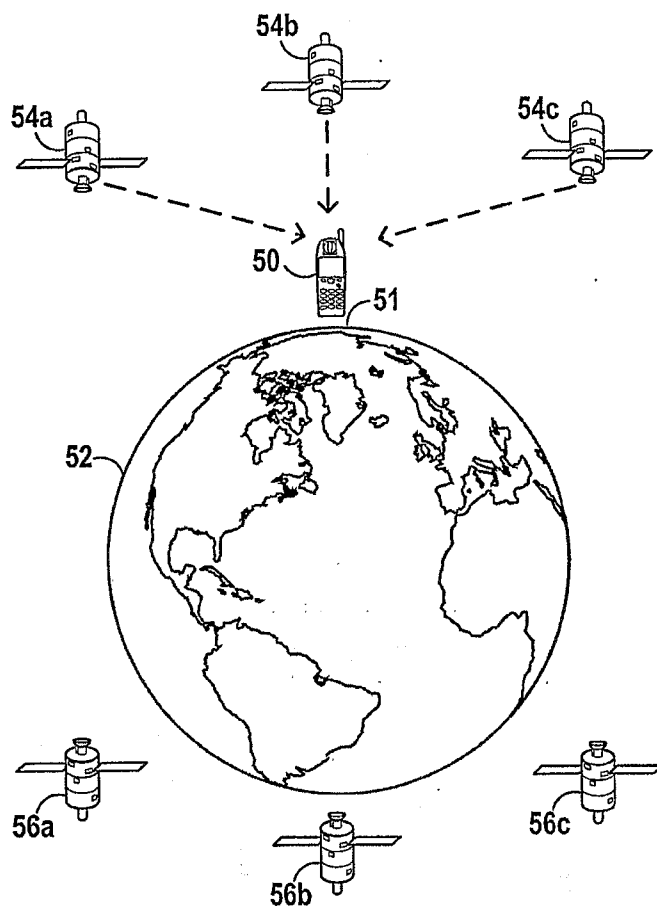
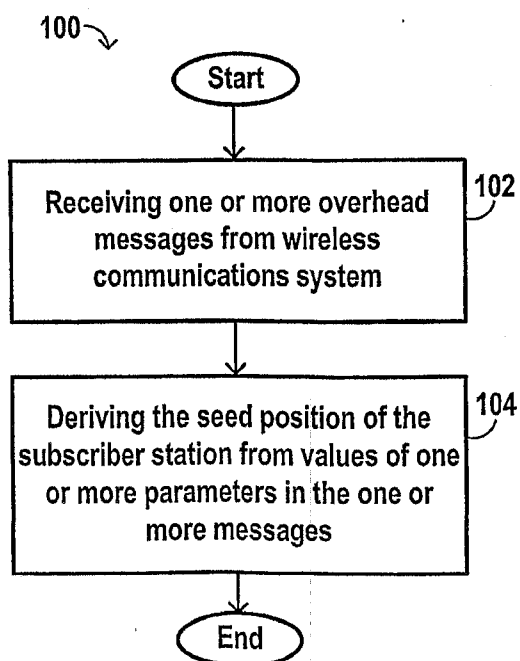
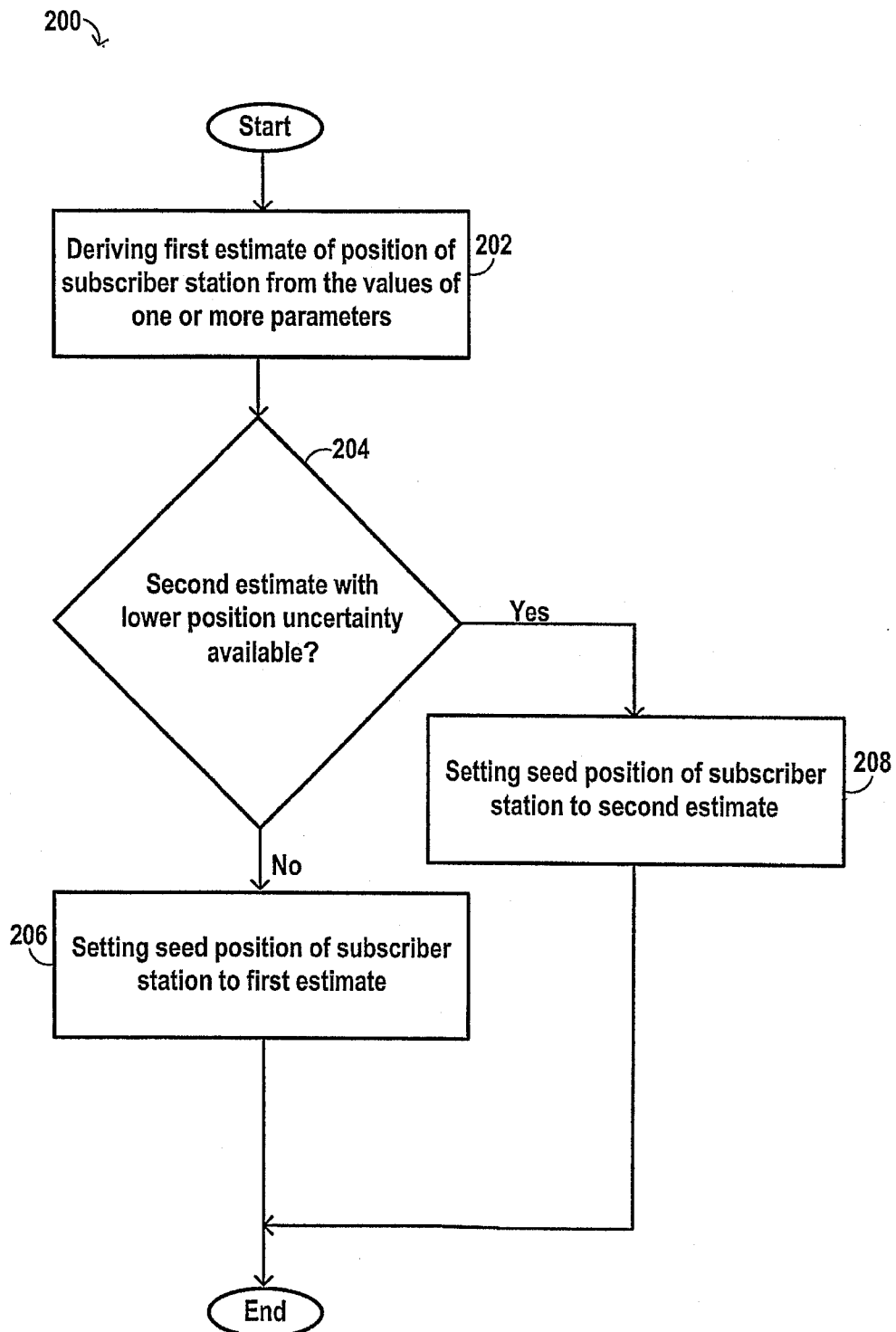


**FIG. 1****FIG. 2A**

**FIG. 2B**

Field	Length (bits)
PILOT_PN	9
CONFIG_MSG_SEQ	6
SID	15
NID	16
REG_ZONE	12
TOTAL_ZONES	3
ZONE_TIMER	3
MULT_SIDS	1
MULT_NIDS	1
BASE_ID	16
BASE_CLASS	4
PAGE_CHAN	3
MAX_SLOT_CYCLE_INDEX	3
HOME_REG	1
FOR_SID_REG	1
FOR_NID_REG	1
POWER_UP_REG	1
POWER_DOWN_REG	1
PARAMETER_REG	1
REG_PRD	7
BASE_LAT	22
BASE_LONG	23
REG_DIST	11
SRCH_WIN_A	4

(continues on next page)

3A

3B

FIGURE 3A

Field	Length (bits)
SRCH_WIN_N	4
SRCH_WIN_R	4
NGHBR_MAX_AGE	4
PWR_REP_THRESH	5
PWR_REP_FRAMES	4
PWR_THRESH_ENABLE	1
PWR_PERIOD_ENABLE	1
PWR_REP_DELAY	5
RESCAN	1
T_ADD	6
T_DROP	6
T_COMP	4
T_TDROP	4
EXT_SYS_PARAMETER	1
EXT_NGHR_LST	1
GEN_NGHR_LST	1
GLOBAL_REDIRECT	1
PRI_NGHR_LST	1
USER_ZONE_ID	1
EXT_GLOBAL_REDIRECT	1
EXT_CHAN_LST	1
T_TDROP_RANGE_INCL	1
T_TDROP_RANGE	0 or 4
NEG_SLOT_CYCLE_INDEX_SUP	1

3A

3B

FIGURE 3B

Field	Length (bits)
PILOT_PN	9
CONFIG_MSG_SEQ	6
DELETE_FOR_TMSI	1
USE_TMSI	1
PREF_MSID_TYPE	2
MCC	10
IMSI_11_12	7
TMSI_ZONE_LEN	4
TMSI_ZONE	$8 \times \text{TMSI_ZONE_LEN}$
BCAST_INDEX	3
IMSI_T_SUPPORTED	1
P_REV	8
MIN_P_REV	8
SOFT_SLOPE	6
ADD_INTERCEPT	6
DROP_INTERCEPT	6
PACKET_ZONE_ID	8
MAX_NUM_ALT_SO	3
RESELECT_INCLUDED	1
EC_THRESH	0 or 5
EC_IO_THRESH	0 or 5
PILOT_REPORT	1
NGHBR_SET_ENTRY_INFO	1
ACC_ENT_HO_ORDER	0 or 1
NGHBR_SET_ACCESS_INFO	1
ACCESS_HO	0 or 1
ACCESS_HO_MSG_RSP	0 or 1

(continues on next page)

FIGURE 4A

4A

4B

4C

4D

4E

Field	Length (bits)
ACCESS_PROBE_HO	0 or 1
ACC_HO_LIST_UPD	0 or 1
ACC_PROBE_HO_OTHER_MSG	0 or 1
MAX_NUM_PROBE_HO	0 or 3
NGHBR_SET_SIZE	0 or 6

If NGHBR_SET_ENTRY_INFO = 1, NGHBR_SET_SIZE occurrences of the following record:

{ (NGHBR_SET_SIZE)

ACCESS_ENTRY_HO	1
-----------------	---

} (NGHBR_SET_SIZE)

If NGHBR_SET_ACCESS_INFO = 1, NGHBR_SET_SIZE occurrences of the following record:

{ (NGHBR_SET_SIZE)

ACCESS_HO_ALLOWED	1
-------------------	---

} (NGHBR_SET_SIZE)

BROADCAST_GPS_ASST	1
QPCH_SUPPORTED	1
NUM_QPCH	0 or 2
QPCH_RATE	0 or 1
QPCH_POWER_LEVEL_PAGE	0 or 3
QPCH_CCI_SUPPORTED	0 or 1
QPCH_POWER_LEVEL_CONFIG	0 or 3
SDB_SUPPORTED	1
RLGAIN_TRAFFIC_PILOT	6
REV_PWR_CNTL_DELAY_INCL	1
REV_PWR_CNTL_DELAY	0 or 2
AUTO_MSG_SUPPORTED	1
AUTO_MSG_INTERVAL	0 or 3

(continues on next page)

4A

4B

4C

4D

4E

FIGURE 4B

Field	Length (bits)
MOB_QOS	1
ENC_SUPPORTED	1
SIG_ENCRYPT_SUP	0 or 8
UI_ENCRYPT_SUP	0 or 8
USE_SYNC_ID	1
CS_SUPPORTED	1
ECCH_SUPPORTED	1
MS_INIT_POS_LOC_SUP_IND	1
PILOT_INFO_REQ_SUPPORTED	1
QPCH_BI_SUPPORTED	0 or 1
QPCH_POWER_LEVEL_BCAST	0 or 3
BAND_CLASS_INFO_REQ	1
ALT_BAND_CLASS	0 or 5
CDMA_OFF_TIME_REP_SUP_IND	1
CDMA_OFF_TIME_REP_THRESHOLD_UNIT	0 or 1
CDMA_OFF_TIME_REP_THRESHOLD	0 or 3
CHM_SUPPORTED	1
RELEASE_TO_IDLE_IND	1
RECONNECT_MSG_IND	1
MSG_INTEGRITY_SUP	1
SIG_INTEGRITY_SUP_INCL	0 or 1
SIG_INTEGRITY_SUP	0 or 8
FOR_PDCH_SUPPORTED	1
PDCH_CHM_SUPPORTED	0 or 1
PDCH_PARMS_INCL	0 or 1
FOR_PDCH_RLGAIN_INCL	0 or 1
RLGAIN_ACKCH_PILOT	0 or 6
RLGAIN_CQICH_PILOT	0 or 6
NUM_SOFT_SWITCHING_FRAMES	0 or 4
NUM_SOFTEN_SWITCHING_FRAMES	0 or 4

4A

4B

4C

4D

4E

FIGURE 4C

Field	Length (bits)
NUM_SOFT_SWITCHING_SLOTS	0 or 2
NUM_SOFTER_SWITCHING_SLOTS	0 or 2
PDCH_SOFT_SWITCHING_DELAY	0 or 8
PDCH_SOFTER_SWITCHING_DELAY	0 or 8
WALSH_TABLE_ID	0 or 3
NUM_PDCCH	0 or 3

