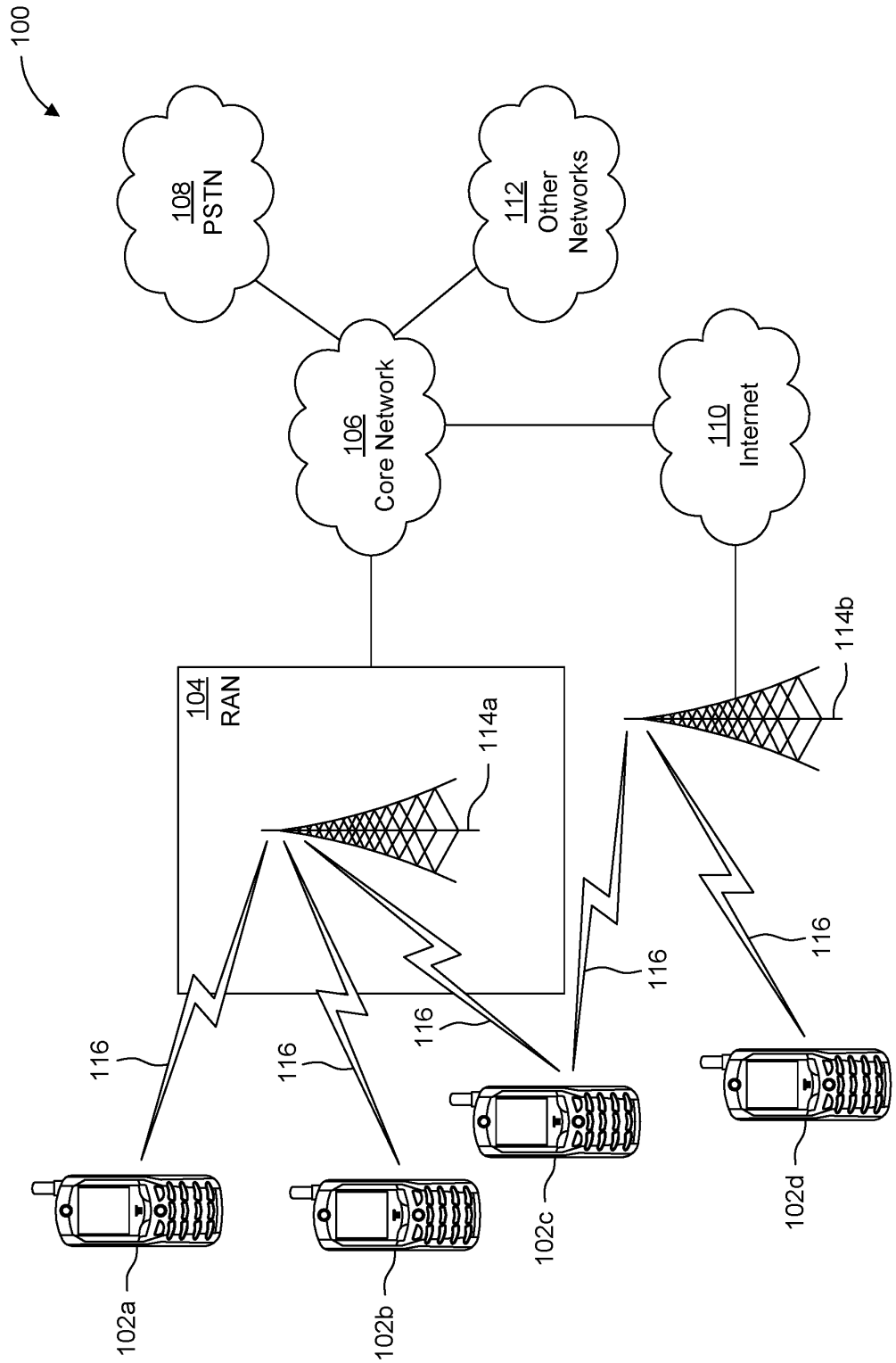
100
108 PSTN
112 Other Networks
106 Core Network
110 Internet
104 RAN
114a
114b
116
116
116
116
116
102a
102b
102c
102d

