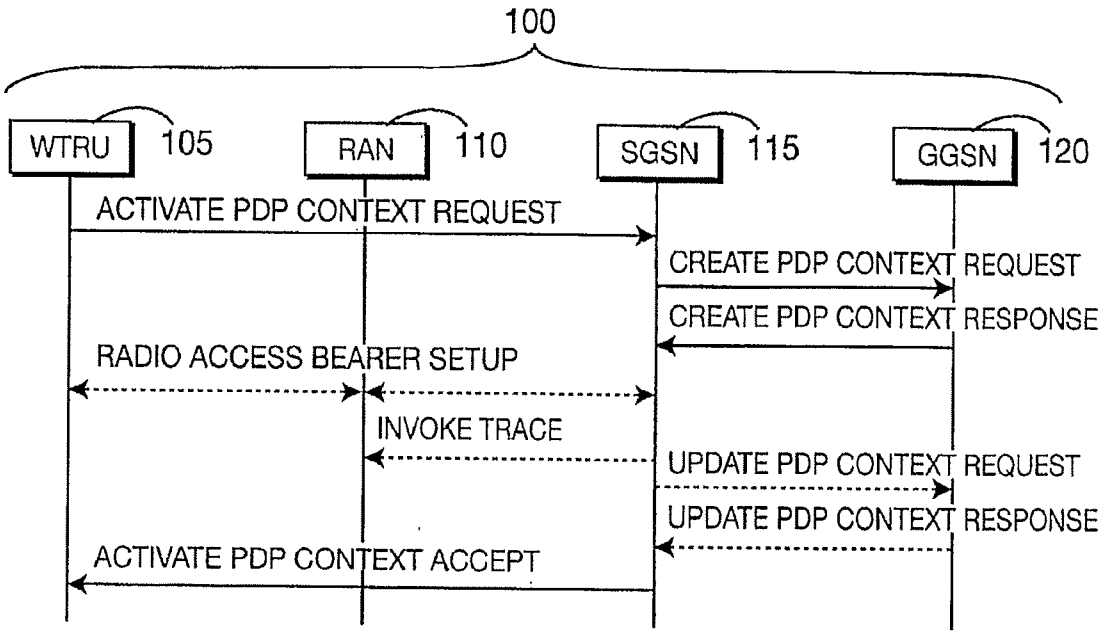

FIG. 1
PRIOR ART

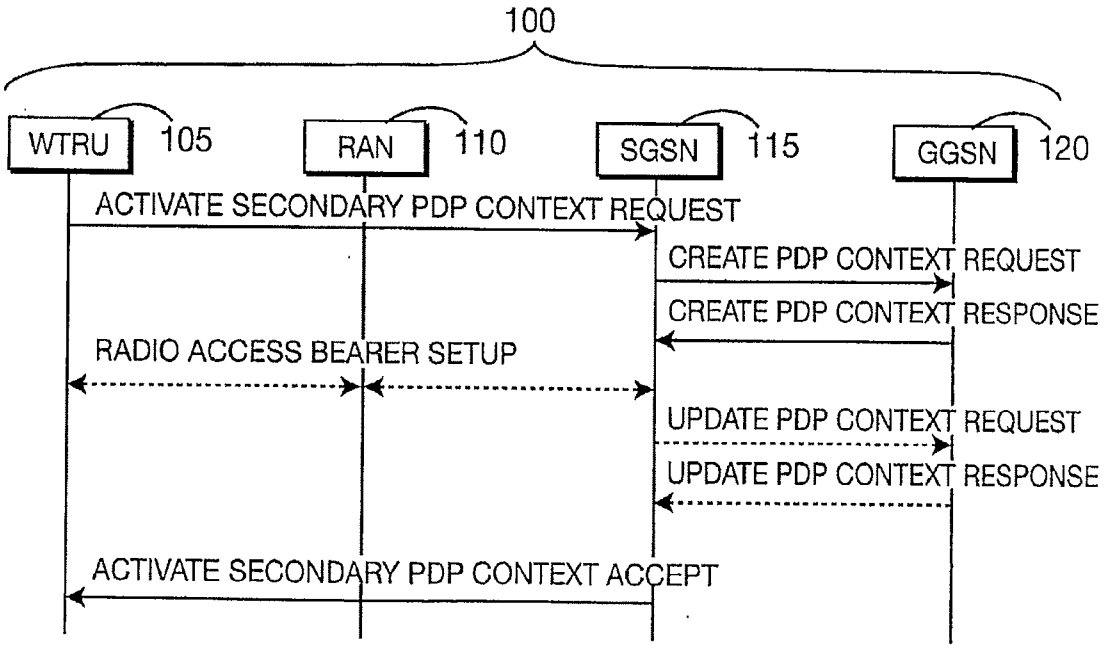

FIG. 2
PRIOR ART

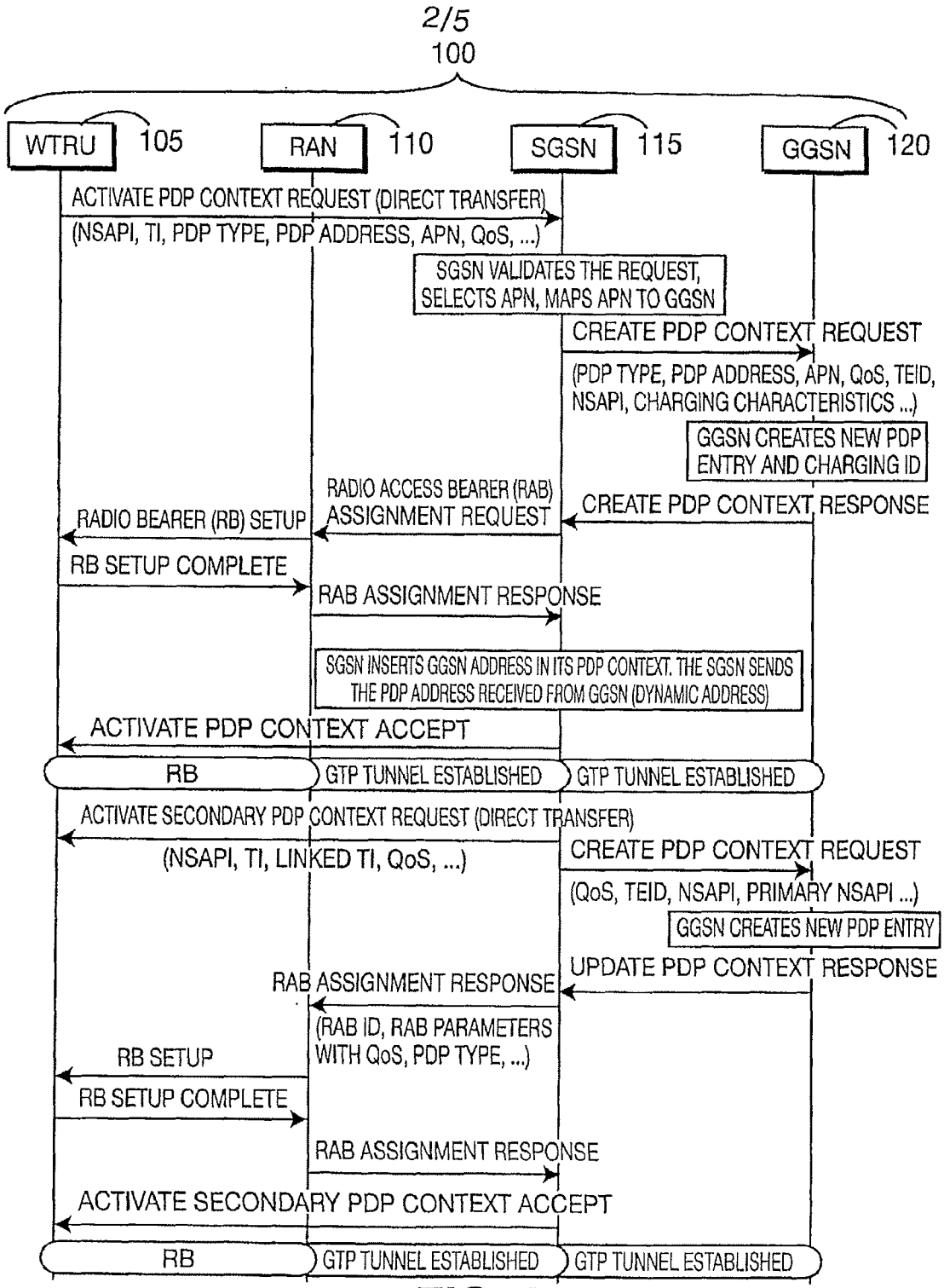

FIG. 3
PRIOR ART

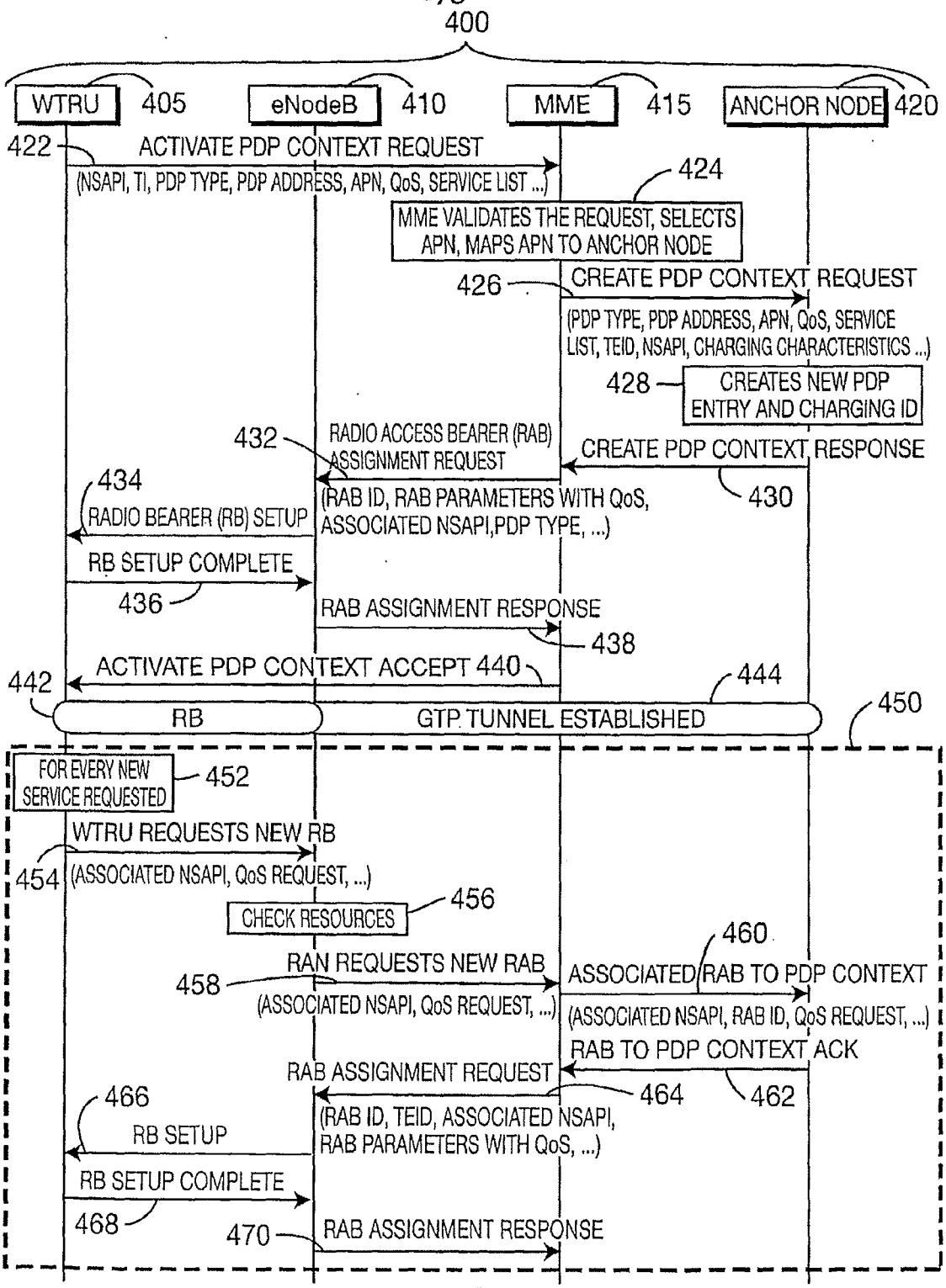
400
WTRU
405
eNodeB
410
MME
415
ANCHOR NODE
420
422
ACTIVATE PDP CONTEXT REQUEST
