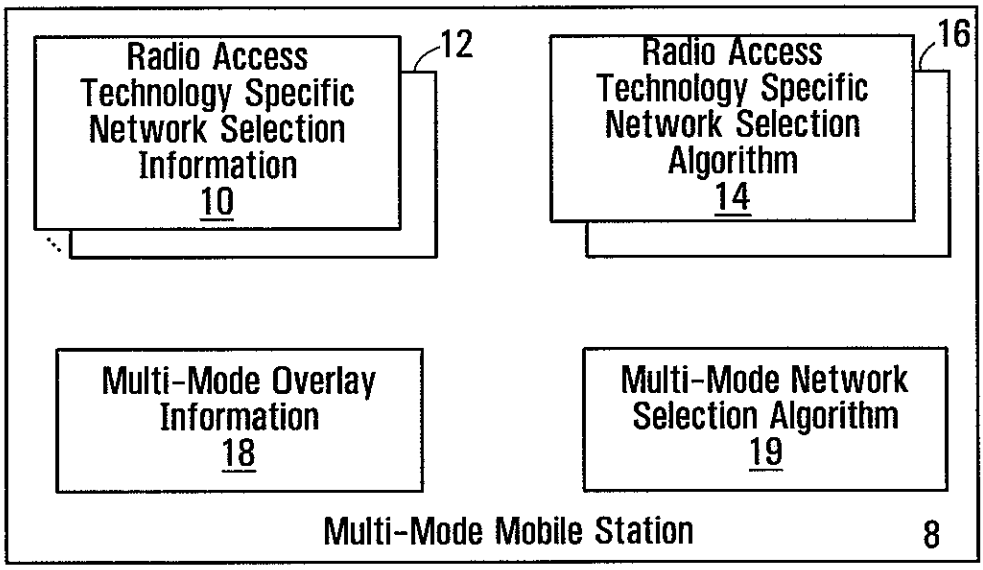

Radio Access Technology Specific Network Selection Information 10
12
Radio Access Technology Specific Network Selection Algorithm 14
16
Multi-Mode Overlay Information 18
Multi-Mode Network Selection Algorithm 19
Multi-Mode Mobile Station 8

FIG. 1

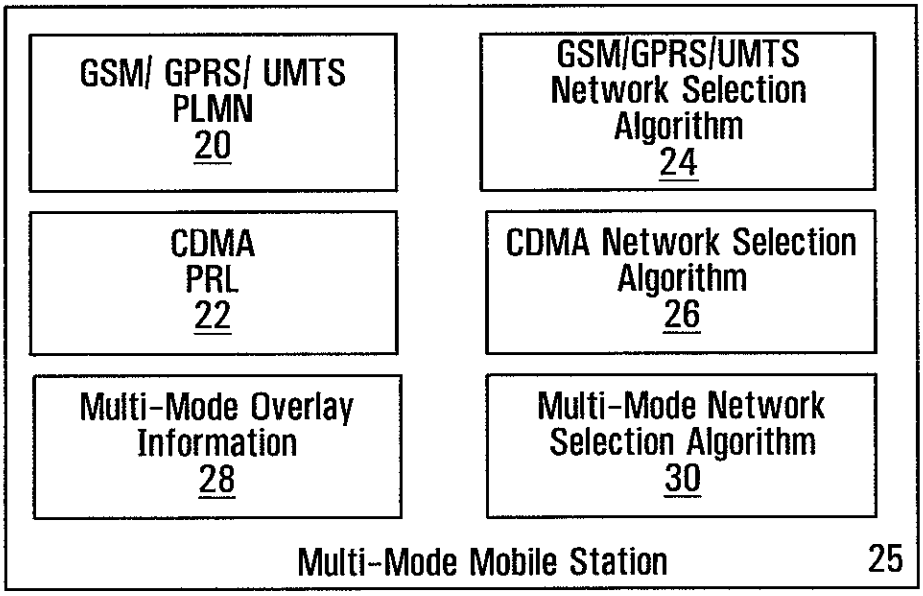

GSM/ GPRS/ UMTS PLMN 20
GSM/GPRS/UMTS Network Selection Algorithm 24
CDMA PRL 22
CDMA Network Selection Algorithm 26
Multi-Mode Overlay Information 28
Multi-Mode Network Selection Algorithm 30
Multi-Mode Mobile Station 25