FIG. 1A

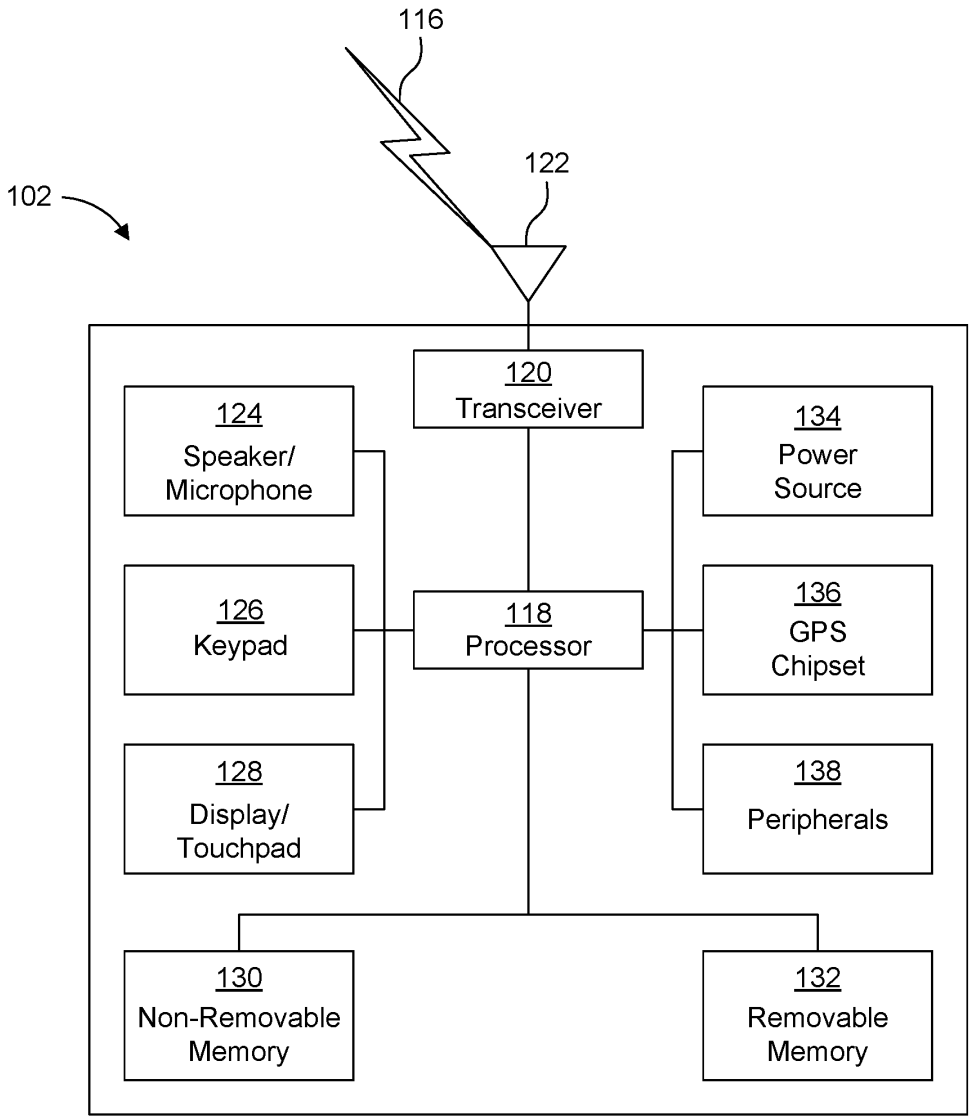
116
122
102
120
Transceiver
124
Speaker/
Microphone
134
Power
Source
126
Keypad
118
Processor
136
GPS
Chipset
128
Display/
Touchpad
138
Peripherals
130
Non-Removable
Memory
132
Removable
Memory

