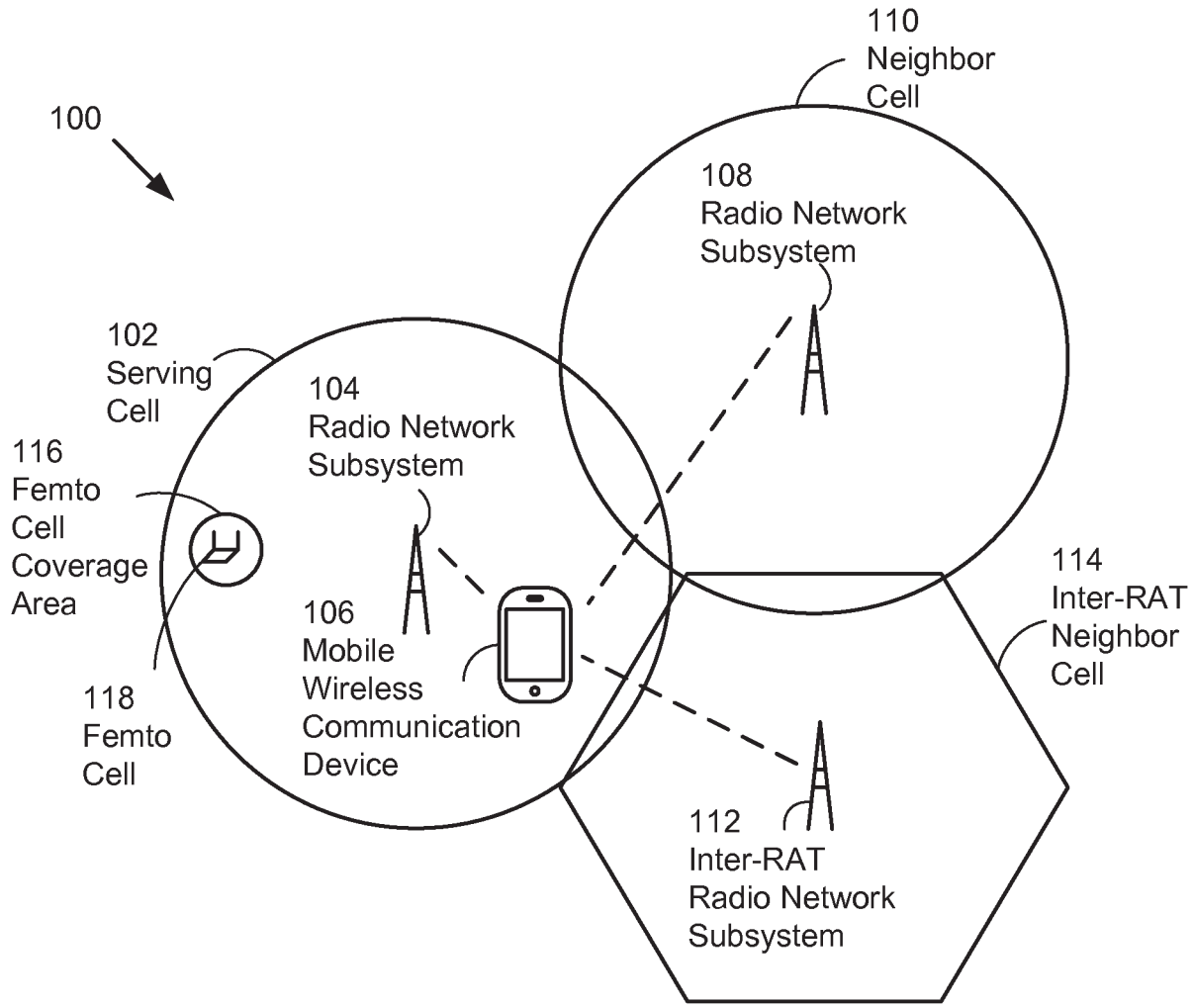

100
110
Neighbor
Cell
108
Radio Network
Subsystem
102
Serving
Cell
104
Radio Network
Subsystem
116
Femto
Cell
Coverage
Area
106
Mobile
Wireless
Communication
Device
114
Inter-RAT
Neighbor
Cell
118
Femto
Cell
112
Inter-RAT
Radio Network
Subsystem