FIG. 2

MMSS Download Request Parameter Block

	Index 43	Overlay Group Number 45	System Info		Intra-Group Overlay Priority 44	Higher Priority Network Search Time (example 1) 46	Higher Priority Network Search Time (example 2) 47
			System Type 48	Specific Info (example) 49			
40	0	0	CDMA	SID=6 NID=1	more	-	5 minutes
		0	GSM	MCC=350 MNC=22 LAC=2	same	10 minutes	10 minutes
		0	UMTS	MCC=350 MNC=22 LAC=3	same	5 minutes	-
42	1	1	CDMA	SID=6 NID=2	more	-	5 minutes
		1	GSM	MCC=350 MNC=22 LAC=3	more	15 minutes	10 minutes
		1	WLAN	SSID	same	10 minutes	-

41

FIG. 3

Table 1
MMSS Download Request Parameter Block

Field	Length(bits)
num_overlay_group	4

Table 2
"num_overlay_group" occurrences of the following:

Field	Length(bits)
Group_id	4
System_type	See table 3
Specific_info	See table 4
priority	Bit 1 More:1 Same:0
Search_time	7

Table 3
System information "System_type"

Type Specific Record	Value
GSM	0
CDMA	1
WLAN	2
UMTS	3

Table 4
System information "Specific_info"

Type Specific Record	Length(bits)
PLMN_LAC type	PLMN:24 LAC:16
sid_nid_type	Sid:15 Nid:16
ssid_type	8

FIG. 4

Table 5
Multi-RAT Capability Support

Type Specific Record	Value	Comments
GSM/GPRS/UMTS_Support	0: not support GSM/GPRS/UMTS 1: support GSM/GPRS/UMTS	If set to "1", see Table 7 for GSM/GPRS/UMTS RAT type
CDMA_Support	0: not support 1x/1xEVDO 1:support CDMA 1x/1xEVDO	If set to "1", see Table 6 for CDMA RAT type
WLAN_Support	0: not support WLAN 1: support WLAN	
Reserved		

Table 6 CDMA RAT Type

Type Specific Record	Length(bits)
CDMA 1X	1
1X EVDO	1
Reserved for future type of CDMA technology	6

Table 7 GSM/GPRS/UMTS RAT Type

Type Specific Record	Length(bits)
GSM/GPRS	1
UMTS	1
Reserved for future type of GSM/GPRS/UMTS technology	6

FIG. 5A

Table 8
MMSS Capability Parameter Block Type

Parameter Block Type	Block_ID	Reference
Multi-RAT Capability Support	'00000000'	Table 5
Reserved	'00000001' through '11111111'	

Table 9

Type Specific Record	Length
GSM_supported	1
UMTS_supported	1
WLAN_supported	1
Reserved for future type of access technologies	6