FIG. 1B

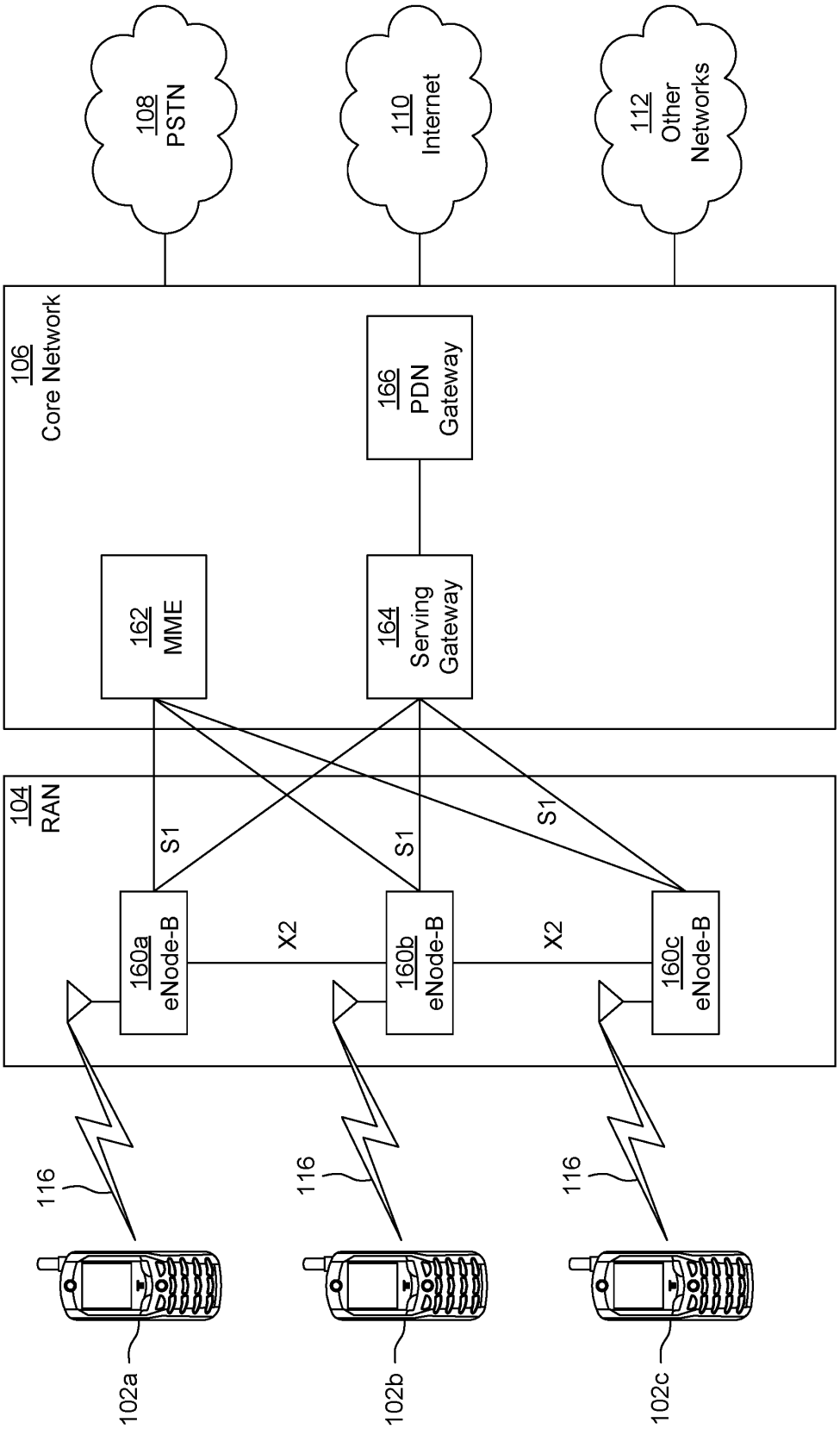
108 PSTN
110 Internet
112 Other Networks
106 Core Network
166 PDN Gateway
162 MME
164 Serving Gateway
104 RAN
S1
S1
S1
160a eNode-B
160b eNode-B
160c eNode-B
X2
X2
116
116
116
102a
102b
102c