Figure 1

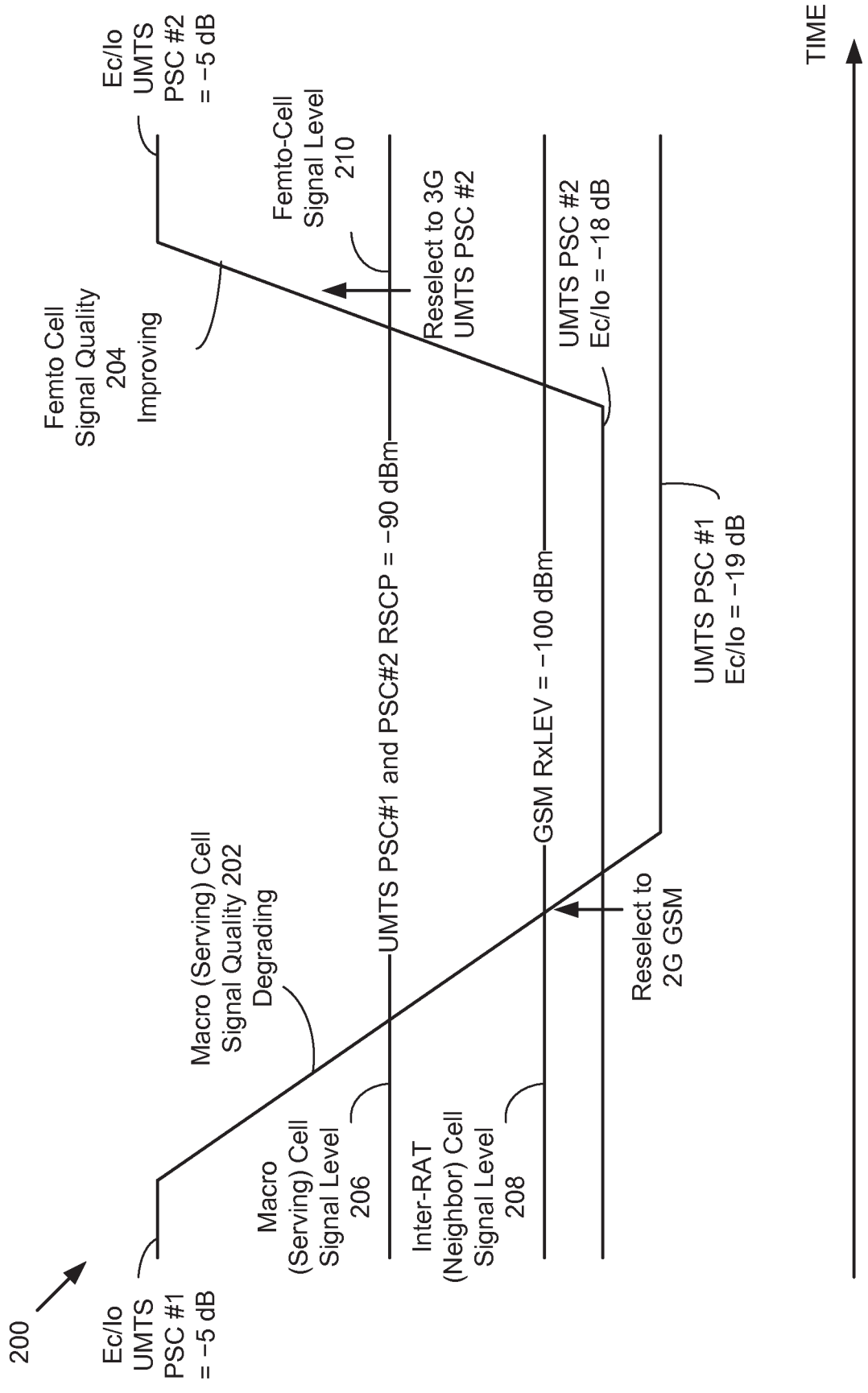

200
Ec/Io
UMTS
PSC #1
= −5 dB
Macro
(Serving) Cell
Signal Level
206
Inter-RAT
(Neighbor) Cell
Signal Level
208
Macro (Serving) Cell
Signal Quality 202
Degrading
UMTS PSC#1 and PSC#2 RSCP = −90 dBm
GSM RxLEV = −100 dBm
Reselect to
2G GSM
UMTS PSC #1
Ec/Io = −19 dB
Femto Cell
Signal Quality
204
Improving
Ec/Io
UMTS
PSC #2
= −5 dB
Femto-Cell
Signal Level
210
Reselect to 3G
UMTS PSC #2
UMTS PSC #2
Ec/Io = −18 dB
TIME

