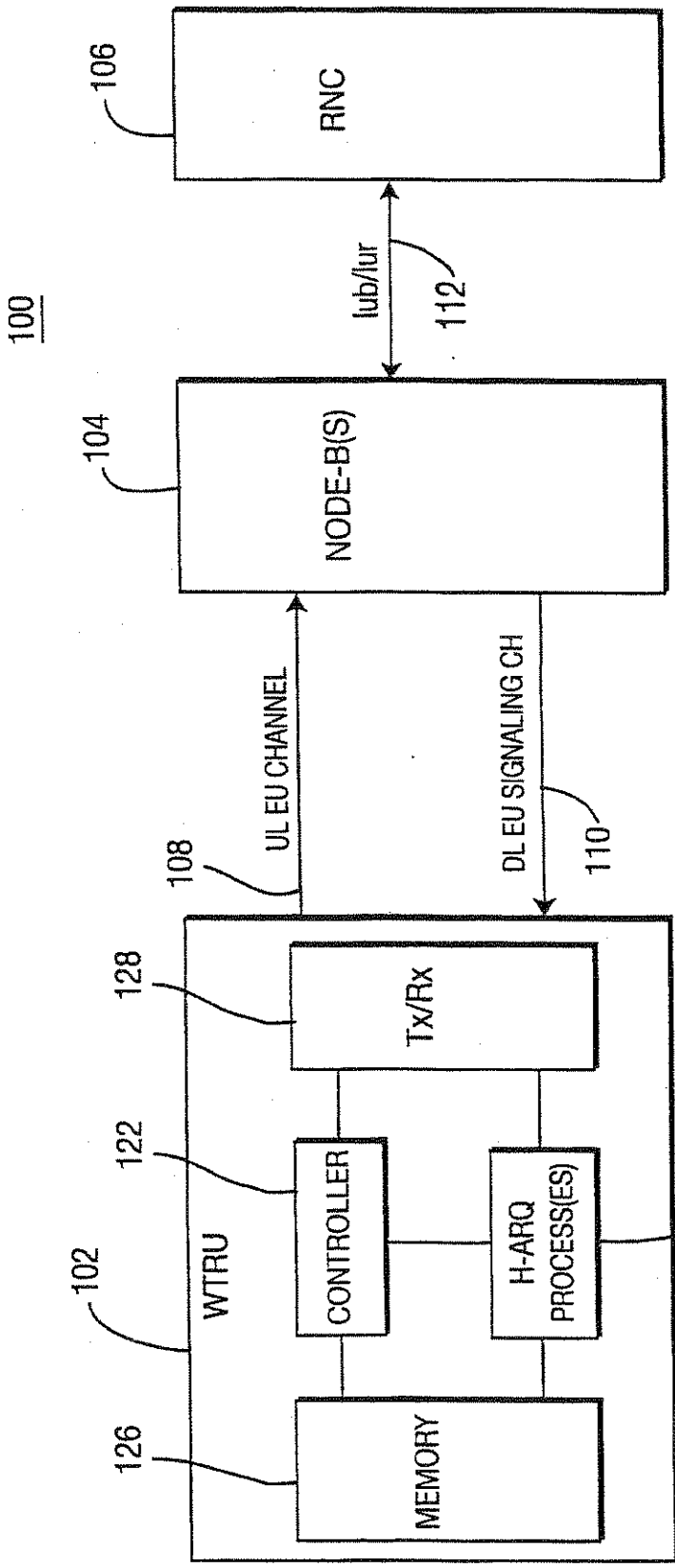

100
106
RNC
Iub/Iur
112
104
NODE-B(S)
UL EU CHANNEL
DL EU SIGNALING CH
108
110
102
WTRU
128
Tx/Rx
122
CONTROLLER
H-ARQ PROCESS(ES)
124
126
MEMORY