FIG. 1C

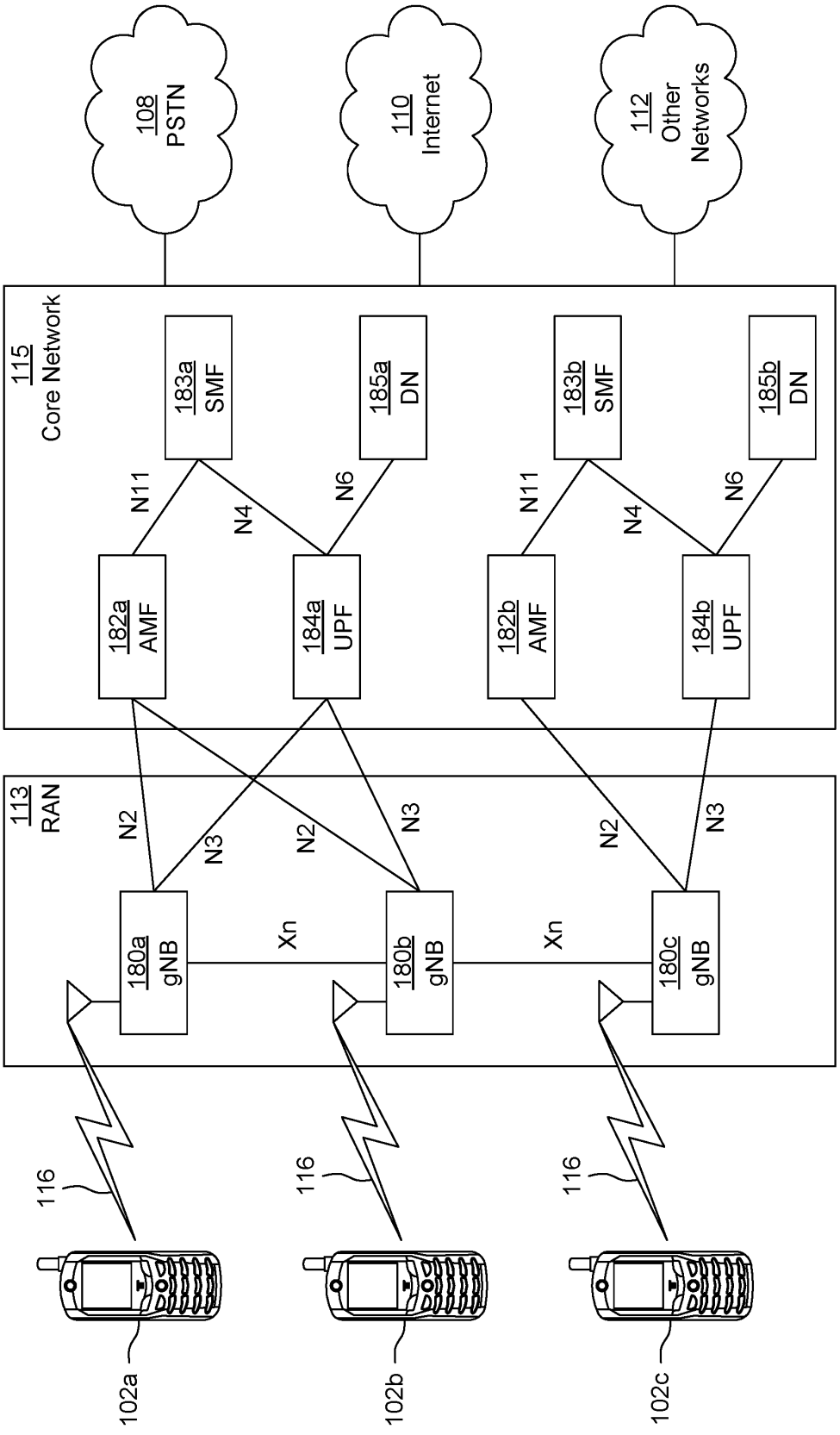
108
PSTN
110
Internet
112
Other
Networks
115
Core Network
183a
SMF
185a
DN
183b
SMF
185b
DN
N11
N4
N6
N11
N4
N6
182a
AMF
184a
UPF
182b
AMF
184b
UPF
113
RAN
N2
N3
N2
N3
N2
N3
180a
gNB
Xn
180b
gNB
Xn
180c
gNB
116
116
116
102a
102b
102c