Figure 2

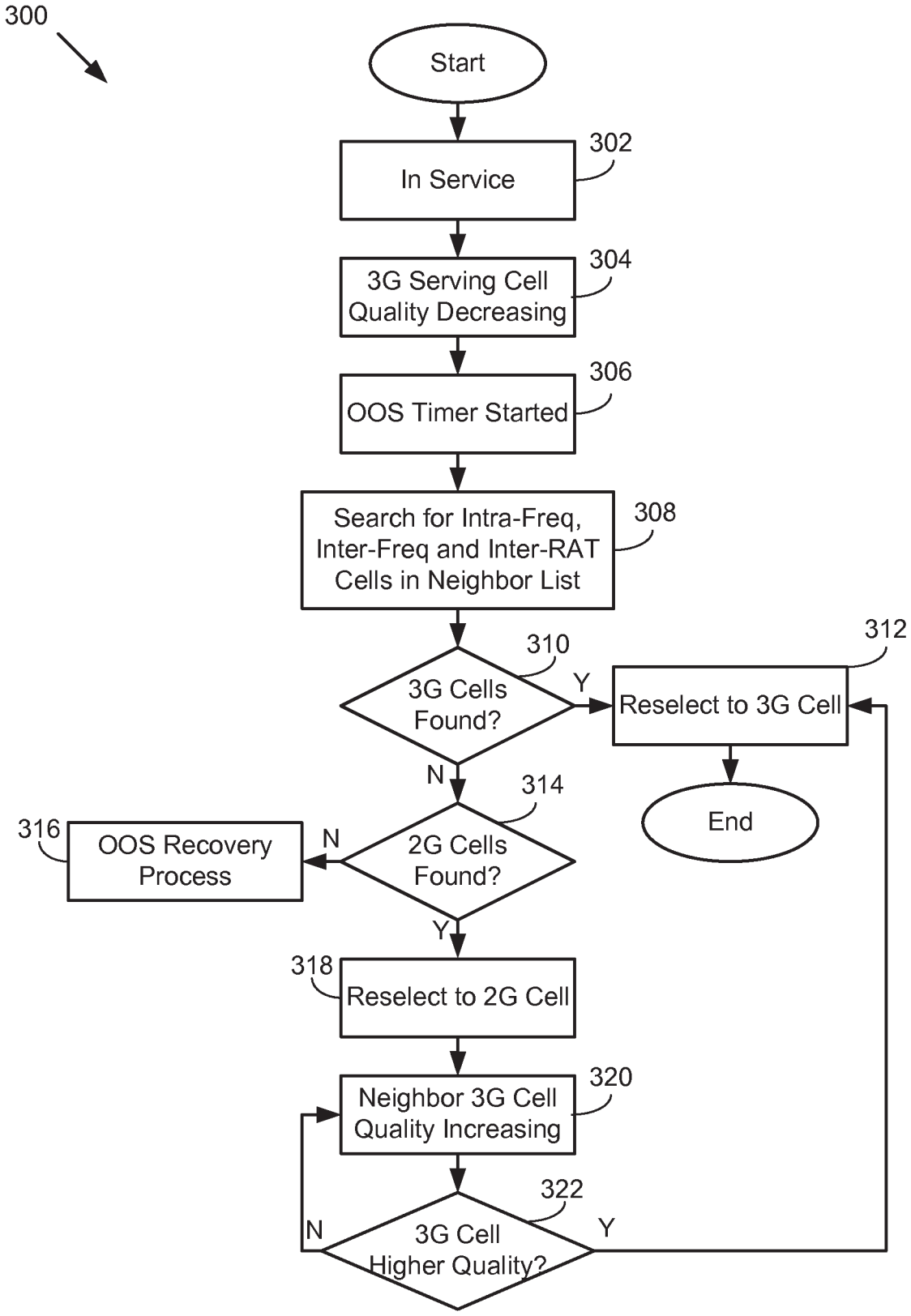


Figure 3 (Prior Art)