NUM_PDCCH+1 occurrences of the following record:

{ (NUM_PDCCH+1)

FOR_PDCCH_WALSH	0 or 6
-----------------	--------

} (NUM_PDCCH+1)

IMSI_10_INCL	1
IMSI_10	0 or 4
MAX_ADD_SERV_INSTANCE	0 or 3
RER_MODE_SUPPORTED	1
TKZ_MODE_SUPPORTED	1
TKZ_ID	0 or 8
PZ_HYST_ENABLED	0 or 1
PZ_HYST_INFO_INCL	0 or 1
PZ_HYST_LIST_LEN	0 or 4
PZ_HYST_ACT_TIMER	0 or 8
PZ_HYST_TIMER_MUL	0 or 3
PZ_HYST_TIMER_EXP	0 or 5
EXT_PREF_MSID_TYPE	2
MEID_REQD	0 or 1
AUTO_FCSO_ALLOWED	1
REV_PDCH_SUPPORTED	0 or 1
REV_PDCH_PARMS_INCL	0 or 1
REV_PDCH_RLGAIN_INCL	0 or 1
RLGAIN_SPICH_PILOT	0 or 6
RLGAIN_REQCH_PILOT	0 or 6
RLGAIN_PDCCH_PILOT	0 or 6

4A

4B

4C

4D

4E

FIGURE 4D

REV_PDCH_PARMS_1_INCL	0 or 1
REV_PDCH_TABLE_SEL	0 or 1
REV_PDCH_MAX_AUTO_TPR	0 or 8
REV_PDCH_NUM_ARQ_ROUNDS_NOR MAL	0 or 2
REV_PDCH_OPER_PARMS_INCL	0 or 1
REV_PDCH_MAX_SIZE_ALLOWED_EN CODER_PACKET	0 or 4
REV_PDCH_DEFAULT_PERSISTENCE	0 or 1
REV_PDCH_RESET_PERSISTENCE	0 or 1
REV_PDCH_MSIB_SUPPORTED	0 or 1
REV_PDCH_SOFT_HANDOFF_RESET_I ND	0 or 1
SDB_IN_RCNM_IND	0 or 1
SENDING_BSPM	1
BSPM_PERIOD_INDEX	0 or 4

FIGURE 4E

4A

4B

4C

4D

4E

Field	Length (bits)
PILOT_PN	9
CONFIG_MSG_SEQ	6
SID	15
NID	16
PACKET_ZONE_ID	8
REG_ZONE	12
TOTAL_ZONES	3
ZONE_TIMER	3
MULT_SIDS	1
MULT_NIDS	1
HOME_REG	1
FOR_SID_REG	1
FOR_NID_REG	1
POWER_UP_REG	1
POWER_DOWN_REG	1
PARAMETER_REG	1
REG_PRD	7
DIST_REG_INCL	1
REG_DIST	0 or 11
DELETE_FOR_TMSI	1
USE_TMSI	1
PREF_MSID_TYPE	2

(continues on next page)

5A

5B

FIGURE 5A

Field	Length (bits)
TMSI_ZONE_LEN	4
TMSI_ZONE	$8 \times \text{TMSI_ZONE_LEN}$
IMSI_T_SUPPORTED	1
MAX_NUM_ALT_SO	3
AUTO_MSG_SUPPORTED	1
AUTO_MSG_INTERVAL	0 or 3
OTHER_INFO_INCL	1
BASE_ID	0 or 16
MCC	0 or 10
IMSI_11_12	0 or 7
BROADCAST_GPS_ASST	0 or 1
SIG_ENCRYPT_SUP	0 or 8
CS_SUPPORTED	1
MS_INIT_POS_LOC_SUP_IND	1
MSG_INTEGRITY_SUP	1
SIG_INTEGRITY_SUP_INCL	0 or 1
SIG_INTEGRITY_SUP	0 or 8
IMSI_10_INCL	1
IMSI_10	0 or 4
MAX_ADD_SERV_INSTANCE	0 or 3
TKZ_MODE_SUPPORTED	1
TKZ_ID	0 or 8
PZ_HYST_ENABLED	0 or 1
PZ_HYST_INFO_INCL	0 or 1
PZ_HYST_LIST_LEN	0 or 4
PZ_HYST_ACT_TIMER	0 or 8
PZ_HYST_TIMER_MUL	0 or 3
PZ_HYST_TIMER_EXP	0 or 5
EXT_PREF_MSID_TYPE	2
MEID_REQD	0 or 1

5A

5B

FIGURE 5B

Field	Length (bits)
SID	15
NID	16
SRCH_WIN_A	4
SRCH_WIN_N	4
SRCH_WIN_R	4
T_ADD	6
T_DROP	6
T_COMP	4
T_TDROP	4
NGHBR_MAX_AGE	4
P_REV	8
SOFT_SLOPE	6
ADD_INTERCEPT	6
DROP_INTERCEPT	6
PACKET_ZONE_ID	8
EXTENSION	1
T_MULCHAN	0 or 3
BEGIN_PREAMBLE	0 or 3
RESUME_PREAMBLE	0 or 3
T_SLOTTED_INCL	1
T_SLOTTED	0 or 8
ENC_SUPPORTED	1
SIG_ENCRYPT_SUP	0 or 8
UL_ENCRYPT_SUP	0 or 8

6A

6B

FIGURE 6A

Field	Length (bits)
CS_SUPPORTED	1
CHM_SUPPORTED	1
CDMA_OFF_TIME_REP_SUP_IND	1
CDMA_OFF_TIME_REP_THRESHO LD_UNIT	0 or 1
CDMA_OFF_TIME_REP_THRESHO LD	0 or 3
T_TDROP_RANGE_INCL	1
T_TDROP_RANGE	0 or 4
FOR_PDCH_SUPPORTED	1
PDCH_CHM_SUPPORTED	0 or 1
SDB_SUPPORTED	1
MOB_QOS	0 or 1
MS_INIT_POS_LOC_SUP_IND	1
PZ_HYST_PARMS_INCL	0 or 1
PZ_HYST_ENABLED	0 or 1
PZ_HYST_INFO_INCL	0 or 1
PZ_HYST_LIST_LEN	0 or 4
PZ_HYST_ACT_TIMER	0 or 8
PZ_HYST_TIMER_MUL	0 or 3
PZ_HYST_TIMER_EXP	0 or 5
BCMC_ON_TRAFFIC_SUP	1
AUTO_REQ_TRAF_ALLOWED_IND	0 or 1
REV_PDCH_SUPPORTED	0 or 1
MAX_ADD_SERV_INSTANCE	0 or 3
USE_CH_CFG_RRM	1

FIGURE 6B

6A

6B

Field	Length (bits)
MessageID	8
CountryCode	12
SectorID	128
SubnetMask	8
SectorSignature	16
Latitude	22
Longitude	23
RouteUpdateRadius	11
LeapSeconds	8
LocalTimeOffset	11
ReverseLinkSilenceDuration	2
ReverseLinkSilencePeriod	2
ChannelCount	5

ChannelCount occurrences of the following field:

Channel	24
---------	----

NeighborCount	5
---------------	---

NeighborCount occurrences of the following field:

NeighborPilotPN	9
-----------------	---

NeighborCount occurrences of the following two fields:

NeighborChannelIncluded	1
NeighborChannel	0 or 24

NeighborSearchWindowSizeIncluded	1
----------------------------------	---

NeighborCount occurrences of the following field

NeighborSearchWindowSize	0 or 4
--------------------------	--------

NeighborSearchWindowOffsetIncluded	1
------------------------------------	---

NeighborCount occurrences of the following field

NeighborSearchWindowOffset	0 or 3
----------------------------	--------

RouteUpdateTriggerCodeIncluded	0 or 1
--------------------------------	--------

7A

7B

FIGURE 7A

Field	Length (bits)
RouteUpdateTriggerCode	0 or 12
RouteUpdateTriggerMaxAge	0 or 4
FPDCHSupportIncluded	0 or 1
m , $0 \leq m \leq \text{NeighborCount}$ occurrences of the following field:	
FPDCHSupported	0 or 1
Reserved	0 – 7 (as needed)

FIGURE 7B

7A

7B

IFAST SID Ranges (Sorted by SID Number)

In the following table, bold is used to indicate SID ranges for which information or status has changed within the last 6 months, and red indicates that a SID conflict exists.

SID Range	Reserved	Country
0	1	Unassigned
1 to 2175	2175	USA
2176 to 2303	128	South Korea
2304 to 4095	1792	USA
4096 to 7679	3584	USA
7680 to 7807	128	Australia
7808 to 7871	64	Globalstar Mobile Satellite
7872 to 7935	64	ICO Mobile Satellite
7936 to 7951	16	Faroe Islands
7952 to 7967	16	Greenland
7968 to 7983	16	Falkland Islands
7984 to 7999	16	St. Pierre and Miquelon
8000 to 8007	8	Saint Vincent and the Grenadines
8008 to 8015	8	Unassigned
8016 to 8031	16	Saint Lucia
8032 to 8047	16	Saint Kitts and Nevis
8048 to 8063	16	Montserrat
8064 to 8079	16	Grenada
8080 to 8095	16	Bahamas
8096 to 8111	16	Bermuda
8112 to 8127	16	British Virgin Islands
8128 to 8143	16	Cayman Islands
8144 to 8159	16	Antigua and Barbuda
8160 to 8175	16	Barbados
8176 to 8191	16	Jamaica
8192 to 8223	32	Thailand
8224 to 8255	32	Egypt
8256 to 8287	32	Morocco
8288 to 8319	32	Algeria
8320 to 8447	128	Australia
8448 to 8479	32	Israel
8480 to 8511	32	Tunisia

8A

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FIGURE 8A

8512 to 8543	32	Libya
8544 to 8575	32	Gambia
8576 to 8703	128	New Zealand
8704 to 8735	32	Senegal
8736 to 8767	32	Mauritania
8768 to 8799	32	Mali
8800 to 8831	32	Guinea
8832 to 8847	16	Dominican Republic
8848 to 8863	16	Cape Verde
8864 to 8879	16	Sao Tome and Principe
8880 to 8895	16	Diego Garcia
8896 to 8911	16	Seychelles
8912 to 8927	16	Djibouti
8928 to 8943	16	Kazakhstan
8944 to 8959	16	Reunion
8960 to 8991	32	Côte d'Ivoire
8992 to 9023	32	Burkina Faso
9024 to 9055	32	Niger
9056 to 9087	32	Togolese Republic
9088 to 9119	32	Benin
9120 to 9151	32	Mauritius
9152 to 9183	32	Liberia
9184 to 9215	32	Sierra Leone
9216 to 9247	32	Ghana
9248 to 9279	32	Nigeria
9280 to 9311	32	Chad
9312 to 9343	32	Central African Republic
9344 to 9375	32	Cameroon
9376 to 9407	32	Equatorial Guinea
9408 to 9439	32	Gabonese Republic
9440 to 9471	32	Congo
9472 to 9503	32	Zaire
9504 to 9535	32	Angola
9536 to 9567	32	Guinea - Bissau
9568 to 9599	32	Sudan
9600 to 9615	16	Lesotho
9616 to 9631	16	Dominica

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FIGURE 8B

9632 to 9647	16	Swaziland
9648 to 9663	16	Aruba
9664 to 9679	16	Singapore
9680 to 9695	16	Northern Mariana Islands
9696 to 9711	16	Guam
9712 to 9727	16	Australian External Territories
9728 to 9759	32	Rwanda
9760 to 9791	32	Ethiopia
9792 to 9823	32	Somalia
9824 to 9855	32	Trinidad and Tobago
9856 to 9887	32	Kenya
9888 to 9919	32	Tanzania
9920 to 9951	32	Uganda
9952 to 9983	32	Burundi
9984 to 10015	32	Mozambique
10016 to 10047	32	Zambia
10048 to 10079	32	Madagascar
10080 to 10111	32	Zimbabwe
10112 to 10143	32	Namibia
10144 to 10175	32	Malawi
10176 to 10207	32	Botswana
10208 to 10239	32	Comoros
10240 to 10367	128	South Africa
10368 to 10495	128	Malaysia
10496 to 10623	128	Indonesia
10624 to 10639	16	Philippines
10640 to 10655	16	Hong Kong
10656 to 10751	96	Philippines
10752 to 10767	16	Monaco
10768 to 10783	16	San Marino
10784 to 10785	2	Latvia
10786 to 10799	14	Unassigned
10800 to 10815	16	Turks and Caicos Islands
10816 to 10831	16	St. Pierre and Miquelon
10832 to 10855	24	Uzbekistan
10856 to 10879	24	Unassigned
10880 to 10895	16	Brunei Darussalam