FIG. 1D

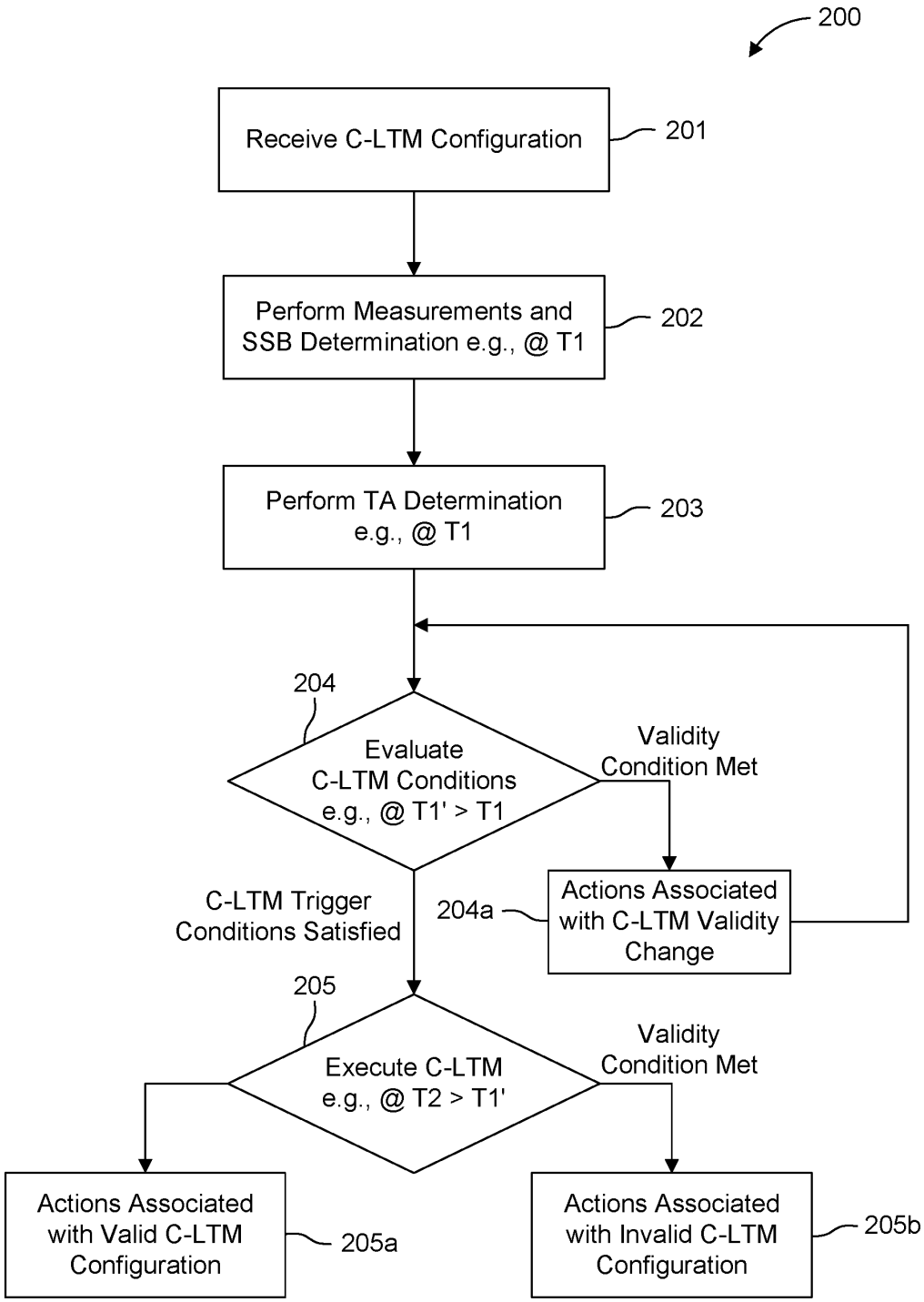
200
Receive C-LTM Configuration
201
Perform Measurements and SSB Determination e.g., @ T1
202
Perform TA Determination e.g., @ T1
203
204
Evaluate C-LTM Conditions e.g., @ T1' > T1
Validity Condition Met
C-LTM Trigger Conditions Satisfied
204a
Actions Associated with C-LTM Validity Change
205
Execute C-LTM e.g., @ T2 > T1'
Validity Condition Met
Actions Associated with Valid C-LTM Configuration
205a
Actions Associated with Invalid C-LTM Configuration
205b

