REMITTANCE PAGE
RETURN

FIG. 17

USER ID	PERSONAL IDENTIFICATION INFORMATION	PASSWORD
user.a	△△△△△△	△△△△
user.b	■■■■■■	■■■■
...	...	...

FIG. 18

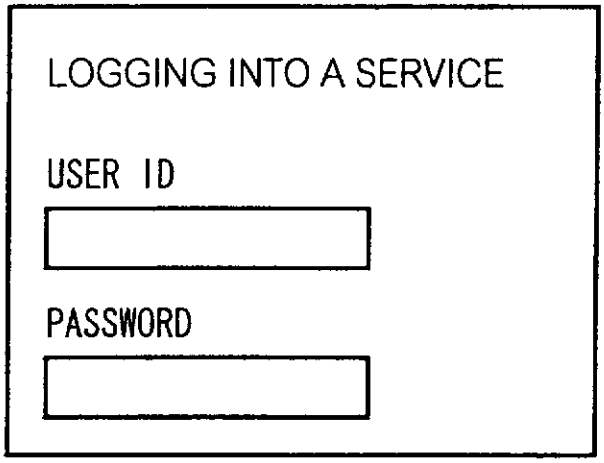


FIG. 19

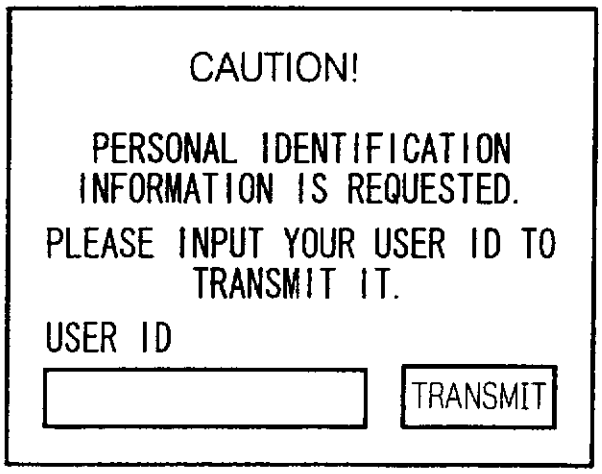


FIG. 20

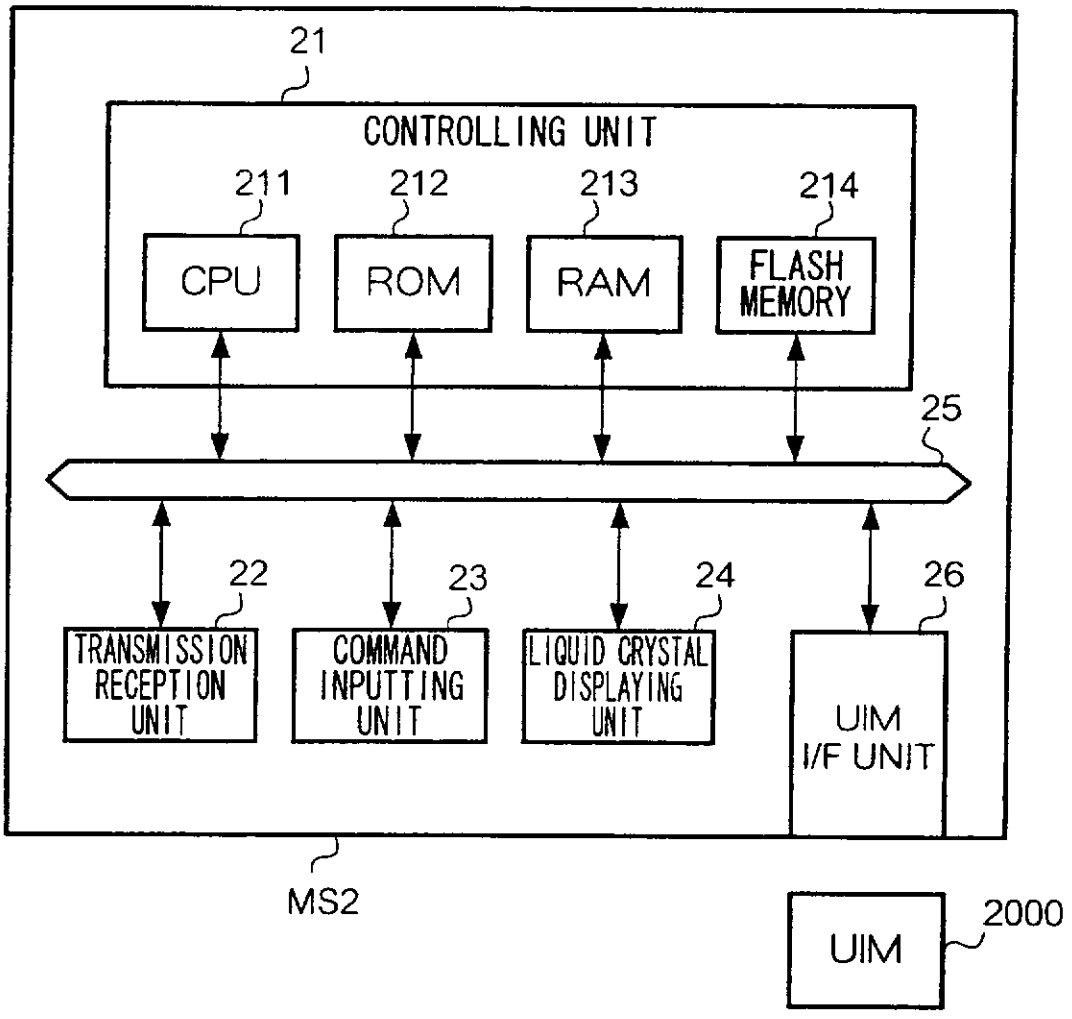

21
CONTROLLING UNIT
211
212
213