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FIGURE 8C

10896 to 10911	16	Nauru
10912 to 10927	16	Tonga
10928 to 10943	16	Solomon Islands
10944 to 10959	16	Vanuatu
10960 to 10975	16	Fiji
10976 to 10991	16	Palau
10992 to 11007	16	Wallis and Futuna
11008 to 11039	32	Papua New Guinea
11040 to 11071	32	Micronesia
11072 to 11103	32	North Korea
11104 to 11135	32	Cambodia
11136 to 11151	16	Cook Islands
11152 to 11167	16	Niue Island
11168 to 11183	16	American Samoa
11184 to 11199	16	Western Samoa
11200 to 11215	16	Kiribati
11216 to 11231	16	New Caledonia
11232 to 11247	16	Tuvalu
11248 to 11263	16	French Polynesia
11264 to 11279	16	Tokelan
11280 to 11295	16	Marshall Islands
11296 to 11311	16	Macau
11312 to 11327	16	Kuwait
11328 to 11343	16	Yemen
11344 to 11359	16	Oman
11360 to 11375	16	Yemen
11376 to 11391	16	United Arab Emirates
11392 to 11554	163	Russia
11555	1	Uzbekistan
11556 to 11599	44	Russia
11600	1	Uzbekistan
11601 to 12287	687	Russia
12288 to 13311	1024	Japan
13312 to 13439	128	Viet Nam
13440 to 13471	32	Lao People's Democratic Republic
13472 to 13503	32	Bangladesh
13504 to 13535	32	Taiwan

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FIGURE 8D

13536 to 13567	32	Maldives
13568 to 14335	768	China
14336 to 14463	128	Turkey
14464 to 14847	384	India
14848 to 14975	128	Pakistan
14976 to 15103	128	Afghanistan
15104 to 15231	128	Sri Lanka
15232 to 15359	128	Burma
15360 to 15391	32	Lebanon
15392 to 15423	32	Jordan
15424 to 15455	32	Syria
15456 to 15487	32	Iraq
15488 to 15519	32	Saudi Arabia
15520 to 15551	32	Mongolia
15552 to 15583	32	Nepal
15584 to 15615	32	Bulgaria
15616 to 15743	128	Iran
15744 to 15871	128	Hungary
15872 to 15903	32	CDMA using GSM MAP
15904 to 15905	2	TIA-683 CDMA PRL Operator escape code 0 (15904)/1 (15905)
15906 to 15999	94	Unassigned
16000 to 16127	128	Romania
16128 to 16255	128	Czech Republic
16256 to 16383	128	Unassigned
16384 to 18431	2048	Canada
18432 to 21549	3118	Unassigned
21550 to 21566	17	Kyrgyz Republic
21567 to 22015	449	Unassigned
22016 to 22271	256	Germany
22272 to 22399	128	Norway
22400 to 22527	128	Unassigned
22528 to 22543	16	Denmark
22544 to 22655	112	Unassigned
22656 to 22911	256	United Kingdom
22912 to 23039	128	Austria
23040 to 23167	128	Switzerland
23168 to 23423	256	Italy

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FIGURE 8E

23424 to 23551	128	Yugoslavia	8A
23552 to 23679	128	Spain	
23680 to 23935	256	France	8B
23936 to 24063	128	Belgium	
24064 to 24191	128	Netherlands	8C
24192 to 24319	128	Greece	
24320 to 24351	32	Portugal	8D
24352 to 24383	32	Luxembourg	
24384 to 24415	32	Unassigned	8E
24416 to 24447	32	Iceland	
24448 to 24575	128	Unassigned	8F
24576 to 25075	500	Mexico	
25076 to 25099	24	Unassigned	8G
25100 to 25124	25	Mexico	
25125 to 25599	475	Unassigned	
25600 to 26111	512	China	
26112 to 31103	4992	CIBERNET BIDS	
31104 to 31135	32	Paraguay	
31136 to 31167	32	Suriname	
31168 to 31199	32	Uruguay	
31200 to 31231	32	Cyprus	
31232 to 31263	32	Bolivia	
31264 to 31295	32	Guyana	
31296 to 31327	32	Ecuador	
31328 to 31359	32	Guiana	
31360 to 31375	16	Guadeloupe	
31376 to 31391	16	Martinique	
31392 to 31407	16	Netherlands Antilles	
31408 to 31423	16	Bahrain	
31424 to 31439	16	Qatar	
31440 to 31455	16	Gibraltar	
31456 to 31471	16	Albania	
31472 to 31487	16	Unassigned	
31488 to 31615	128	Venezuela	
31616 to 31743	128	Colombia	
31744 to 31754	11	Chile	
31755 to 31808	54	Unassigned	

FIGURE 8F

31809 to 31820	12	Chile
31821 to 31840	20	Unassigned
31841 to 31854	14	Chile
31855 to 31871	17	Unassigned
31872 to 32127	256	Brazil
32128 to 32255	128	Argentina
32256 to 32383	128	Cuba
32384 to 32511	128	Peru
32512 to 32543	32	Nicaragua
32544 to 32575	32	Costa Rica
32576 to 32607	32	Panama
32608 to 32639	32	Haiti
32640 to 32649	10	Belize
32650 to 32671	22	Unassigned
32672 to 32703	32	Guatemala
32704 to 32735	32	El Salvador
32736 to 32767	32	Honduras
32768 to 65535	32768	Unassigned

FIGURE 8G

8A

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SID Range	Country/Carrier Using SID	Country/Carrier Allocated SID
13	Hong Kong (Hutchison Telecom)	United States of America — Cingular (Washington/Baltimore)
136	Netherlands Antilles (St. Maarten Boatphone)	United States of America — Cingular (Jacksonville, FL)
700	Cayman Islands (Cable and Wireless)	United States of America
741	Conecel (Ecuador)	United States of America
1111	Republic of Korea for AMPS system	United States of America
1235	Piltel, Philippines	United States of America — US Cellular (Mitchel, IA)
1525	Mexico (Mexico City) (IUSACEL)	United States of America
1700	Republic of Korea (Shinsegi Telecom)	United States of America — (withheld by US Cellular)
1901	Russia (Vimpelcom)	United States of America
4100	Movilnet/Venezuela	United States of America
4101	Movilnet/Venezuela	United States of America — AT&T Wireless (Atlanta)
4110	Movilnet/Venezuela	United States of America
4120	Movilnet/Venezuela	United States of America — Sprint PCS (Dallas)
4130	Movilnet/Venezuela	United States of America
4140	Movilnet/Venezuela	United States of America
4150	Movilnet/Venezuela	United States of America
4369	Republic of Korea	United States of America
4370	Republic of Korea	United States of America
4371	Republic of Korea	United States of America
5732	BellSouth Eastern Colombia Region	United States of America
5734	BellSouth San Andres Island (Colombia)	United States of America
5772	BellSouth Northern Colombia Region	United States of America
6190	British Virgin Islands	United States of America

FIGURE 9A

9A

9B

8002	Grenada	Saint Vincent and the Grenadines
8010	Saint Lucia (Saint Lucia Boatphone)	Saint Vincent and the Grenadines
8166	Saint Kitts	Barbados
8198	Bermuda (Bermuda Telephone Co.)	Thailand
12461	Bangladesh (Pacific Bangladesh Telecom Ltd.) - Dhaka	Japan
12463	Bangladesh (Pacific Bangladesh Telecom Ltd.) - Chittagong	Japan
12464	Bangladesh (Pacific Bangladesh Telecom Ltd.) - Sylhet	Japan
12561	SingTel Mobile, Singapore	Japan
12978	SETAR - Aruba	Japan
26883	IUSACELL (formerly Portatel)	CIBERNET BIDs
32752	Bahamas (Bahamas Telecom)	Honduras (Republic of)

FIGURE 9B

9A

9B

1000 ↘

1002 ↘

1004 ↘

1006 ↘

SID ₁	POS ₁
SID ₂	POS ₂
▪	▪
▪	▪
▪	▪
SID _N	POS _N

FIG. 10A

1050 ↘

1052 ↘

1054 ↘

1056 ↘

SID Range ₁	POS ₁
SID Range ₂	POS ₂
▪	▪
▪	▪
▪	▪
SID Range _N	POS _N

FIG. 10B

1100 ↘

1102 ↘

1104 ↘

1106 ↘

SID ₁ or SID Range ₁	POS ₁	UNC ₁
SID ₂ or SID Range ₂	POS ₂	UNC ₂
▪	▪	▪
▪	▪	▪
▪	▪	▪
SID _N or SID Range _N	POS _N	UNC _N

FIG. 10C

8	7	6	5	4	3	2	1	
		Location Area Identification IEI						octet 1
MCC digit 2				MCC digit 1				octet 2
MNC digit 3				MCC digit 3				octet 3
MNC digit 2				MNC digit 1				octet 4
LAC								octet 5
LAC (continued)								octet 6

FIGURE 11

8	7	6	5	4	3	2	1	
Routing Area Identification IEI								octet 1
MCC digit 2				MCC digit 1				octet 2
MNC digit 3				MCC digit 3				octet 3
MNC digit 2				MNC digit 1				octet 4
LAC								octet 5
LAC cont'd								octet 6
RAC								octet 7

FIGURE 12

Information Element/Group name	Need	Multi	Type and reference	Semantics description
MCC	MP	3		The first element contains the first MCC digit, the second element the second MCC digit and so on.
>MCC digit	MP		INTEGER(0..9)	
MNC	MP	2 to 3		The first element contains the first MNC digit, the second element the second MNC digit and so on.
>MNC digit	MP		INTEGER(0..9)	

FIGURE 13

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Cell identity	MP		bit string(28)	