FIG. 2

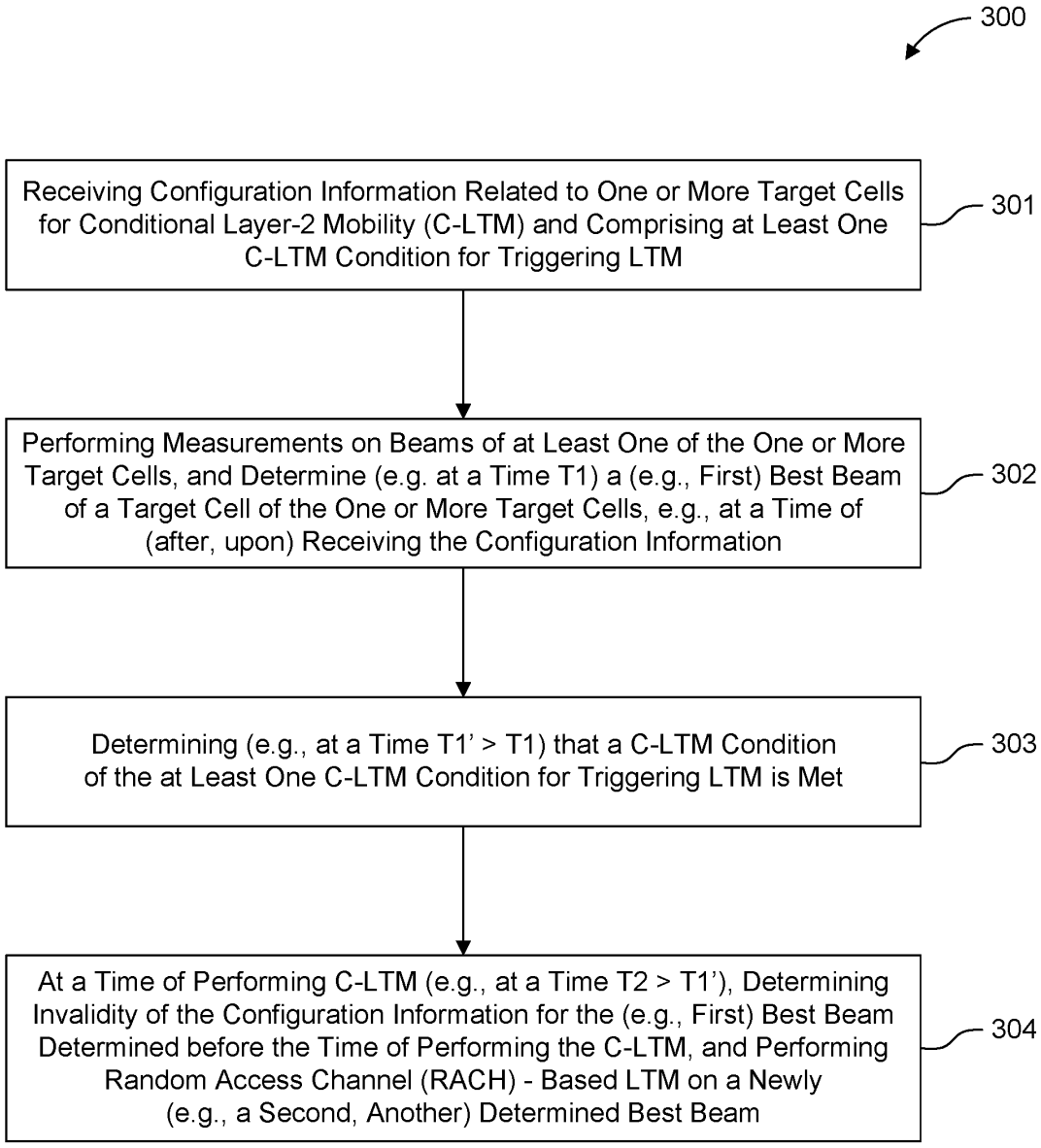
300
Receiving Configuration Information Related to One or More Target Cells for Conditional Layer-2 Mobility (C-LTM) and Comprising at Least One C-LTM Condition for Triggering LTM
301
Performing Measurements on Beams of at Least One of the One or More Target Cells, and Determine (e.g. at a Time T1) a (e.g., First) Best Beam of a Target Cell of the One or More Target Cells, e.g., at a Time of (after, upon) Receiving the Configuration Information
302
Determining (e.g., at a Time T1' > T1) that a C-LTM Condition of the at Least One C-LTM Condition for Triggering LTM is Met
303
At a Time of Performing C-LTM (e.g., at a Time T2 > T1'), Determining Invalidity of the Configuration Information for the (e.g., First) Best Beam Determined before the Time of Performing the C-LTM, and Performing Random Access Channel (RACH) - Based LTM on a Newly (e.g., a Second, Another) Determined Best Beam
304