FIG. 1

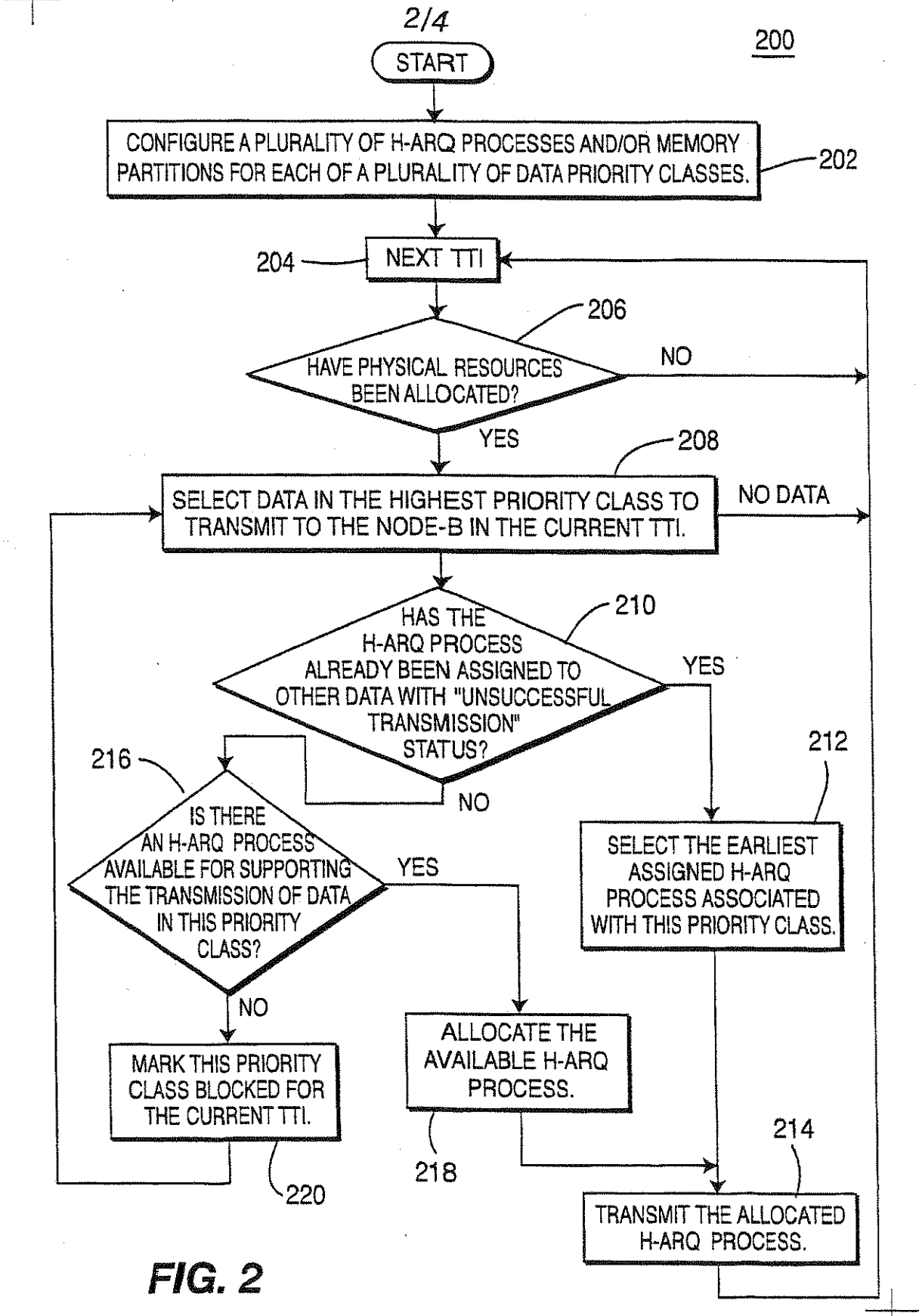

200
START
CONFIGURE A PLURALITY OF H-ARQ PROCESSES AND/OR MEMORY PARTITIONS FOR EACH OF A PLURALITY OF DATA PRIORITY CLASSES.
202
204
NEXT TTI
206
HAVE PHYSICAL RESOURCES BEEN ALLOCATED?
NO
YES
208
SELECT DATA IN THE HIGHEST PRIORITY CLASS TO TRANSMIT TO THE NODE-B IN THE CURRENT TTI.
NO DATA
210
HAS THE H-ARQ PROCESS ALREADY BEEN ASSIGNED TO OTHER DATA WITH "UNSUCCESSFUL TRANSMISSION" STATUS?
YES
NO
212
SELECT THE EARLIEST ASSIGNED H-ARQ PROCESS ASSOCIATED WITH THIS PRIORITY CLASS.
216
IS THERE AN H-ARQ PROCESS AVAILABLE FOR SUPPORTING THE TRANSMISSION OF DATA IN THIS PRIORITY CLASS?
YES
NO
MARK THIS PRIORITY CLASS BLOCKED FOR THE CURRENT TTI.
220
ALLOCATE THE AVAILABLE H-ARQ PROCESS.
218
214
TRANSMIT THE ALLOCATED H-ARQ PROCESS.