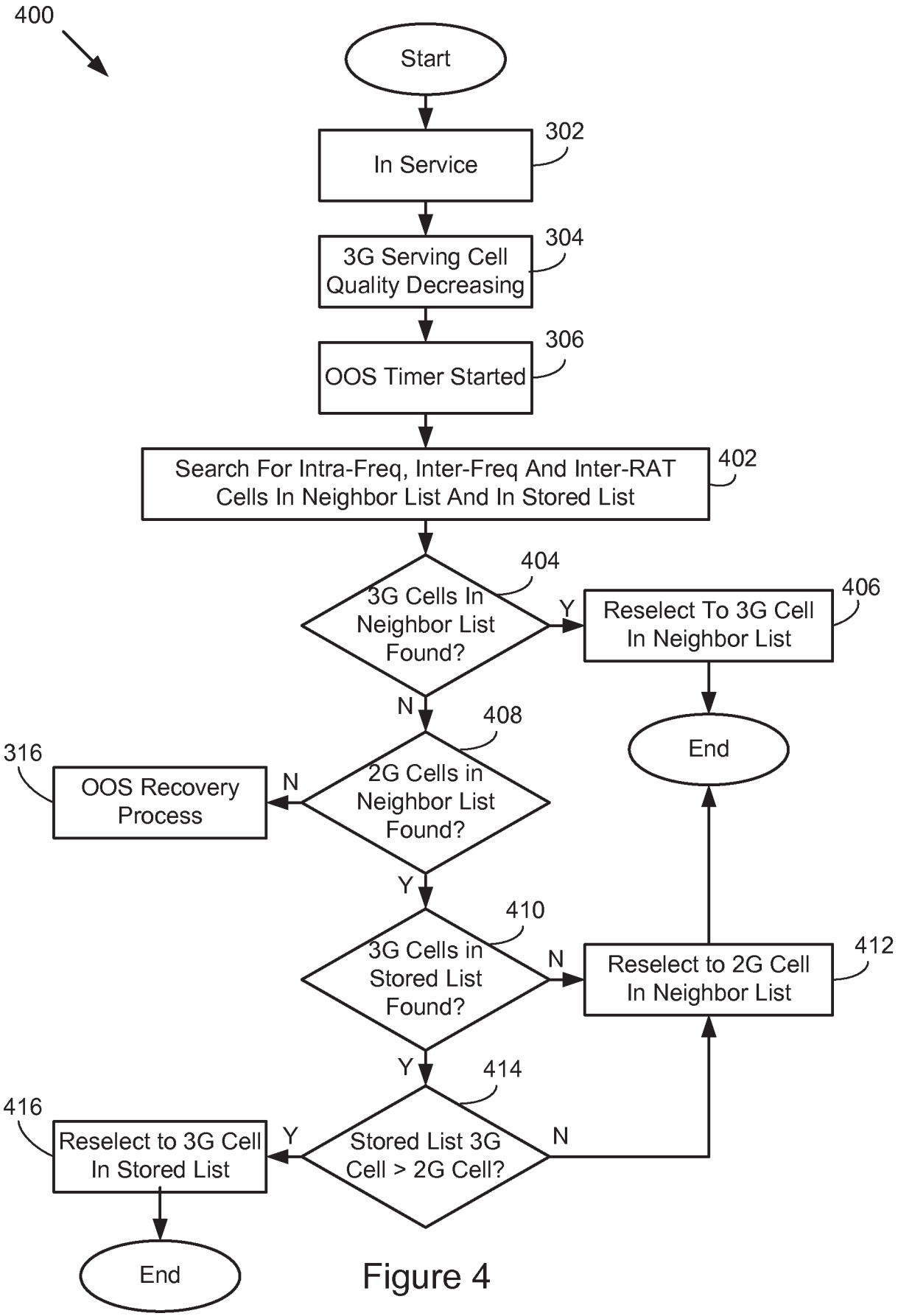

400
Start
In Service
302
3G Serving Cell Quality Decreasing
304
OOS Timer Started
306
Search For Intra-Freq, Inter-Freq And Inter-RAT Cells In Neighbor List And In Stored List
402
3G Cells In Neighbor List Found?
404
Y
Reselect To 3G Cell In Neighbor List
406
End
N
2G Cells in Neighbor List Found?
408