FIGURE 14

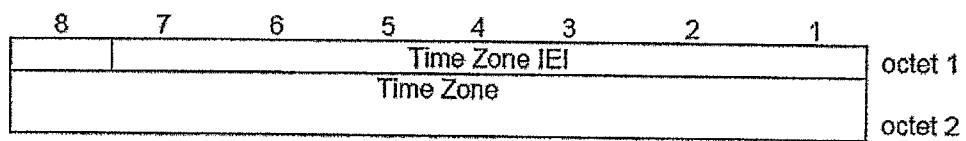


FIGURE 15

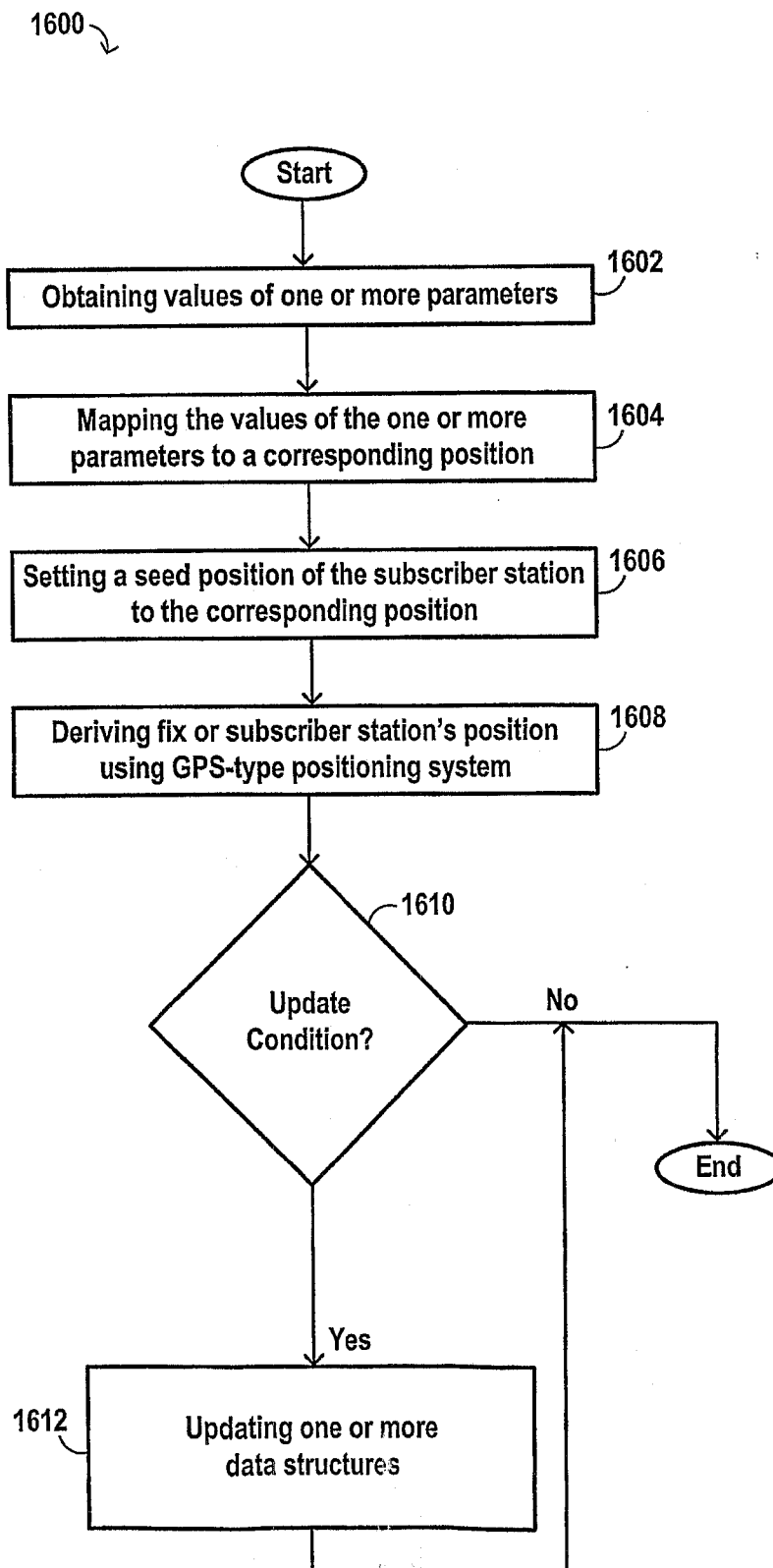


FIG. 16

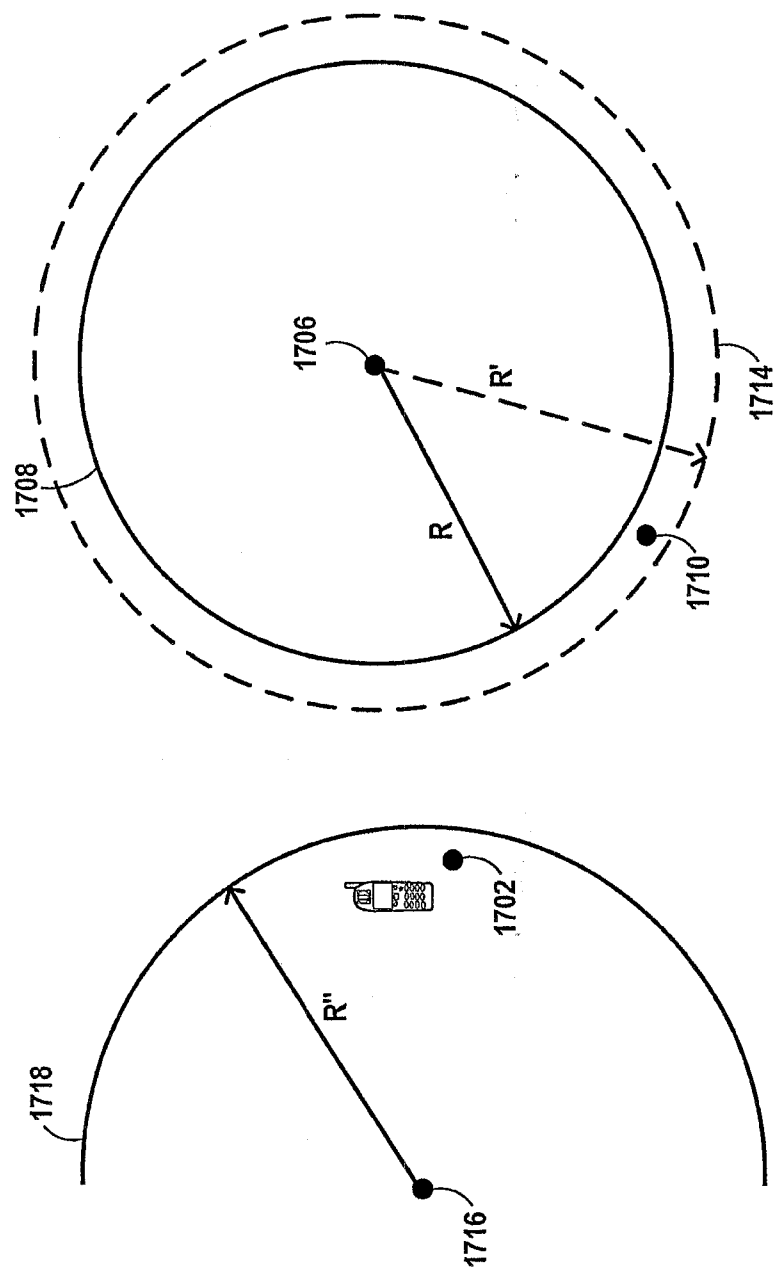


FIG. 17

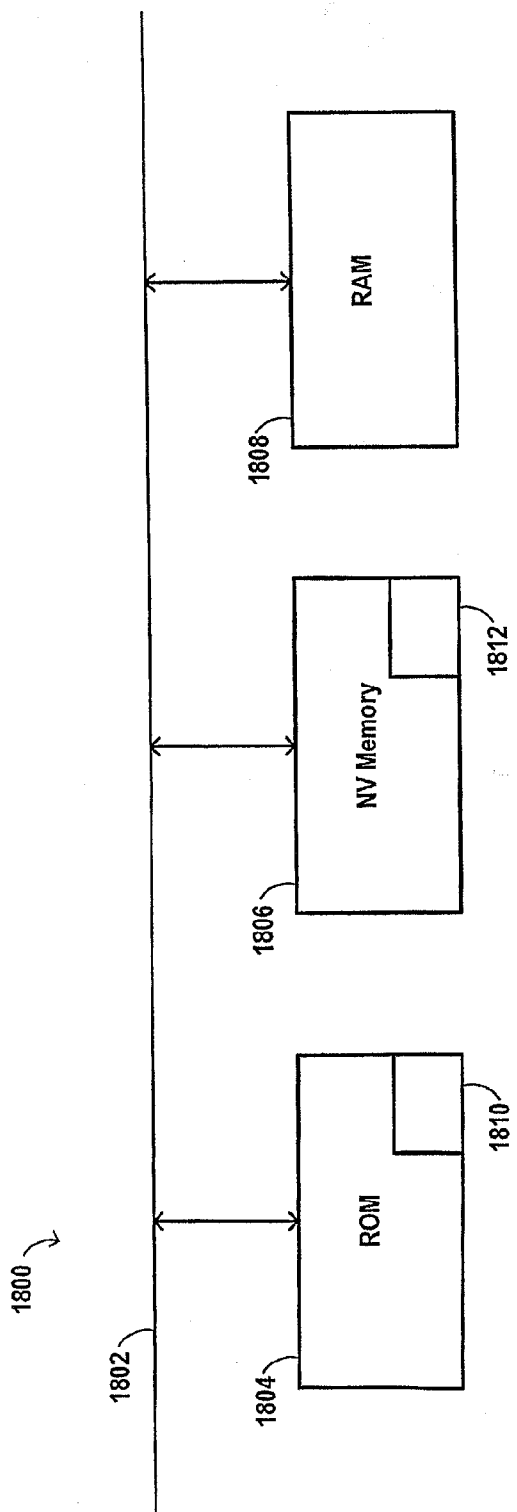


FIG. 18A

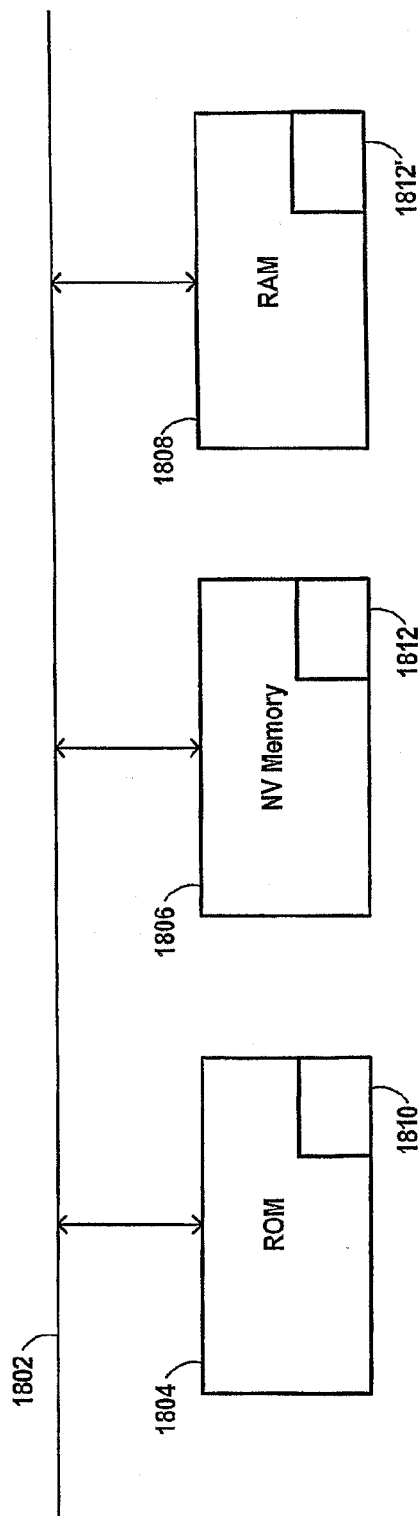


FIG. 18B

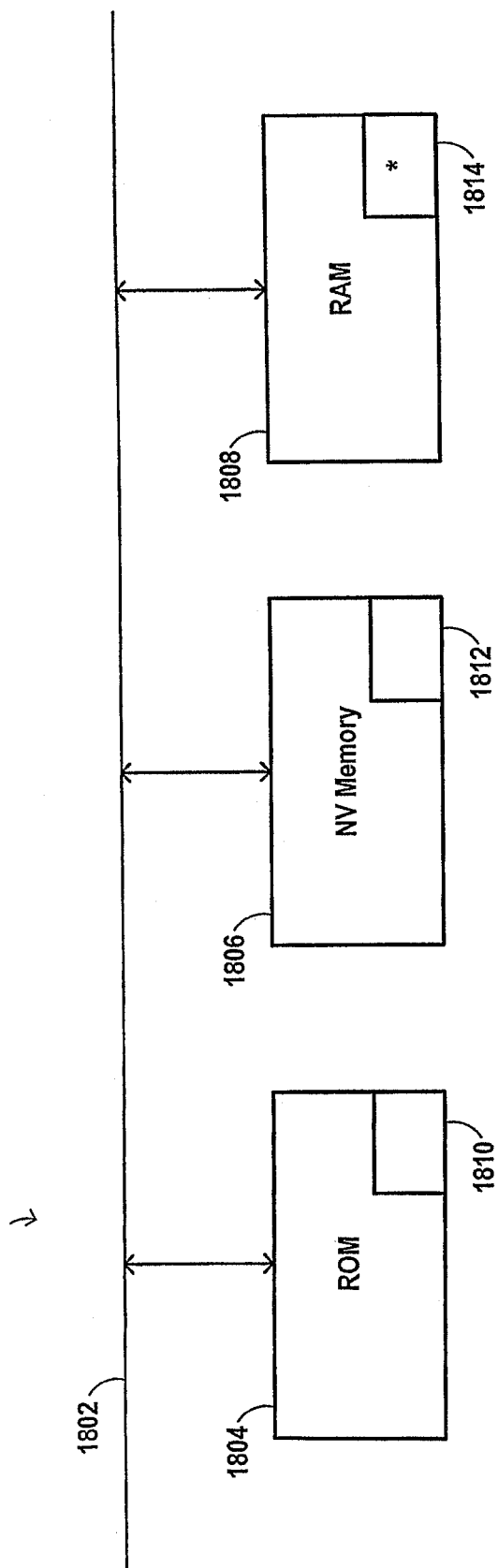


FIG. 18C

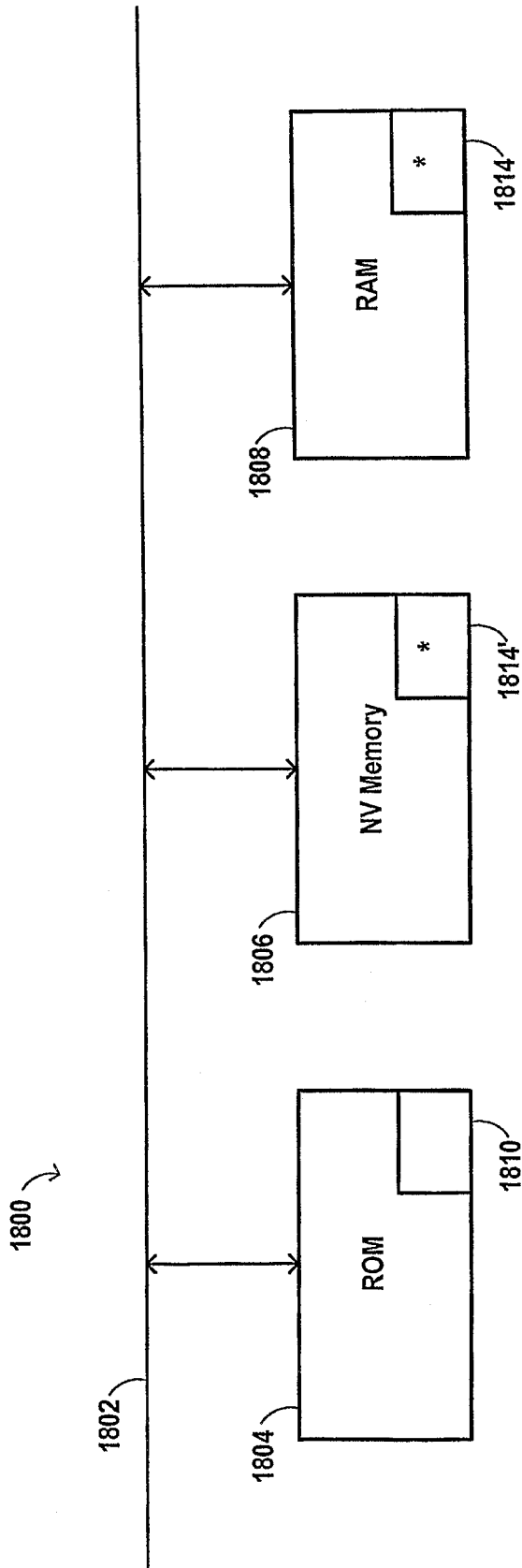
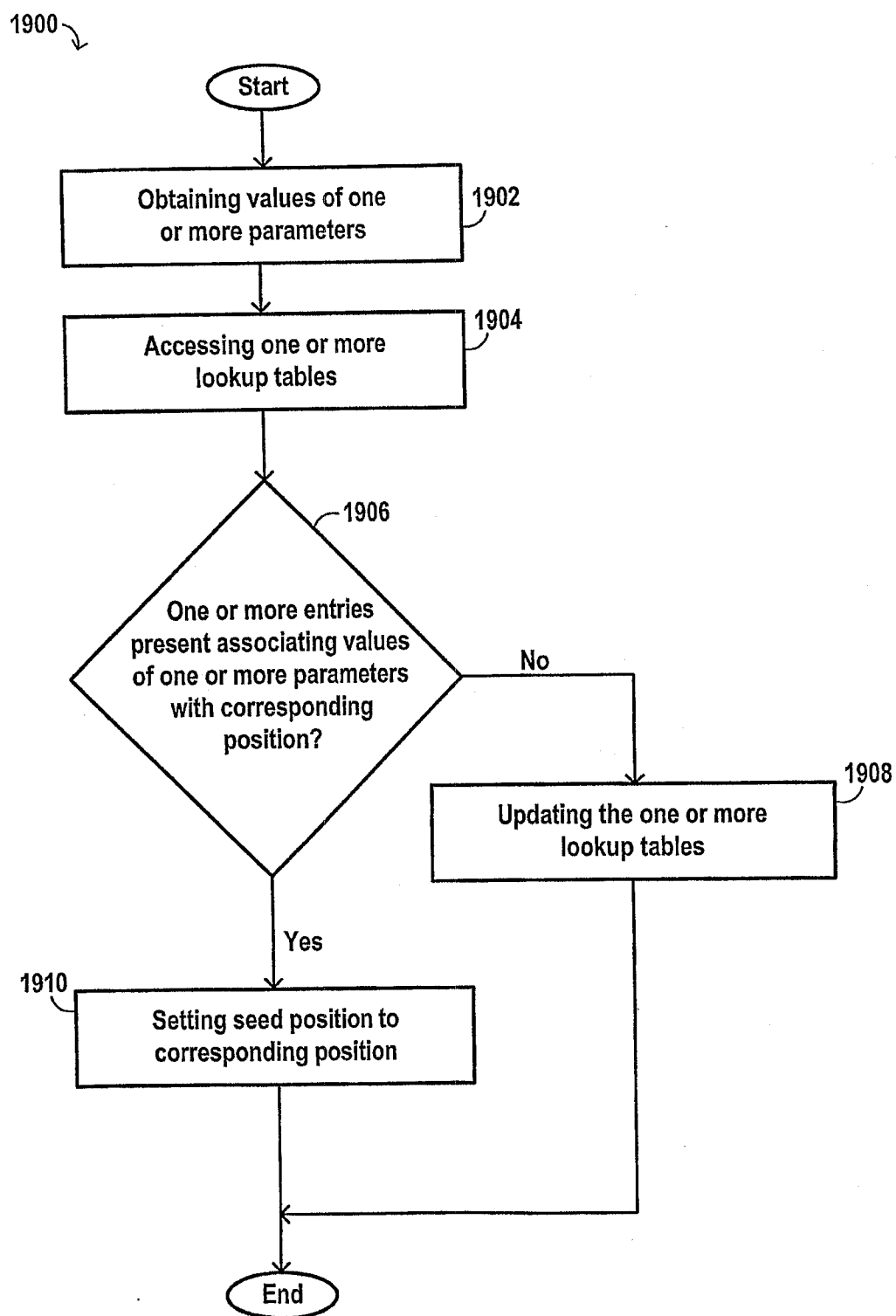
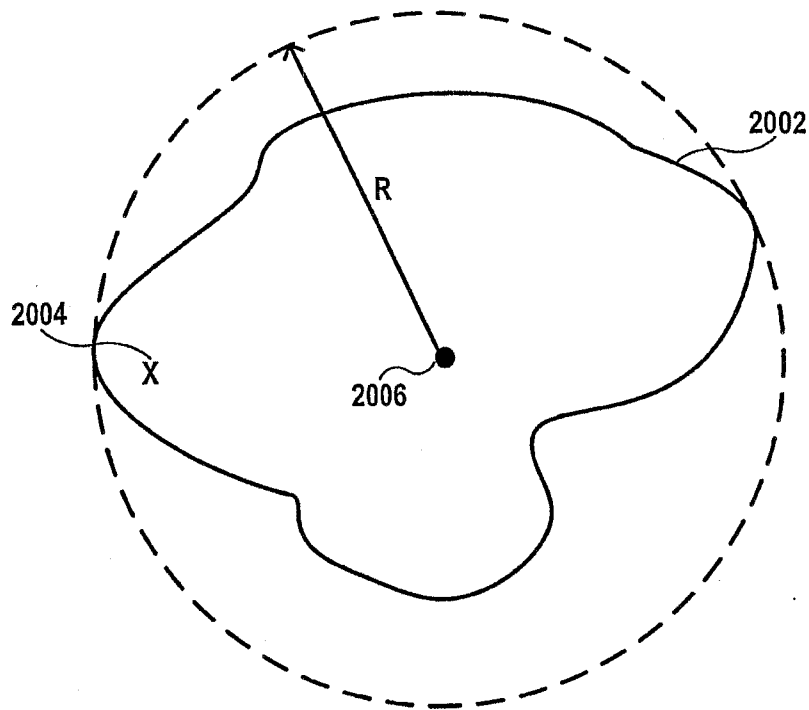
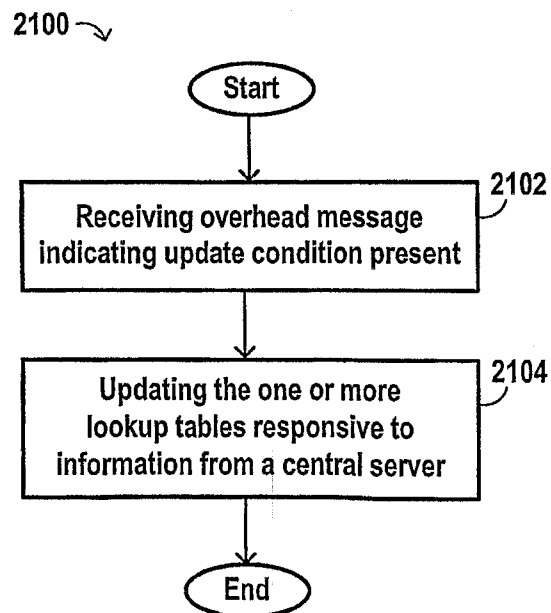


FIG. 18D

**FIG. 19**

**FIG. 20****FIG. 21**

2200 ↘

2206 ↘
2208 ↘

2202 ↘ 2204 ↘

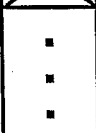
SID _r - SID _s	POS ₁	UNC ₁		
SID _r	POS ₂	UNC ₂		
▪ ▪ ▪	▪ ▪ ▪	▪ ▪ ▪	▪ ▪ ▪	▪ ▪ ▪
SID _x - SID _y	POS _n	UNC _n		

FIG. 22A

2200 ↘

2206 ↘
2208 ↘

2202 ↘ 2204 ↘

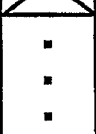
SID _r - SID _s	POS ₁	UNC ₁		
SID _r	POS ₂	UNC ₂		
▪ ▪ ▪	▪ ▪ ▪	▪ ▪ ▪	▪ ▪ ▪	▪ ▪ ▪
SID _x - SID _y	POS _n	UNC _n		

FIG. 22B

2200 ↘

2206 ↘

2202 ↘ 2204 ↘