(NSAPI, TI, PDP TYPE, PDP ADDRESS, APN, QoS, SERVICE LIST ...)
424
MME VALIDATES THE REQUEST, SELECTS APN, MAPS APN TO ANCHOR NODE
426
CREATE PDP CONTEXT REQUEST
(PDP TYPE, PDP ADDRESS, APN, QoS, SERVICE LIST, TEID, NSAPI, CHARGING CHARACTERISTICS ...)
428
CREATES NEW PDP ENTRY AND CHARGING ID
432
RADIO ACCESS BEARER (RAB) ASSIGNMENT REQUEST
CREATE PDP CONTEXT RESPONSE
430
434
RADIO BEARER (RB) SETUP
(RAB ID, RAB PARAMETERS WITH QoS, ASSOCIATED NSAPI,PDP TYPE, ...)
RB SETUP COMPLETE
436
RAB ASSIGNMENT RESPONSE
438
ACTIVATE PDP CONTEXT ACCEPT 440
442
444
RB
GTP TUNNEL ESTABLISHED
450
FOR EVERY NEW SERVICE REQUESTED
452
WTRU REQUESTS NEW RB
454
(ASSOCIATED NSAPI, QoS REQUEST, ...)
CHECK RESOURCES
456
460
RAN REQUESTS NEW RAB
458
ASSOCIATED RAB TO PDP CONTEXT
(ASSOCIATED NSAPI, QoS REQUEST, ...)
(ASSOCIATED NSAPI, RAB ID, QoS REQUEST, ...)
RAB TO PDP CONTEXT ACK
RAB ASSIGNMENT REQUEST
464
462
466
(RAB ID, TEID, ASSOCIATED NSAPI, RAB PARAMETERS WITH QoS, ...)
RB SETUP
RB SETUP COMPLETE
468
470
RAB ASSIGNMENT RESPONSE