FIG. 3

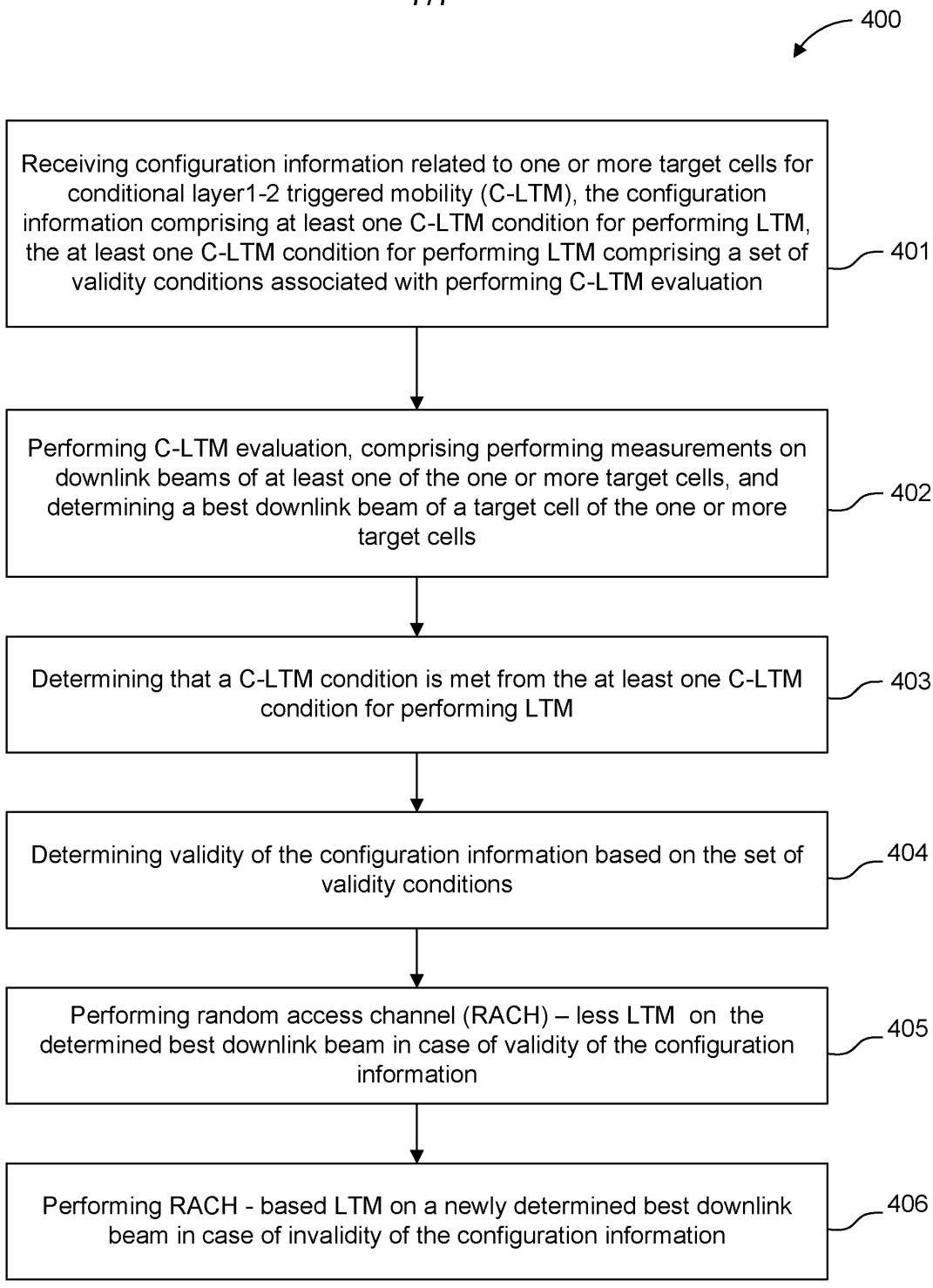
400
Receiving configuration information related to one or more target cells for conditional layer1-2 triggered mobility (C-LTM), the configuration information comprising at least one C-LTM condition for performing LTM, the at least one C-LTM condition for performing LTM comprising a set of validity conditions associated with performing C-LTM evaluation
401
Performing C-LTM evaluation, comprising performing measurements on downlink beams of at least one of the one or more target cells, and determining a best downlink beam of a target cell of the one or more target cells
402
Determining that a C-LTM condition is met from the at least one C-LTM condition for performing LTM
403
Determining validity of the configuration information based on the set of validity conditions
404
Performing random access channel (RACH) – less LTM on the determined best downlink beam in case of validity of the configuration information
405
Performing RACH - based LTM on a newly determined best downlink beam in case of invalidity of the configuration information
406

FIG. 4