SID _r - SID _s	POS ₁	UNC ₁		
▪ ▪ ▪	▪ ▪ ▪	▪ ▪ ▪	▪ ▪ ▪	▪ ▪ ▪
SID _x - SID _y	POS _n	UNC _n		

FIG. 22C

Parameter(s)	Overhead message(s)	System
SID	SYSTEM PARAMETERS MESSAGE ANSI-41 SYSTEM PARAMETERS MESSAGE IN-TRAFFIC SYSTEM PARAMETERS MESSAGE	CDMA 2000
NID	SAME AS SID	CDMA 2000
BASE_LAT BASE_LON	SYSTEM PARAMETERS MESSAGE	CDMA 2000
MCC	EXTENDED SYSTEM PARAMETERS MESSAGE ANSI-41 SYSTEM PARAMETERS MESSAGE	CDMA 2000
COUNTRY CODE	SECTOR PARAMETERS MESSAGE	1xEVDO
SECTOR ID	SECTOR PARAMETERS MESSAGE	1xEVDO

FIG. 23A

Parameter(s)	Overhead message(s)	System
MCC	LOCATION AREA INFORMATION ELEMENT ROUTING AREA INFORMATION ELEMENT	GSM/UMTS
MNC	LOCATION AREA INFORMATION ELEMENT ROUTING AREA INFORMATION ELEMENT	GSM/UMTS
LAC	LOCATION AREA INFORMATION ELEMENT ROUTING AREA INFORMATION ELEMENT	GSM/UMTS
PLMN	PLMN IDENTITY INFORMATION ELEMENT	GSM/UMTS
RAC	ROUTING AREA INFORMATION ELEMENT	GSM/UMTS
CELL IDENTITY	CELL IDENTITY INFORMATION ELEMENT	UMTS
TIME ZONE	TIME ZONE INFORMATION ELEMENT	GSM/UMTS