FIG. 5B

Table 10

Field	Length (bits)
MSPL_SIZE	8
MSPL_ID	4
NUM_MSPL_RECS	8

Table 11
NUM_MSPL_RECS occurrences of the following field

SYS_TYPE	4
PRI_CLASS	4
SYS_PRI	1
HIGHER_PRI_SRCH_TIME	7

FIG. 6A

Table 12
System Type Definitions

System Type	Value
CDMA2000	0000
GSM	0001
UMTS	0010

Table 13
NUM_MSPL_RECS occurrences of the following field

SYS_TYPE	4
PRI_CLASS	4 (see table 14)
SYS_PRI	1
SRCH_TIME_INCL	1
HIGHER_PRI_SRCH_TIME	7

Table 14
PRI_CLASS Definitions

0000	Home network only
0001	Home and preferred networks
0010	Any network

FIG. 6B

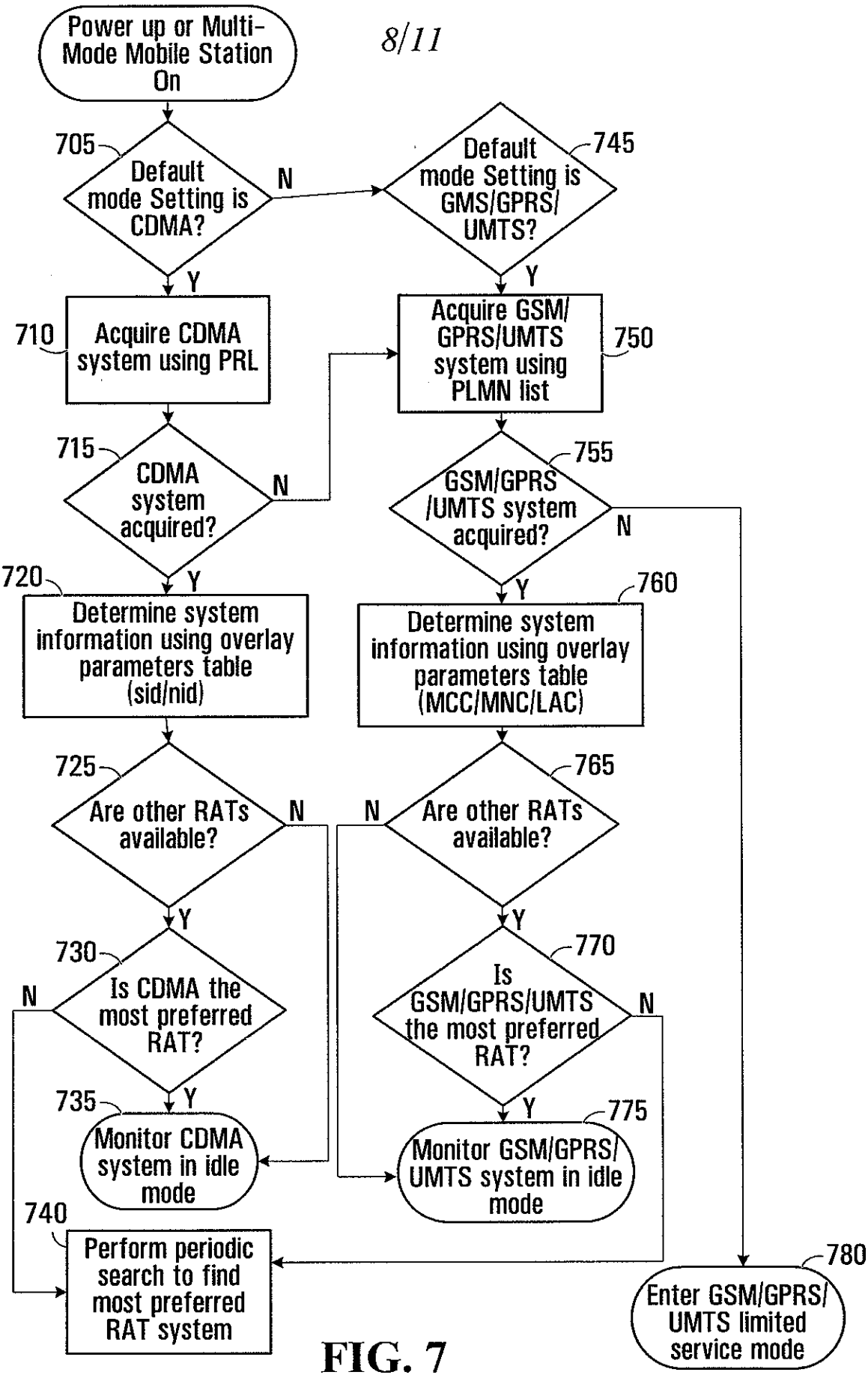

Power up or Multi-Mode Mobile Station On
705
Default mode Setting is CDMA?
N
Y
745
Default mode Setting is GMS/GPRS/ UMTS?
Y
710
Acquire CDMA system using PRL
750
Acquire GSM/ GPRS/UMTS system using PLMN list
715
CDMA system acquired?
N
Y
755
GSM/GPRS /UMTS system acquired?
N
Y
720
Determine system information using overlay parameters table (sid/nid)
760
Determine system information using overlay parameters table (MCC/MNC/LAC)
725
Are other RATs available?
N
Y
765
Are other RATs available?
N
Y
730
Is CDMA the most preferred RAT?
N
Y
770
Is GSM/GPRS/UMTS the most preferred RAT?
N
Y
735
Monitor CDMA system in idle mode
775
Monitor GSM/GPRS/ UMTS system in idle mode
740
Perform periodic search to find most preferred RAT system
780
Enter GSM/GPRS/ UMTS limited service mode

FIG. 7

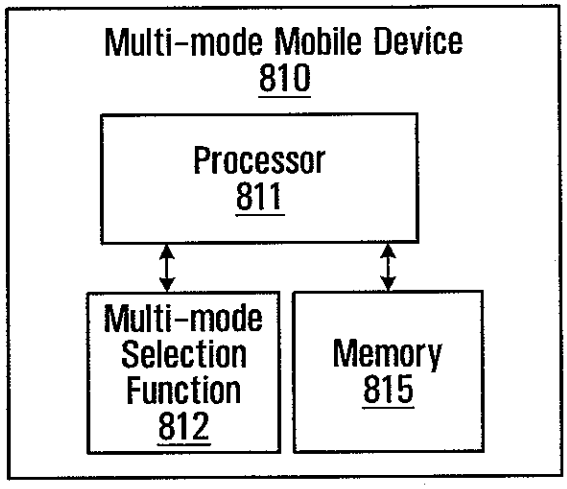

Multi-mode Mobile Device
810
Processor
811
Multi-mode
Selection
Function
812
Memory
815