FIG. 2

FIG. 3

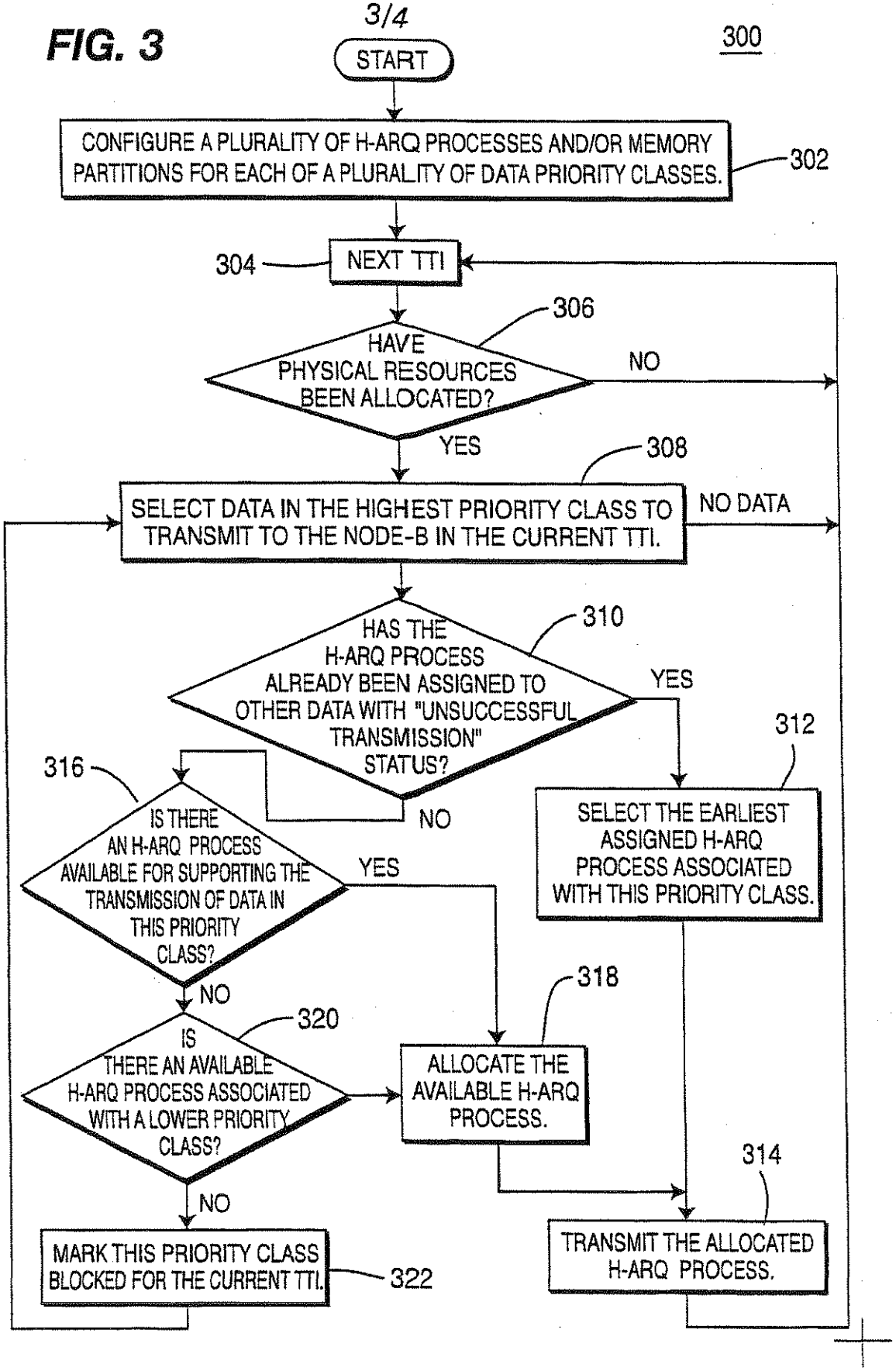