FIG. 23B

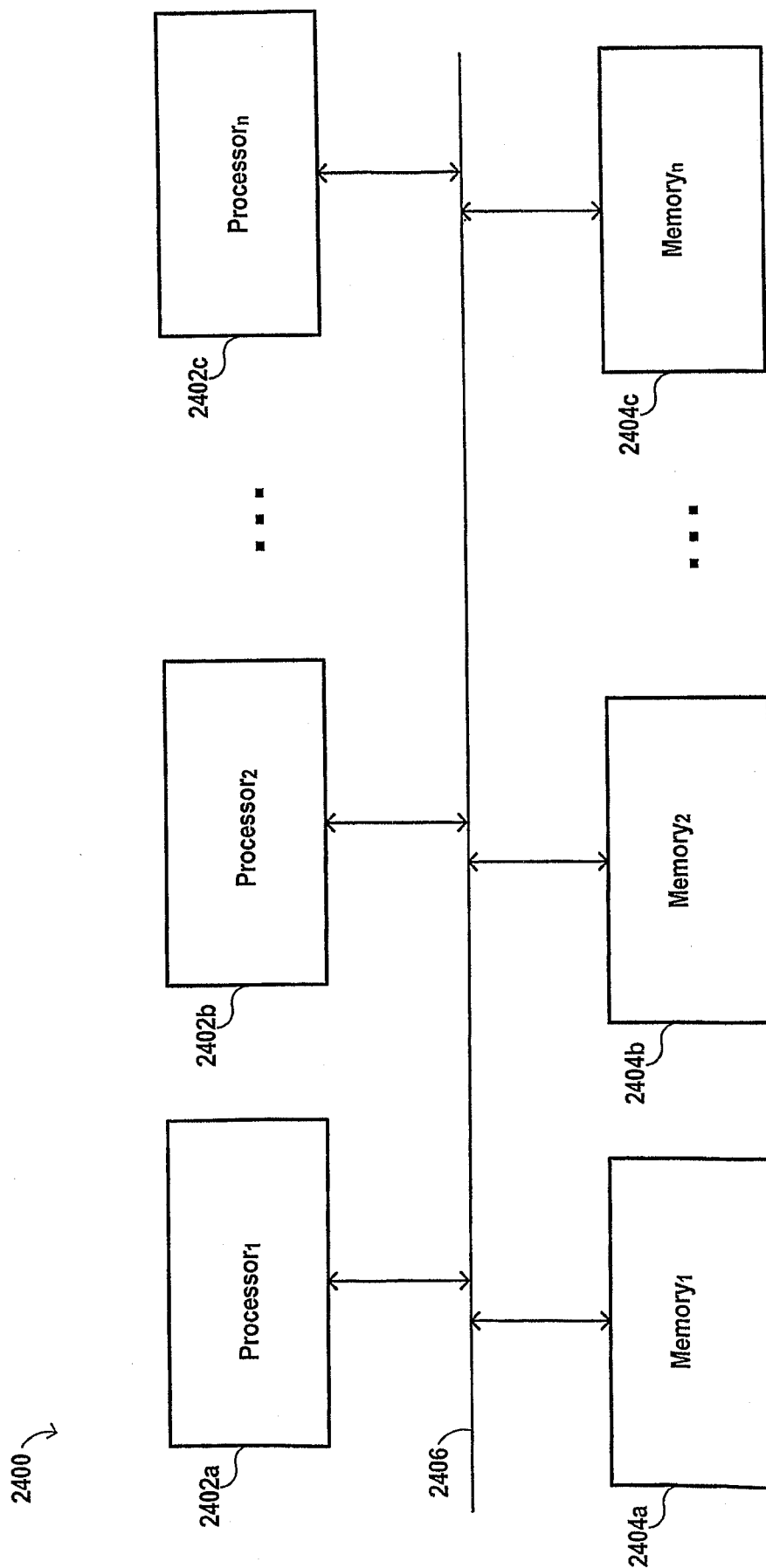


FIG. 24

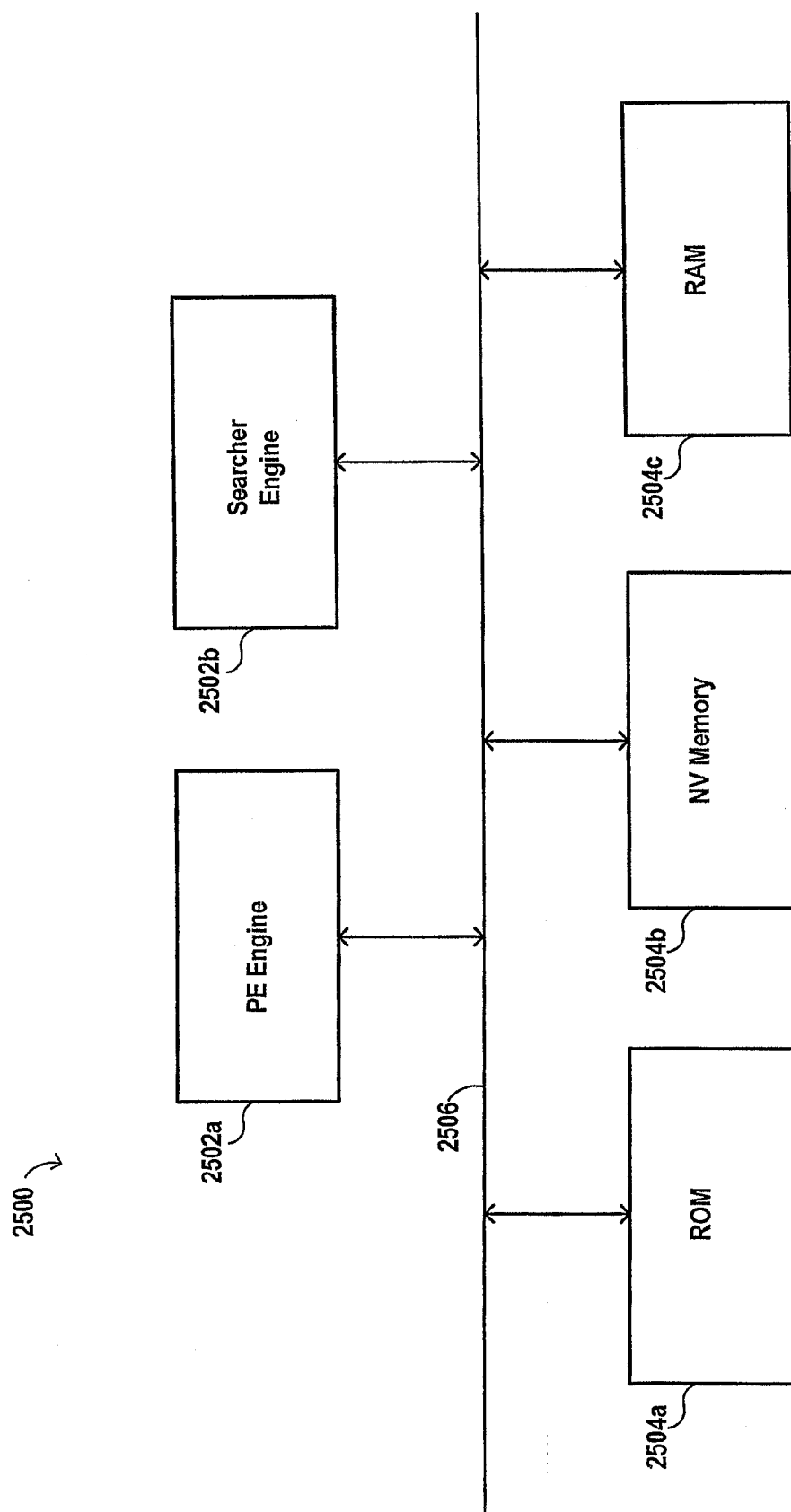


FIG. 25

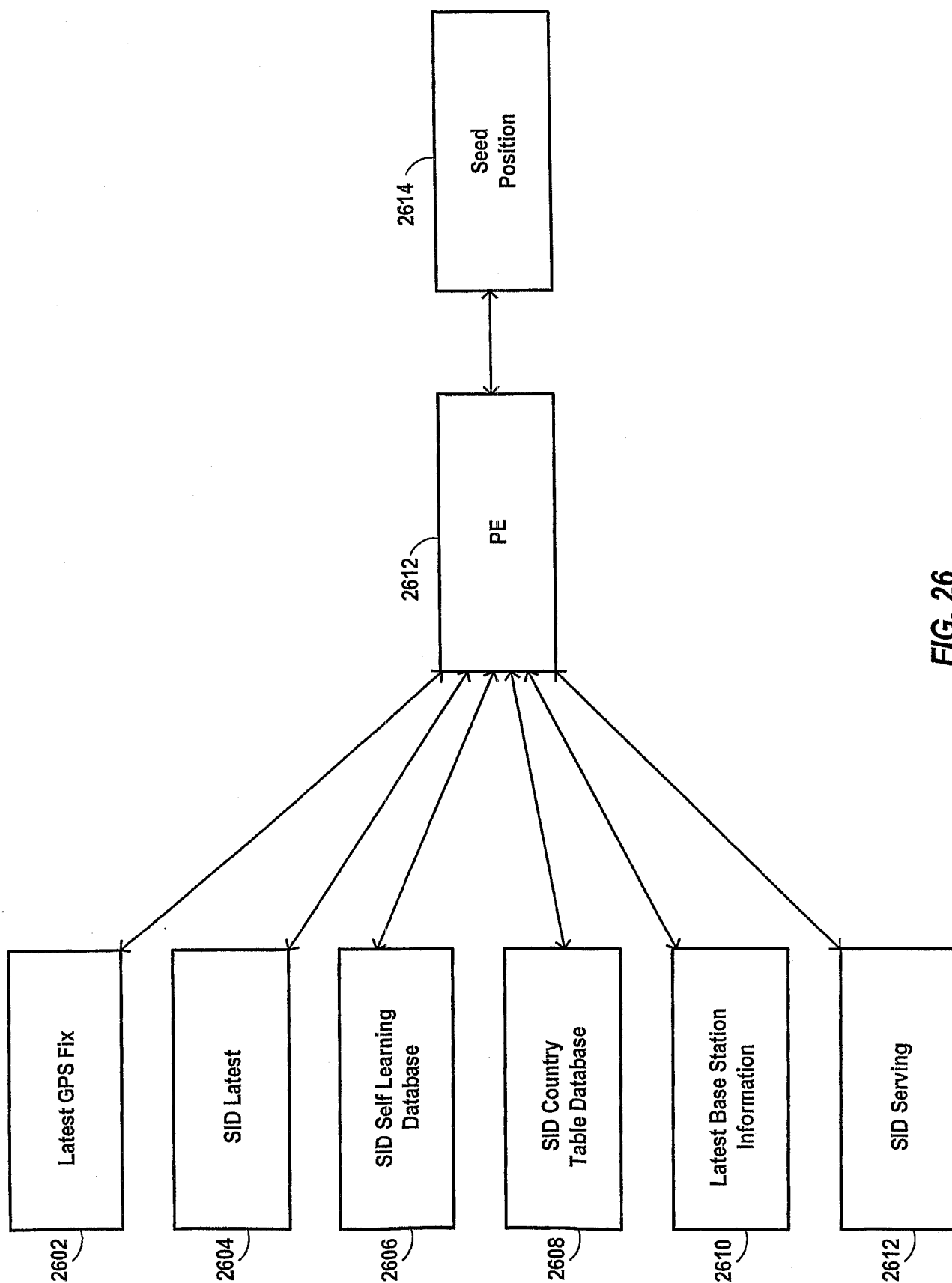


FIG. 26

Item	Unit	Type	Size [bytes]	Notes
Latest GPS Fix This is updated in memory when 1. power up 2. a GPS fix is available This is saved to the EFS file POS_DB at power down.				
Lat_gps	degree	float	4	GPS fix latitude
Lon_gps	degree	float	4	GPS fix longitude
Position Unc_gps	meter	float	4	Position standard deviation estimate
gpsWeek_gps	week no.	uint16	2	GPS fix at this GPS week
gpsMs_gps	ms	uint32	4	GPS fix at this GPS time of week

FIGURE 27

Item	Unit	Type	Size [bytes]	Notes
SIDlatest This is updated in memory when 1. power up 2. detecting OOS 3. during handoff to a new SID serving, keep the old SID serving here This is saved to the EFS file GPS_DB at power down.				
SIDlatest	n/a	uint16	2	Latest serving SID
gpsWeek	week no.	uint16	2	GPS week
gpsMs	ms	uint32	4	GPS ms of week
Latest Base Station Info This is updated in memory when 1. power up 2. a non-zero base station lat/lon is found This is saved to the EFS file GPS_DB at power down.				
BSLat	radian	float	4	Base station latitude
BSLon	radian	float	4	Base station longitude
Dmar	km	uint8	1	Dynamic MAR value used for this Base Station broadcasted Lat/Lon
gpsWeek_BsInfo	week no.	uint16	2	GPS week tagged for SID_BsInfo
gpsMS_BsInfo	ms	uint32	4	GPS ms of week tagged for SID_BsInfo

FIGURE 28

Item	Unit	Type	Size [bytes]	Notes
sid	n/a	uint16	2	SID that has a GPS position
mask	n/a	uint8	1	bit 0 - 1: sid conflict found - 0: no sid conflict
latitude	degree	float	4	Latitude - GPS position
longitude	degree	float	4	Longitude - GPS position
gpsWeek	week no.	uint16	2	GPS week tagged to the GPS position
gpsMs	ms	uint32	4	GPS Time tagged to the GPS position

FIGURE 29

Item	Unit	Type	Size [bytes]	Notes
SIDstart	n/a	uint16	2	Starting SID used for this country
SIDend	n/a	uint16	2	Ending SID used for this country
latitude	0.001 radian	int16	2	Latitude of the central position in the country
longitude	0.001 radian	int16	2	Longitude of the central position in the country
radius	km	uint16	2	circular position uncertainty from the central position

FIGURE 30

as of 11/02/04 are listed in the www.itsa.org website

http://www.kao.itasas.org/SToolsScale.htm#www.itsa.org/publications/itsa-book/containing.htm
http://www.kao.itasas.org/containing.htm