214
CPU
ROM
RAM
FLASH MEMORY
25
22
23
24
26
TRANSMISSION RECEPTION UNIT
COMMAND INPUTTING UNIT
LIQUID CRYSTAL DISPLAYING UNIT
UIM I/F UNIT
MS2
UIM
2000

FIG. 21

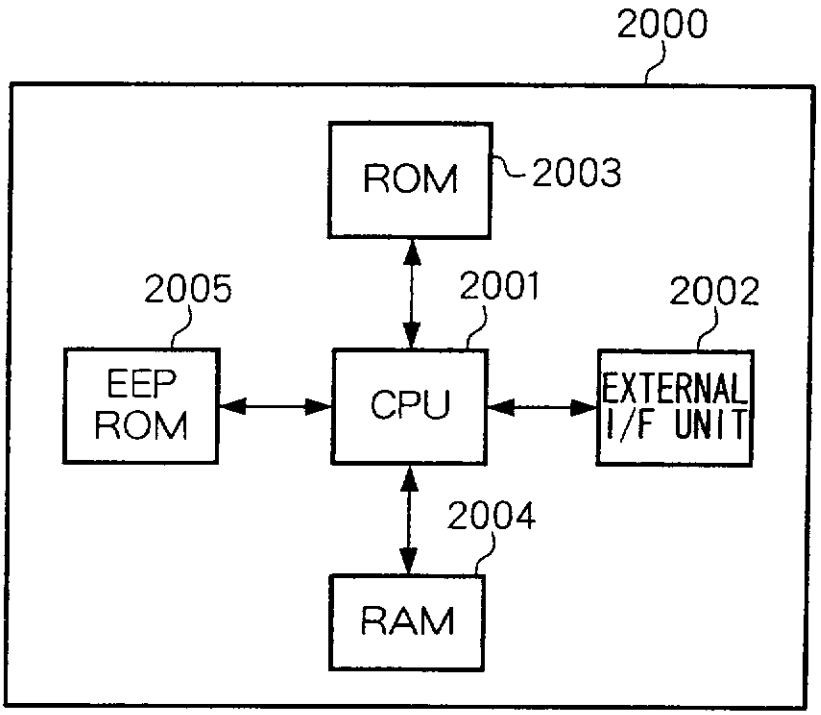


FIG. 22

USER ID	PERSONAL IDENTIFICATION INFORMATION	
	MOBILE UNIT	UIM
user.a	△△△△△△	△△△△
user.b	■■■■■■	■■■■
...	...	...