N
OOS Recovery Process
316
Y
3G Cells in Stored List Found?
410
N
Reselect to 2G Cell In Neighbor List
412
Y
Stored List 3G Cell > 2G Cell?
414
N
Y
Reselect to 3G Cell In Stored List
416
End

Figure 4

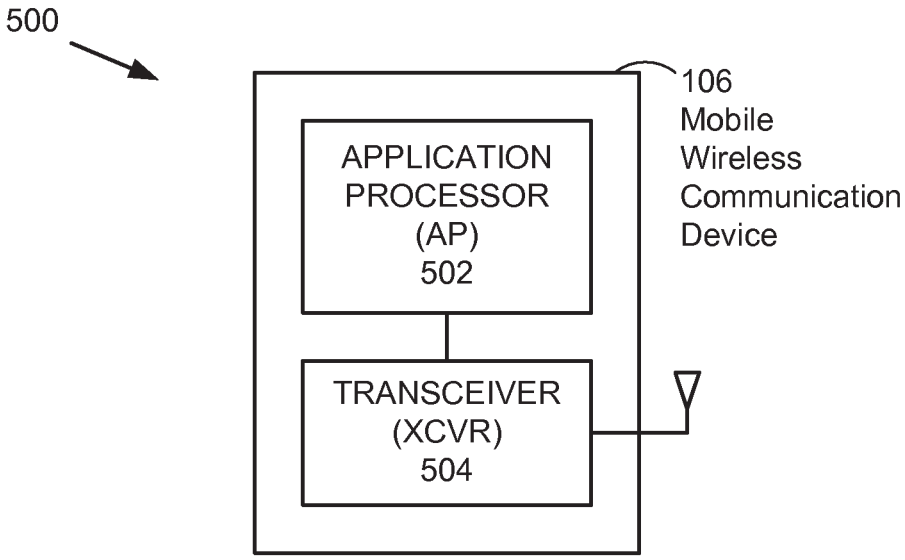

500
106
Mobile
Wireless
Communication
Device
APPLICATION
PROCESSOR
(AP)
502
TRANSCEIVER
(XCVR)
504