FIG. 8

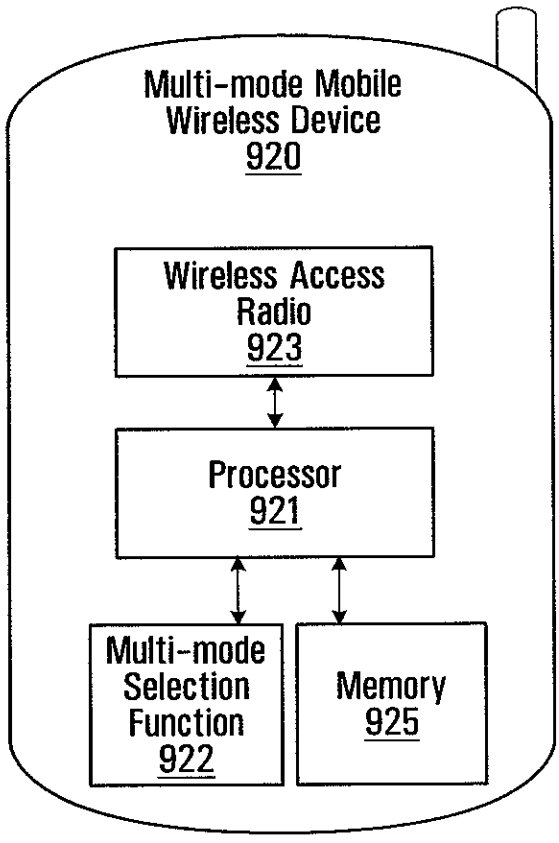

Multi-mode Mobile
Wireless Device
920
Wireless Access
Radio
923
Processor
921
Multi-mode
Selection
Function
922
Memory
925