FIG. 4

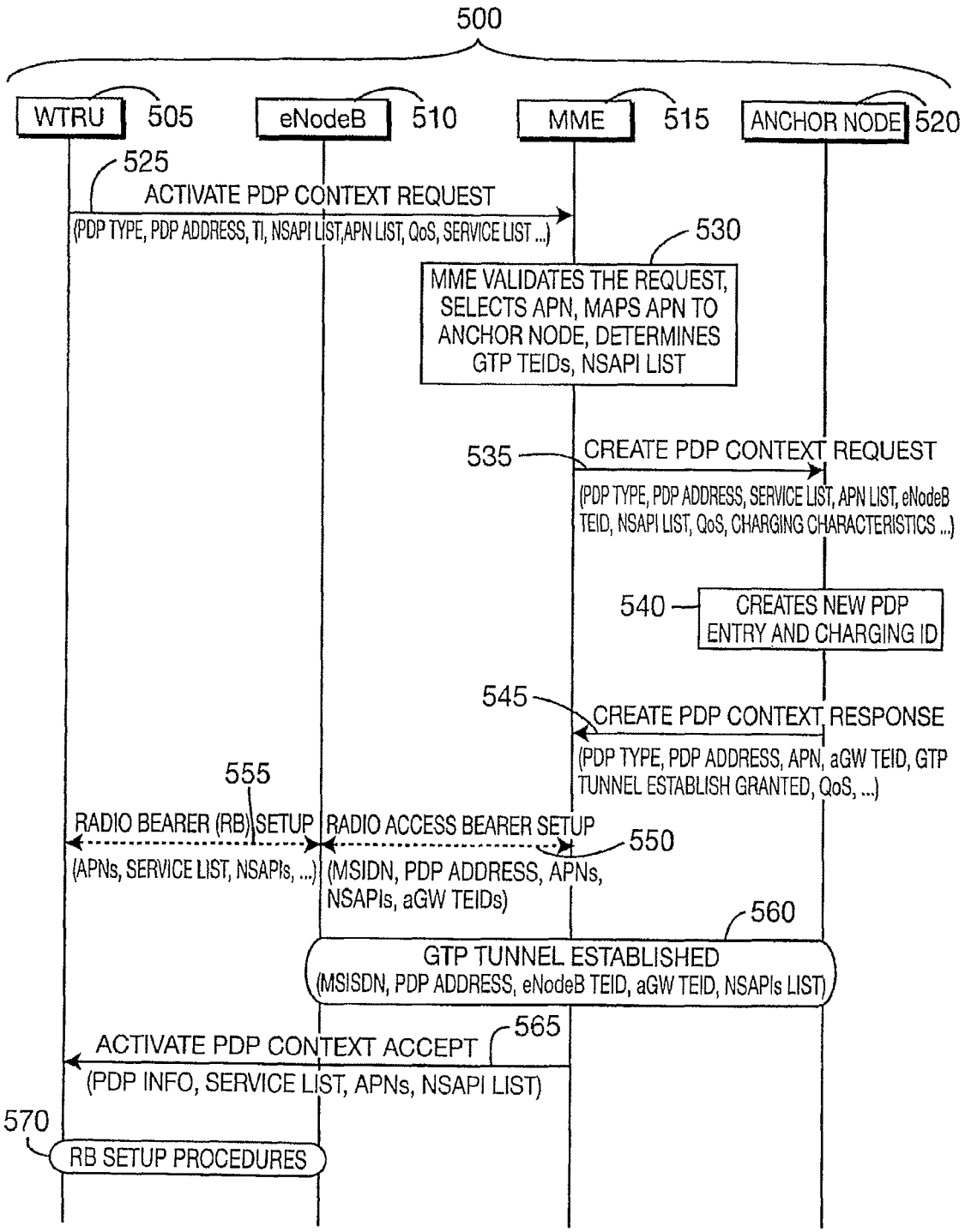
500
WTRU
505
eNodeB
510
MME
515
ANCHOR NODE
520
525
ACTIVATE PDP CONTEXT REQUEST
(PDP TYPE, PDP ADDRESS, TI, NSAPI LIST,APN LIST, QoS, SERVICE LIST ...)
530
MME VALIDATES THE REQUEST, SELECTS APN, MAPS APN TO ANCHOR NODE, DETERMINES GTP TEIDs, NSAPI LIST
535
CREATE PDP CONTEXT REQUEST
(PDP TYPE, PDP ADDRESS, SERVICE LIST, APN LIST, eNodeB TEID, NSAPI LIST, QoS, CHARGING CHARACTERISTICS ...)
540
CREATES NEW PDP ENTRY AND CHARGING ID
545
CREATE PDP CONTEXT RESPONSE
(PDP TYPE, PDP ADDRESS, APN, aGW TEID, GTP TUNNEL ESTABLISH GRANTED, QoS, ...)
555
RADIO BEARER (RB) SETUP
(APNs, SERVICE LIST, NSAPIs, ...)
RADIO ACCESS BEARER SETUP
(MSIDN, PDP ADDRESS, APNs, NSAPIs, aGW TEIDs)
550
560
GTP TUNNEL ESTABLISHED
(MSISDN, PDP ADDRESS, eNodeB TEID, aGW TEID, NSAPIs LIST)
565
ACTIVATE PDP CONTEXT ACCEPT
(PDP INFO, SERVICE LIST, APNs, NSAPI LIST)
570
RB SETUP PROCEDURES