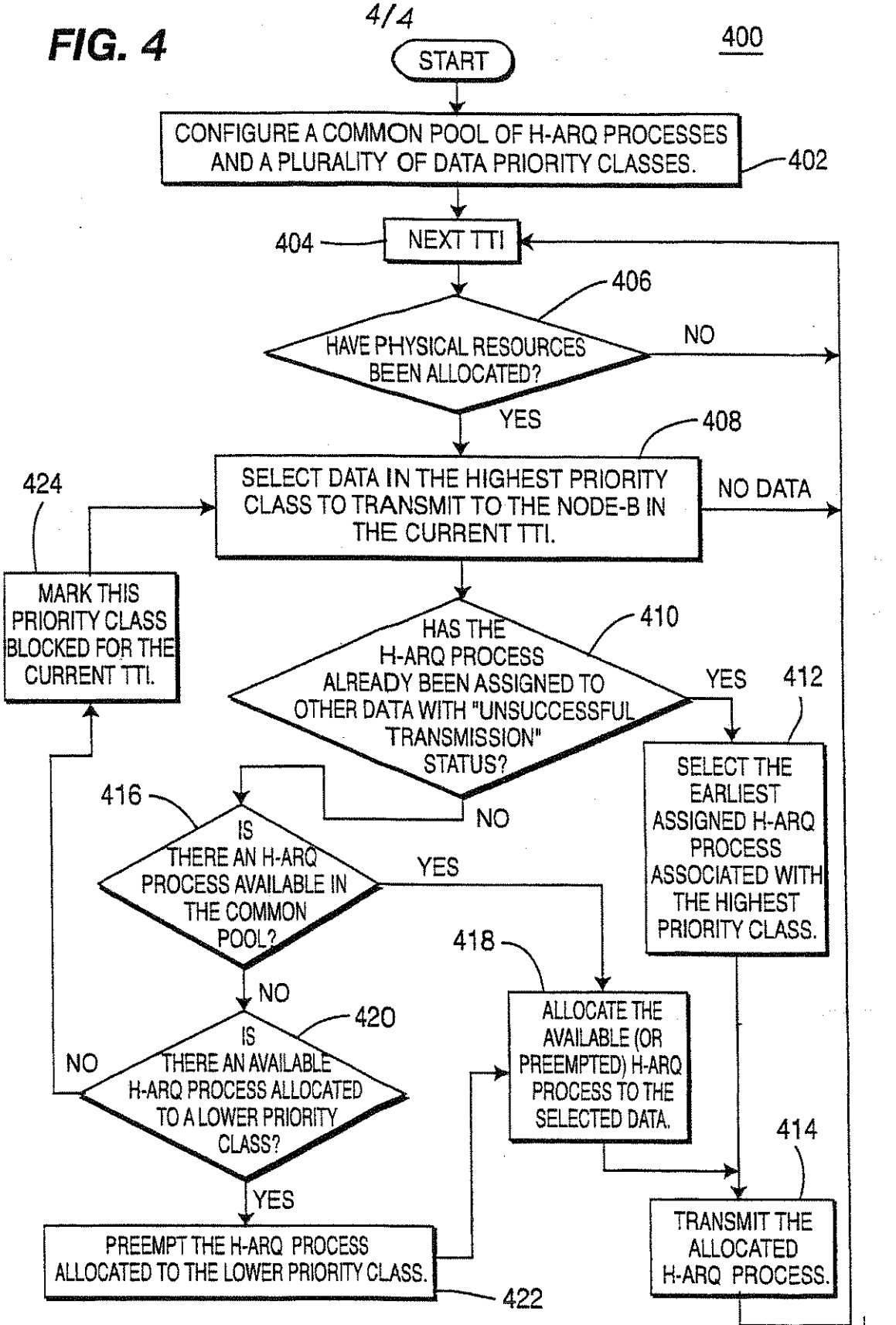