Figure 5

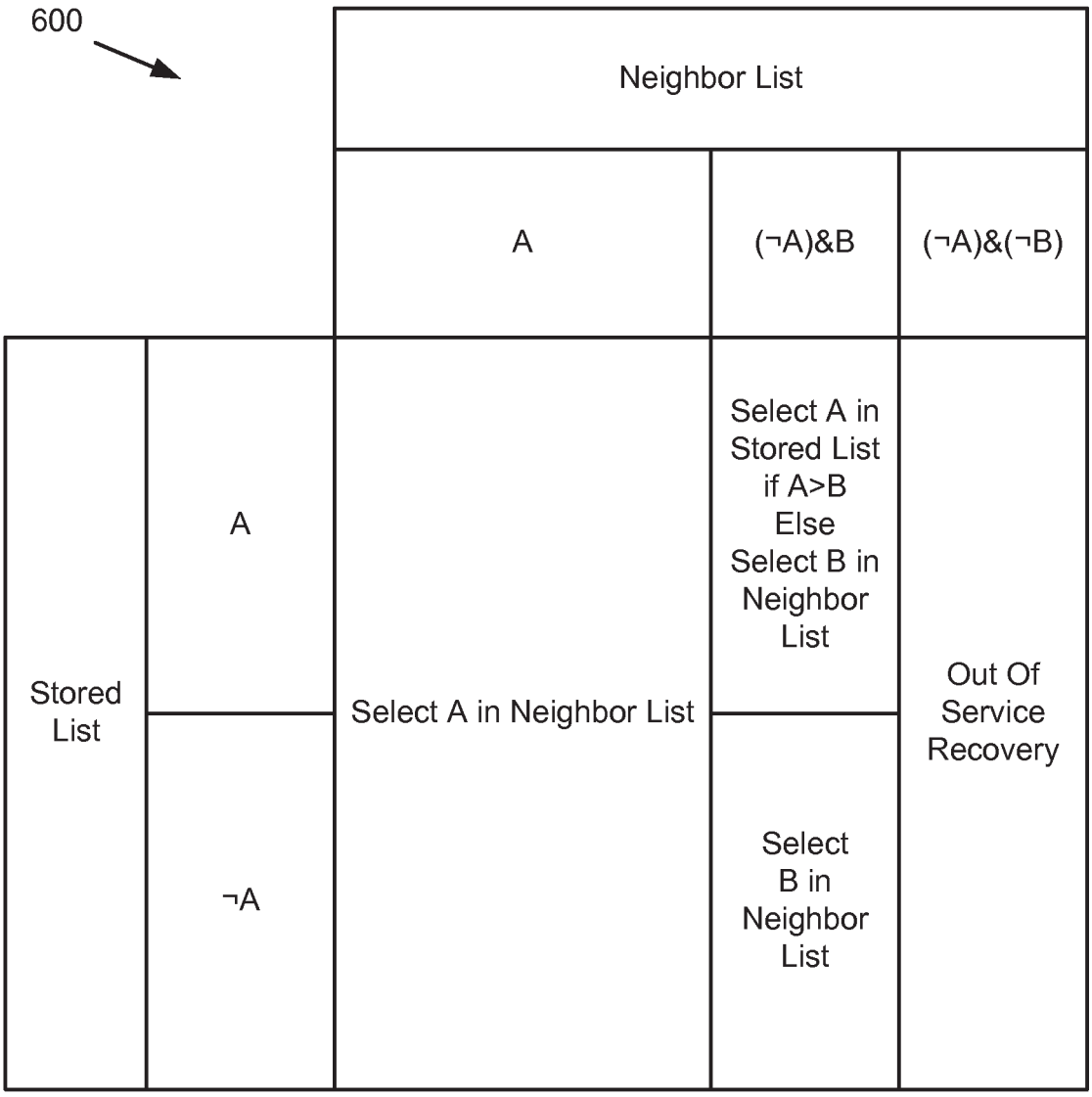

600
Neighbor List
A
(¬A)&B
(¬A)&(¬B)
Stored List
A
¬A
Select A in Neighbor List
Select A in Stored List if A>B Else Select B in Neighbor List
Select B in Neighbor List
Out Of Service Recovery

Figure 6