FIG. 5

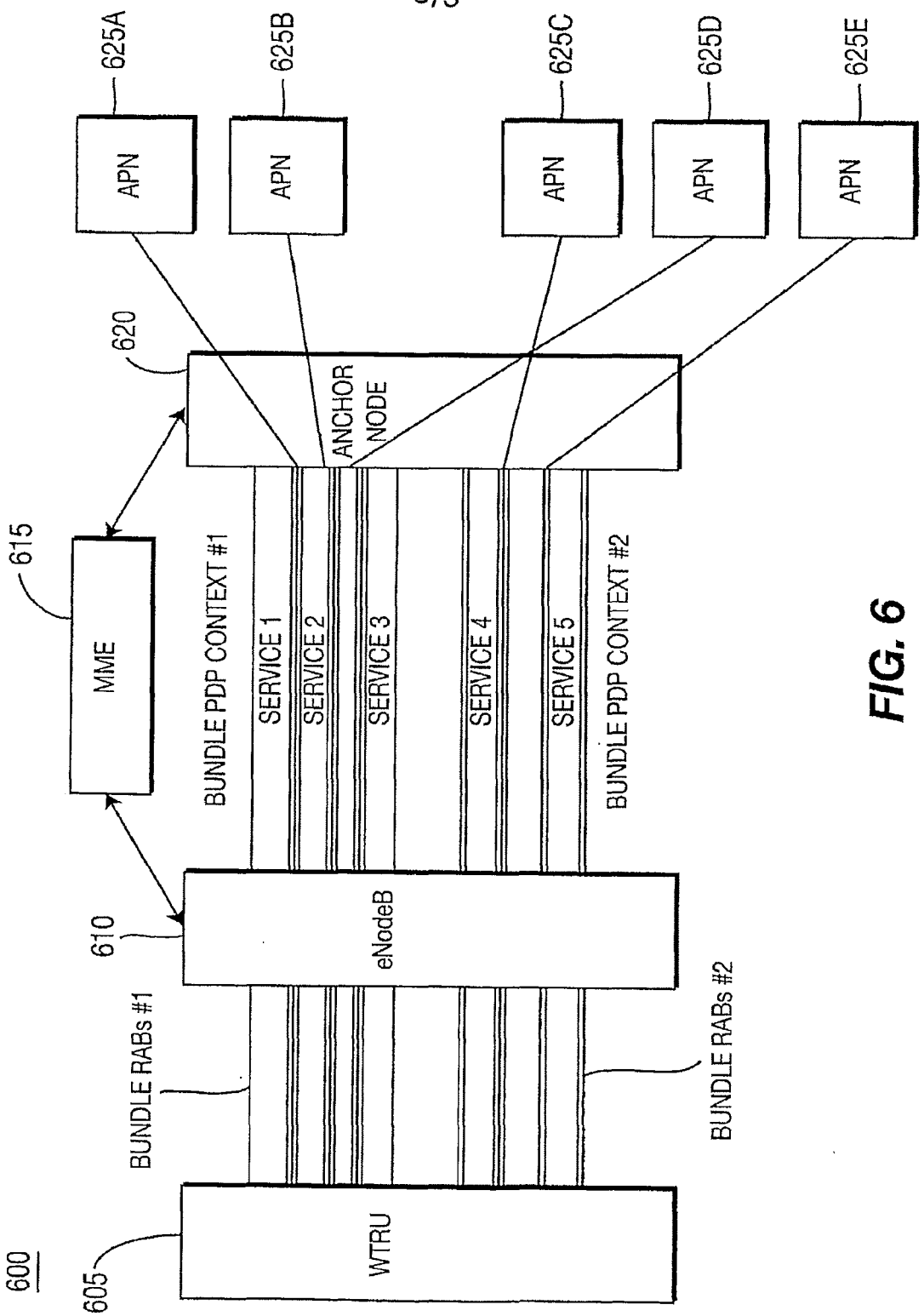
600
605
WTRU
610
eNodeB
615
MME
620
ANCHOR NODE
625A
APN
625B
APN
625C
APN
625D
APN
625E
APN
BUNDLE RABs #1
BUNDLE RABs #2
BUNDLE PDP CONTEXT #1
BUNDLE PDP CONTEXT #2
SERVICE 1
SERVICE 2
SERVICE 3
SERVICE 4
SERVICE 5

FIG. 6