FIG. 9

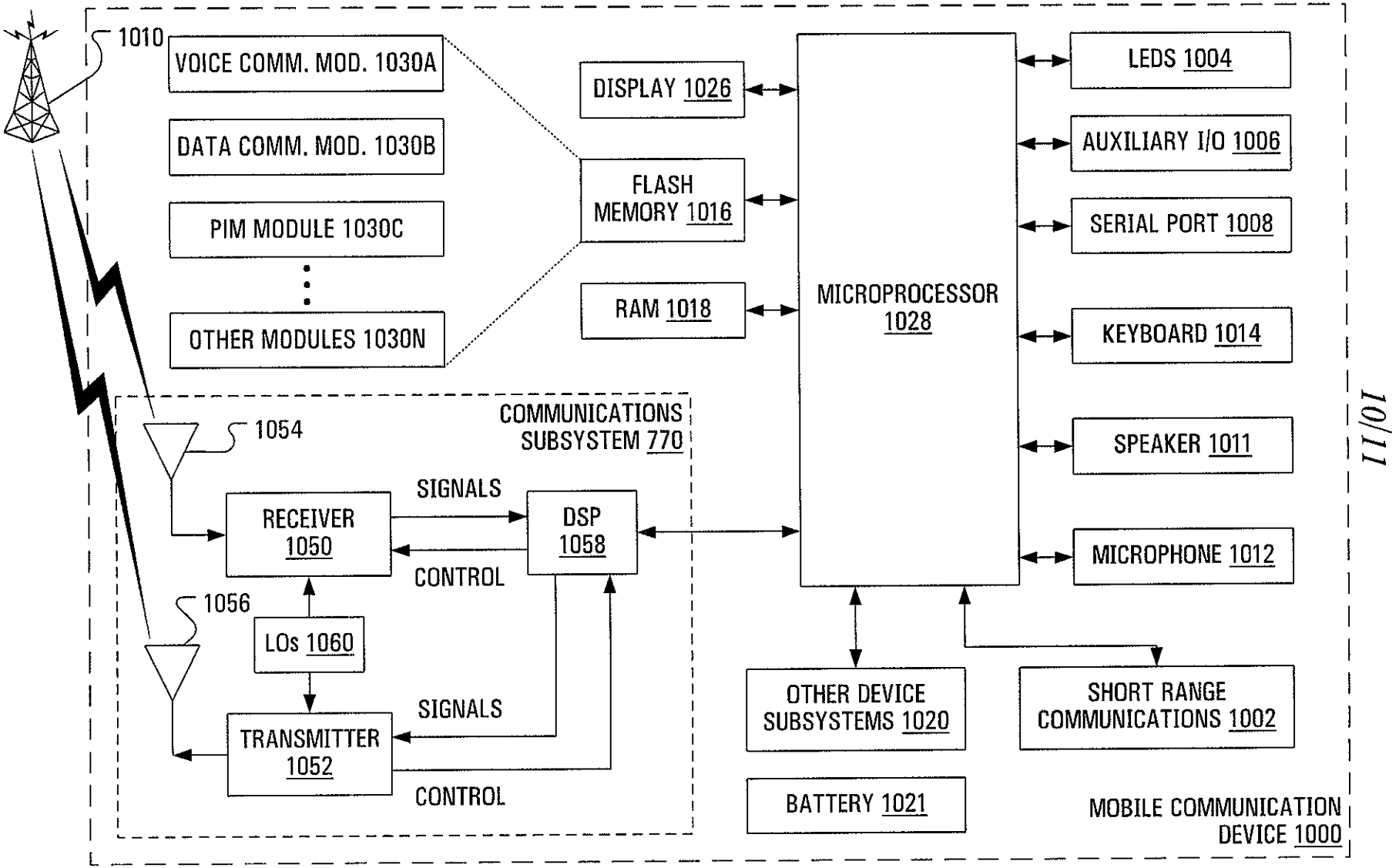

1010
VOICE COMM. MOD. 1030A
DATA COMM. MOD. 1030B
PIM MODULE 1030C
OTHER MODULES 1030N
DISPLAY 1026
FLASH MEMORY 1016
RAM 1018
MICROPROCESSOR 1028
LEDS 1004
AUXILIARY I/O 1006
SERIAL PORT 1008
KEYBOARD 1014
SPEAKER 1011
MICROPHONE 1012
1054
COMMUNICATIONS SUBSYSTEM 770
SIGNALS
RECEIVER 1050
DSP 1058
CONTROL
1056
LOs 1060
SIGNALS
TRANSMITTER 1052
CONTROL
OTHER DEVICE SUBSYSTEMS 1020
SHORT RANGE COMMUNICATIONS 1002
BATTERY 1021
MOBILE COMMUNICATION DEVICE 1000
10/11

FIG. 10

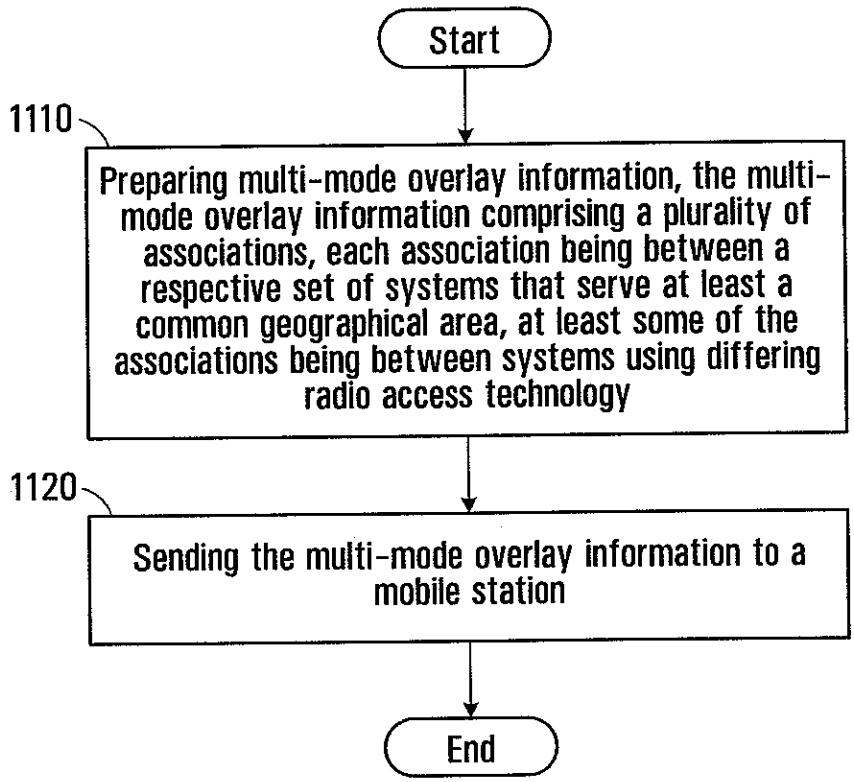

Start
1110
Preparing multi-mode overlay information, the multi-mode overlay information comprising a plurality of associations, each association being between a respective set of systems that serve at least a common geographical area, at least some of the associations being between systems using differing radio access technology
1120
Sending the multi-mode overlay information to a mobile station
End

FIG. 11