SID RANGE	Lo	Hi	Reserved	Country	Region	Geo Coordinates	lat	long	Hash Order	centlat (0.001 rad)	centlong (0.001 rad)	max radius [km]	http://www.kao.itasas.org/containing.htm
1	2175 0x0001	0x037F	1	Unassigned	N. America	38 00 N 97 00 W	38	-97	653	653	-1683	3225	
276	2176 0x0880	0x07FF	2176	USA	N. America	37 00 N 127 30 E	37	127.5	1257	1257	-688	445	
234	4095 0x0500	0x07FF	1752	S. Korea	N. America	38 00 N 87 00 W	38	-87	653	653	-1683	3225	
405	7079 0x1000	0x10FF	3584	USA	N. America	38 00 N 87 00 W	38	-87	653	653	-1683	3225	
7680	7807 0x1E00	0x1E7F	128	Australia	Australia	27 00 S 133 00 E	27	133	471	471	-2321	2502	
800	7813 0x1E80	0x1E7F	84	Hawaii	N. America	21 00 N 157 30 W	21	-157.5	385.5191	385.5191	-1675	300	
7853	7853 0x1E80	0x1E7F	16	Faroe Is.	Europe	62 00 N 7 00 W	62	-7	1082	1082	-122	50	
7854	7854 0x1F00	0x1F7F	16	Greenland	N. America	72 00 N 40 00 W	72	-40	1257	1257	-688	3335	
7855	7855 0x1F20	0x1F7F	16	Falkland Is.	S. America	51 45 S 59 00 W	51.75	-59	-903	-903	-1030	222	
7856	7856 0x1F40	0x1F7F	8	St. Pierre/Miquelon	N. America	46 50 N 58 20 W	46.83	-58.33	817	817	-983	30	
7857	7857 0x1F60	0x1F7F	8	Unassigned	Caribbean	13 15 N 61 12 W	13.25	-61.2	231	231	-1088	60	
8001	8001 0x1F80	0x1F7F	16	Saint Lucia	Caribbean	20 N 70 W	20	-70	349	349	-1222	1200	
8002	8002 0x1F90	0x1F7F	16	Saint Kitts/Nevis	Caribbean	20 N 70 W	20	-70	349	349	-1222	1200	
8003	8003 0x1FA0	0x1F7F	16	Montserrat	Caribbean	20 N 70 W	20	-70	349	349	-1222	1200	
8004	8004 0x1FB0	0x1F7F	16	Guadalupe	Caribbean	20 N 70 W	20	-70	349	349	-1222	1200	
8005	8005 0x1FC0	0x1F7F	16	Bahamas	Caribbean	20 N 70 W	20	-70	349	349	-1222	1200	
8006	8006 0x1FD0	0x1F7F	16	Bermuda	Caribbean	20 N 70 W	20	-70	349	349	-1222	1200	
8007	8007 0x1FE0	0x1F7F	16	British Virgin Is.	Caribbean	20 N 70 W	20	-70	349	349	-1222	1200	
8008	8008 0x1FF0	0x1F7F	16	Cayman Is.	Caribbean	20 N 70 W	20	-70	349	349	-1222	1200	
8009	8009 0x1FF0	0x1F7F	16	Anguilla/Baobabs	Caribbean	20 N 70 W	20	-70	349	349	-1222	1200	
8010	8010 0x1FF0	0x1F7F	16	Barbados	Caribbean	20 N 70 W	20	-70	349	349	-1222	1200	
8011	8011 0x1FF0	0x1F7F	32	Thailand	Asia	15 00 N 100 00 E	15	100	262	262	-122	1200	
8012	8012 0x1FF0	0x1F7F	32	Egypt	N. Africa	27 00 N 30 00 E	27	30	471	471	-122	834	
8013	8013 0x1FF0	0x1F7F	32	Morocco	N. Africa	32 00 N 5 00 W	32	-5	559	559	-122	612	
8014	8014 0x1FF0	0x1F7F	128	Algeria	N. Africa	37 00 N 3 00 E	37	3	890	890	-122	47	
8015	8015 0x1FF0	0x1F7F	32	Australia	Australia	27 00 S 133 00 E	27	133	471	471	-122	1334	
8016	8016 0x1FF0	0x1F7F	32	Israel	Middle East	31 30 N 34 45 E	31.5	34.75	231	231	-122	3502	
8017	8017 0x1FF0	0x1F7F	32	Tunisia	N. Africa	34 00 N 9 00 E	34	9	593	593	-122	206	
8018	8018 0x1FF0	0x1F7F	32	Libya	N. Africa	25 00 N 17 00 E	25	17	436	436	-122	389	

31A
31B
31C
31D
31E
31F
31G

FIGURE 31A

8544	8575	32 Gambia	13.28 N, 16.34 W	13.47	-16.57	255	289	100
8576	8703	128 New Zealand	41.00 S, 174.00 E	-41	174	-716	3037	723
8704	8735	32 Senegal	14.00 N, 14.00 W	14	-14	-244	244	334
8736	8767	32 Mauritania	20.00 N, 12.00 W	20	-12	-209	249	723
8768	8799	32 Mali	17.00 N, 4.00 W	17	-4	-70	297	890
8800	8831	32 Guinea	11.00 N, 10.00 W	11	-10	-175	192	1279
8832	8863	16 Dominican Rep	19.00 N, 70.40 W	19	-70.67	-1233	332	222
8864	8879	16 Cape Verde	16.00 N, 24.00 W	16	-24	-419	219	170
8880	8895	16 Sao Tome/Principe	1.00 N, 7.00 E	1	7	17	122	120
8896	8911	16 Diego Garcia	6.00 S, 71.30 E	-6	71.5	-105	1248	15
8912	8927	16 Seychelles	4.35 S, 55.40 E	-4.58	55.67	-60	972	600
8928	8943	16 Djibouti	11.30 N, 43.00 E	11.5	43	201	750	139
8944	8959	16 Kazakhstan	48.00 N, 68.00 E	48	68	838	1187	2502
8960	8991	16 Reunion	21.05 S, 55.36 E	-21.1	55.6	-368	970	40
8992	9023	32 Cote d'Ivoire	8.00 N, 5.00 W	8	-5	-87	334	334
9024	9055	32 Burkina Faso	13.00 N, 2.00 W	13	-2	-35	227	500
9056	9087	32 Niger	16.00 N, 3.00 E	16	3	140	279	834
9088	9119	32 Togo	8.00 N, 1.10 E	8	1.17	20	140	278
9120	9151	32 Benin	9.30 N, 2.45 E	9.5	2.25	166	140	278
9152	9183	32 Mauritius	20.17 S, 57.33 E	-20.28	57.55	-354	1004	361
9184	9215	32 Liberia	6.30 N, 9.30 W	6.5	-9.5	113	278	18
9216	9247	32 Sierra Leone	8.30 N, 11.30 W	8.5	-11.5	148	201	222
9248	9279	32 Ghana	8.00 N, 2.00 W	8	-2	-35	334	334
9280	9311	32 Nigeria	10.00 N, 3.00 E	10	3	175	140	687
9312	9343	32 Chad	15.00 N, 19.00 E	15	19	262	332	690
9344	9375	32 Central African Rep	7.00 N, 21.00 E	7	21	122	367	723
9376	9407	32 Cameroon	6.00 N, 12.00 E	6	12	105	209	612
9408	9439	32 Equatorial Guinea	2.00 N, 10.00 E	2	10	35	175	157
9440	9471	32 Gabon	1.00 S, 11.45 E	-1	11.75	205	205	334
9472	9503	32 Congo	1.00 S, 15.00 E	-1	15	-17	202	500
9504	9535	32 Dem. Rep. Of Congo/Zair	0.00 N, 25.00 E	0	25	0	436	1058
9536	9567	32 Angola	12.30 S, 18.30 E	-12.5	18.5	-218	323	778
9568	9599	32 Guinea-Bissau	12.00 N, 15.00 W	12	-15	209	262	195
9600	9631	32 Sudan	15.00 N, 30.00 E	15	30	262	524	1058
9616	9647	16 Lesotho	28.30 S, 28.30 E	-28.5	28.5	-515	487	167
9632		16 Swaziland	15.25 N, 31.30 E	15.42	-31.33	-1070	269	26
			26.30 S, 31.30 E	-26.5	31.5	-463	550	111

31A
31B
31C
31D
31E
31F
31G

FIGURE 31B

9548	9548	16 Andra	12.5	-69.97	218	-1271	20
9564	9564	16 Singapore	13.7	103.8	24	1812	300
9580	9580	16 Northern Mariana Islands	13.2	145.75	165	2534	480
9596	9596	16 Guam	13.47	144.76	235	2527	30
9712	9712	16 Australian External Territory					
9726	9726	32 Azores	-2	30	-35	524	111
9760	9760	32 Azores	8	38	140	663	884
9792	9792	32 Azores	10	49	175	855	884
9824	9824	32 Azores	11	-61	192	-1065	381
9856	9856	32 Azores	1	38	17	663	500
9888	9888	32 Azores	-6	35	-105	611	723
9920	9920	32 Azores	1	32	17	559	306
9952	9952	32 Azores	-3.5	30	-81	524	222
9984	9984	32 Azores	-18.25	35	-319	611	945
10016	10016	32 Azores	-15	30	-262	524	667
10048	10048	32 Azores	-20	47	-349	820	778
10080	10080	32 Azores	-20	37	-349	524	417
10112	10112	32 Azores	-22	17	-384	297	778
10144	10144	32 Azores	-13.5	34	-235	593	417
10176	10176	32 Azores	-22	24	-384	419	556
10208	10208	32 Azores	-12.77	44.25	-212	772	140
10240	10240	32 Azores	-29	24	-506	419	945
10272	10272	32 Azores	2.5	112.5	44	1993	1112
10304	10304	32 Azores	-5	120	-87	2094	2613
10336	10336	32 Azores	13	122	227	2129	880
10368	10368	32 Azores	22.25	114.17	388	1993	40
10400	10400	32 Azores	13	122	227	2129	880
10432	10432	32 Azores	43.73	7.4	763	129	2
10464	10464	32 Azores	43.77	12.42	764	217	4
10496	10496	32 Azores	57	25	995	436	250
10528	10528	32 Azores	21.75	-71.58	380	-1249	60
10560	10560	32 Azores	46.83	-56.33	817	-993	30
10592	10592	32 Azores	41	64	716	1117	650
10624	10624	32 Azores	4.5	114.67	79	2001	72
10656	10656	32 Azores	-0.53	166.92	-9	2913	4

31A
31B
31C
31D
31E
31F
31G

FIGURE 31C

10912	10927	16 India	20 00 S, 175 00 W	-20	-175	349	-3054
10926	10943	16 Solomon Islands	8 00 S, 159 00 E	-8	159	-140	2775
10944	10959	16 Vanuatu	16 00 S, 167 00 E	-16	167	-279	2916
10960	10975	16 Fiji	18 00 S, 175 00 E	-18	175	-314	3054
10976	10991	16 Palau	7 30 N, 134 30 E	7.5	134.5	-131	2247
10992	11007	16 Wallis and Futuna	13 18 S, 176 12 W	-13.3	-176.2	-232	-3075
11008	11039	32 Prata New Guinea	6 00 S, 147 00 E	-6	147	-185	2556
11050	11071	32 Micronesia	8 55 N, 158 45 E	8.52	158.25	121	2762
11072	11103	32 N. Korea	40 00 N, 127 00 E	40	127	698	2217
11104	11135	32 Cambodia	13 09 N, 105 00 E	13	105	227	1833
11136	11151	16 Cook Islands	21 14 S, 159 45 W	-21.23	-159.77	-371	-2789
11152	11167	16 Niue Island	19 02 S, 169 52 W	-19.03	-169.87	-332	-2565
11168	11183	U.S. Territory	14 29 S, 170 00 W	-14.33	-170	-250	-2967
11184	11199	16 American Samoa	13 35 S, 172 30 W	-13.58	-172.33	-237	-3008
11200	11215	16 Samoa	1 25 N, 173 00 E	1.42	173	25	3019
11216	11231	16 Kiribati	21 30 S, 165 30 E	-21.5	165.5	-375	2889
11232	11247	16 New Caledonia	8 00 S, 178 00 E	-8	178	-140	3107
11248	11263	16 Tuvalu	15 00 S, 140 00 W	-15	-140	-262	-2443
11264	11279	16 French Polynesia	9 00 S, 172 00 W	-9	-172	-157	-3002
11280	11295	16 Tokelau	9 00 N, 168 00 E	9	168	157	2932
11296	11311	16 Marshall Is	22 10 N, 113 33 E	22.17	113.55	167	1982
11312	11327	16 Kuwait	28 30 N, 45 45 E	28.5	45.75	515	798
11328	11343	16 Yemen	15 00 N, 48 00 E	15	48	838	838
11344	11359	16 Oman	21 00 N, 57 00 E	21	57	262	965
11360	11375	16 Yemen	15 00 N, 48 00 E	15	48	262	838
11376	11391	16 United Arab Emirates	24 00 N, 54 00 E	24	54	419	942
11392	11554	163 Russia	60 00 N, 100 00 E	60	100	1041	1745
11555		1 Uzbekistan	41 00 N, 64 00 E	41	64	716	1117
11556		44 Russia	60 00 N, 100 00 E	60	100	1047	1745
11600		1 Uzbekistan	41 00 N, 64 00 E	41	64	716	1117
11601		687 Russia	60 00 N, 100 00 E	60	100	1047	1745
12288	12287	1023 Japan	35 00 N, 139 00 E	35	139	628	2409
13312	13311	128 Vietnam	16 00 N, 103 00 E	16	103	279	1850
13440	13471	32 Lao People's Dem. Rep	18 00 N, 105 00 E	18	105	314	1833
13472	13503	32 Bangladesh	24 00 N, 90 00 E	24	90	419	1571
13472	13503	32 Taiwan	23 30 N, 121 00 E	23.5	121	410	2112
13504	13507	32 Maldives	3 15 N, 73 00 E	3.25	73	57	1274

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FIGURE 31D

13638	14335	765 China	35	105	611	1833	3391
14336	14463	128 Turkey	39	35	661	611	1056
14464	14847	384 India	30	77	1344	1344	1557
14848	14975	128 Pakistan	20	70	524	890	890
14976	15103	128 Afghanistan	30	30	134	834	834
15104	15231	128 Sri Lanka	33	85	576	222	222
15232	15359	128 Burma	7	81	1414	834	834
15360	15391	128 Lebanon	22	98	1710	111	111
15392	15423	32 Jordan	33.5	35.63	625	250	250
15424	15455	32 Syria	31	35	841	334	334
15456	15487	32 Iraq	35	38	663	556	556
15488	15519	32 Saudi Arabia	33	41	611	1112	1112
15520	15551	32 Morocco	25	45	576	1668	1668
15552	15583	32 Nepal	46	105	803	445	445
15584	15615	32 Bulgaria	28	84	469	334	334
15616	15643	128 Iran	43	25	436	1056	1056
15644	15671	128 Hungary	32	53	790	361	361
15690	15699	94 Unassigned	47	20	820	556	556
16000	16127	128 Romania	46	25	803	1724	1724
16128	16255	128 Czech Rep	49.75	15.5	868	5004	5004
16256	16383	128 Unassigned	60	-95	1047	500	500
16384	16431	2048 Canada	41	75	716	500	500
16432	21549	3118 Unassigned	51	9	890	1501	1501
21550	21566	17 Kyrgyz Rep	62	10	1082	278	278
21567	22015	449 Unassigned	56	10	977	590	590
22016	22271	256 Germany	54	2	942	417	417
22272	22399	128 Norway	47.33	13.33	826	278	278
22400	22527	128 Unassigned	42.83	12.83	820	723	723
22528	22543	16 Denmark	44	21	748	528	528
22544	22655	112 Unassigned	40	-4	688	723	723
22656	22911	256 United Kingdom	46	2	803	723	723
22912	23039	128 Austria	47	8			
23040	23167	128 Switzerland	42.83	12.83			
23168	23423	256 Italy	44	21			
23424	23551	128 Serbia and Montenegro	40	-4			
23552	23679	128 Spain	46	2			
23680	23935	256 France					