300
START
CONFIGURE A PLURALITY OF H-ARQ PROCESSES AND/OR MEMORY PARTITIONS FOR EACH OF A PLURALITY OF DATA PRIORITY CLASSES.
302
304
NEXT TTI
306
HAVE PHYSICAL RESOURCES BEEN ALLOCATED?
NO
YES
308
SELECT DATA IN THE HIGHEST PRIORITY CLASS TO TRANSMIT TO THE NODE-B IN THE CURRENT TTI.
NO DATA
310
HAS THE H-ARQ PROCESS ALREADY BEEN ASSIGNED TO OTHER DATA WITH "UNSUCCESSFUL TRANSMISSION" STATUS?
YES
NO
312
SELECT THE EARLIEST ASSIGNED H-ARQ PROCESS ASSOCIATED WITH THIS PRIORITY CLASS.
316
IS THERE AN H-ARQ PROCESS AVAILABLE FOR SUPPORTING THE TRANSMISSION OF DATA IN THIS PRIORITY CLASS?
YES
NO
318
ALLOCATE THE AVAILABLE H-ARQ PROCESS.
320
IS THERE AN AVAILABLE H-ARQ PROCESS ASSOCIATED WITH A LOWER PRIORITY CLASS?
NO
314
TRANSMIT THE ALLOCATED H-ARQ PROCESS.
MARK THIS PRIORITY CLASS BLOCKED FOR THE CURRENT TTI.
322

FIG. 4


400
START
CONFIGURE A COMMON POOL OF H-ARQ PROCESSES AND A PLURALITY OF DATA PRIORITY CLASSES.
402
404
NEXT TTI
406
HAVE PHYSICAL RESOURCES BEEN ALLOCATED?
NO
YES
408
SELECT DATA IN THE HIGHEST PRIORITY CLASS TO TRANSMIT TO THE NODE-B IN THE CURRENT TTI.
NO DATA
424
MARK THIS PRIORITY CLASS BLOCKED FOR THE CURRENT TTI.
410
HAS THE H-ARQ PROCESS ALREADY BEEN ASSIGNED TO OTHER DATA WITH "UNSUCCESSFUL TRANSMISSION" STATUS?
YES
412
SELECT THE EARLIEST ASSIGNED H-ARQ PROCESS ASSOCIATED WITH THE HIGHEST PRIORITY CLASS.
NO
416
IS THERE AN H-ARQ PROCESS AVAILABLE IN THE COMMON POOL?
YES
418
ALLOCATE THE AVAILABLE (OR PREEMPTED) H-ARQ PROCESS TO THE SELECTED DATA.
NO
420
IS THERE AN AVAILABLE H-ARQ PROCESS ALLOCATED TO A LOWER PRIORITY CLASS?
NO
YES
PREEMPT THE H-ARQ PROCESS ALLOCATED TO THE LOWER PRIORITY CLASS.
422
414
TRANSMIT THE ALLOCATED H-ARQ PROCESS.