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FIGURE 31E

23936	24063 0x5080	128 Belgium	50.83	4	887	70	222
24064	24191	128 Netherlands	52.5	5.75	916	100	222
24192	24319	128 Greece	39	22	681	384	1112
24320	24351	32 Portugal	39.5	-8	689	-140	56
24352	24393	32 Luxembourg	49.75	6.17	888	108	556
24394	24415	32 Unassigned	65	-18	1134	-314	1179
24416	24477	32 Iceland	23	-102	401	-1780	1179
24478	24575	128 Unassigned	23	-102	401	-1780	1179
24576	25075 0x6000	500 Mexico	35	105	611	1833	3391
25076	25099	24 Unassigned	-23	-58	401	-1012	6561
25100	25124	25 Mexico	4	-56	70	-977	222
25125	25699	475 Unassigned	-33	-56	576	576	278
25600	26111 0x6400 0x65FF	512 China	35	33	611	-1134	167
31101	31135	32 Paraguay	-17	-65	-297	-1030	778
31136	31167	32 Sunnam	5	-59	87	-1353	417
31168	31189	32 Uruguay	-2	-77.5	-35	-925	334
31201	31231	32 Cyprus	4	-63	70	-1075	389
31232	31263	32 Bolivia	16.25	-61.58	284	-1065	70
31264	31295	32 Guyana	14.87	-61	256	882	30
31296	31327	32 Ecuador	26	50.55	454	882	60
31328	31359	32 Guinea	26	50.55	454	882	56
31360	31375	16 Guadeloupe	25.5	61.25	445	882	89
31376	31391	16 Martinique	36.13	-5.35	631	-93	2
31392	31407	16 Netherlands Antilles	41	-71	716	349	195
31408	31423	16 Bahrain	8	-66	140	-1152	723
31424	31439	16 Qatar	4	-72	70	-1257	667
31440	31455	16 Gibraltar	-30	-71	-524	-1239	2057
31456	31471	16 Albania	-30	-71	-524	-1239	2057
31472	31487	16 Unassigned	-30	-71	-524	-1239	2057
31488	31615 0x7800	128 Venezuela	8	-66	140	-1152	723
31616	31743	128 Colombia	4	-72	70	-1257	667
31744	31754 0x7C00	11 Chile	-30	-71	-524	-1239	2057
31755	31808	64 Unassigned	-30	-71	-524	-1239	2057
31809	31820	12 Chile	-30	-71	-524	-1239	2057
31821	31840	20 Unassigned	-30	-71	-524	-1239	2057
31841	31854	14 Chile	-30	-71	-524	-1239	2057
31855	31871	17 Unassigned	-30	-71	-524	-1239	2057

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FIGURE 31F

2224	1835	612	945	278	195	139	222	139	222	128	500
------	------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

-950
-1117
-1396
-1326
-1484
-1466
-1396
-1264
-1549

-1575
-1552
-1510

-175
-593
375
-175
227
175
157
332
301
274
241
262

-10	-55
-34	-64
21.5	-80
-10	-76
13	-85
10	-84
9	-80
19	-72.42
17.25	-88.75
15.5	-90.25
13.83	-88.92
1.7	0.5

ES: America	10.00 N, 55.00 W
ES: Africa	34.00 S, 64.00 W
ES: Caribbean	21.30 N, 20.00 W
ES: Asia	10.03 S, 76.00 W
ES: America	13.00 N, 85.00 W
ES: Africa	10.00 N, 84.00 W
ES: Caribbean	19.00 N, 60.00 W
ES: Asia	17.45 N, 72.25 W
ES: America	15.30 N, 90.15 W
ES: Africa	13.50 N, 88.55 W

256 Brazil
128 Argentina
128 Cuba
128 Peru
32 Nicaragua
32 Costa Rica
32 Panama
32 Haiti
10 Belize
22 Unassigned
32 Guatemala
32 El Salvador

0x7EFF

32127 0x7C80
32255
32383
32511
32543 0x7F00
32575
32607
32639
32649
32671
32703
32735

31872
32128
32256
32384
32512
32544
32576
32608
32640
32650
32672
32704

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FIGURE 31G

五

32735

police

```
void seedpos_selflearn_update_seed (SIDserving, gpsFix, gpsFixTime)
{
    If SIDserving is not found in SID Self Learning Database then
        Get a new slot in the database.
        Assume the default RadiusSL is at 400km (this number is
        configurable by seedpos_default_sid_uncertainty).
    Endif

    If SIDserving is found in the SID Country Table Database then
        RadiusCountry =
        SID_Country_Table_Database_GetRadius(SIDserving)

        CentroidCountry =
        SID_Country_Table_Database_GetCentroid(SIDserving)

        DeltaRadius = (gpsFix, CentroidCountry)
    Else
        // Found a new SID assignment that is not assigned to any country.
        RadiusCountry = RadiusSL
        DeltaRadius = 0;
    Endif

    If (DeltaRadius > RadiusCountry) then
        Set "mask" for "SID in conflict" in Self Learning Database for
        SIDserving
    Else
        Clear "mask" for "SID no conflict" in Self Learning Database for
        SIDserving
    Endif

    Store the gpsFix and gpsFixTime in the Self Learning Database for
    SIDserving
}
```

FIGURE 32A

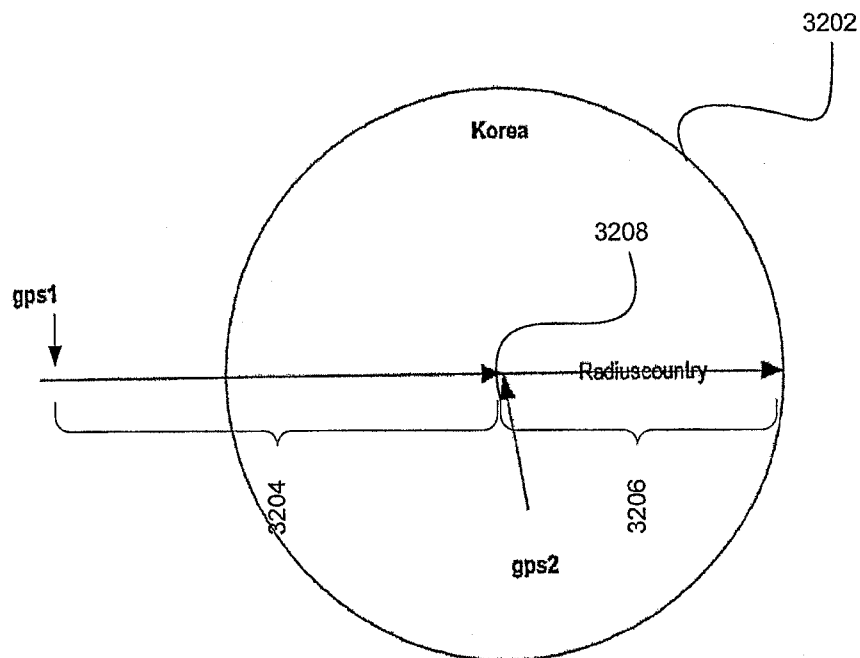


FIGURE 32B

```
If (TimeDelta < 2 hrs)
  seedpos_MsSpeedMax = seedpos_MsSpeedMax_car
Else
  seedpos_MsSpeedMax = seedpos_MsSpeedMax_air;

SeedUncertainty = (current time - time tagged to GPS fix) * seedpos_MsSpeedMax +
                  GPS Fix Position Uncertainty
SeedPosition = Latest GPS Fix
```

FIGURE 33

SeedPosition = Base Station Lat/Lon

TimeDelta = current time - time tagged to BSlatlon

If (TimeDelta < 2 hrs)

```
seedpos_MsSpeedMax = seedpos_MsSpeedMax_Car
```

Else

```
seedpos_MsSpeedMax = seedpos_MsSpeedMax_Air;
```

$$\text{UncertaintyBSlatlon} = \text{TimeDelta} * \text{seedpos_MsSpeedMax} + \text{DMAR associated with base station lat/lon}$$

```
SeedUncertainty = min(Whole Earth Uncertainty, UncertaintyBSlatlon )
```

FIGURE 34

```
If (TimeDelta < 2 hrs)
  seedpos_MsSpeedMax = seedpos_MsSpeedMax_Car
Else
  seedpos_MsSpeedMax = seedpos_MsSpeedMax_Air

If MS is in OOS
  Note: SIDlatest is used to find a match in the SID Self Learning Database
  If SIDlatest is not found in the SID Self Learning Database then
    Skip this option for seed generation
  End

  SeedPosition = Lat/Lon from Self Learning Database
  TimeDelta = current time - time tagged to SIDselflearn
  SeedUncertainty = Min(Whole Earth Uncertainty,
    seedpos_MsSpeedMax * TimeDelta + seedpos_default_sid_uncertainty)

Else if MS is in service
  Note: SIDserving is used to find a match in the SID Self Learning Database
  If SIDserving is not found in the SID Self Learning Database then
    Skip this option for seed generation
  End

  SeedPosition = Lat/Lon from Self Learning Database
  SeedUncertainty = seedpos_default_sid_uncertainty

End
```

FIGURE 35

```
If (TimeDelta < 2 hrs)
    seedpos_MsSpeedMax = seedpos_MsSpeedMax_Car
Else
    seedpos_MsSpeedMax = seedpos_MsSpeedMax_Air

If MS is in OOS
    If SIDlatest is not defined then return with no table lookup.

    TimeDelta = current time - time tagged to SIDlatest

    If SIDlatest is in SID Self Learning Database and is in conflict then
        SeedUncertainty = Whole Earth
        SeedPosition = lat at 0, long at 0
    Else
        If SIDlatest is not in the country table then
            SeedUncertainty = Whole Earth
            SeedPosition = lat at 0, long at 0
        Endif

        RadiusCountry = SID_Country_Table_Database_GetRadius( SIDlatest )
        SeedUncertainty = min(TimeDelta * seedpos_MsSpeedMax + RadiusCountry,
                               Whole Earth Uncertainty)

        SeedPosition = SID_Country_Table_Database_GetCentroid(SIDlatest)
    End
```

FIGURE 36A

36A

36B

```

Else if MS is in-service
    TimeDelta = curren time - time tagged to SIDserving

    //
    // If SIDlatest is in a different country than the SIDserving then we might have
    // the case for MS crosses SID boundaries between countries during a long
    // traffic call. Age the SIDlatest country radius to current time using the
    // maximum MS speed. Compare this radius with SIDserving country radius and
    // pick the smaller one.
    //
    // Note: if the SID is found to reside in unassigned country SID ranges then
    // the default country uncertainty of 400km (configurable via
    // seedpos_default_country_uncertainty) will be used.
    //

    CountryServing = SID_Country_Table_Database_GetCountry( SIDserving )
    Countrylatest = SID_Country_Table_Database_GetCountry( SIDlatest )

    If CountryServing != Countrylatest

        RadiusCountryServing = SID_Country_Table_Database_GetRadius( SIDserving )
        RadiusCountryLatest = SID_Country_Table_Database_GetRadius( SIDlatest )

        SeedUncertainty = min( min( TimeDelta * seedpos_MsSpeedMax + RadiusCountryLatest,
                                   Whole Earth Uncertainty ) , RadiusCountryServing )

        If SIDlatest country is picked for SeedUncertainty then
            SeedPosition = SID_Country_Table_Database_GetCentroid( SIDlatest )
        Else
            SeedPosition = SID_Country_Table_Database_GetCentroid( SIDserving )
        End

    Else /* Here if CountryServing == Countrylatest */

        If SIDserving is in SID Self Learning Database and is in conflict then
            SeedUncertainty = Whole Earth Uncertainty

            SeedPosition = lat at 0, long at 0
        Else
            RadiusCountry = SID_Country_Table_Database_GetRadius( SIDserving )
            SeedUncertainty = min( TimeDelta * seedpos_MsSpeedMax + RadiusCountry,
                                   Whole Earth Uncertainty )

            SeedPosition = SID_Country_Table_Database_GetCentroid( SIDserving )
        End

    End /* CountryServing vs Countrylatest */
End /* in service or OOS */

```

36A

36B

FIGURE 36B