FIG. 1

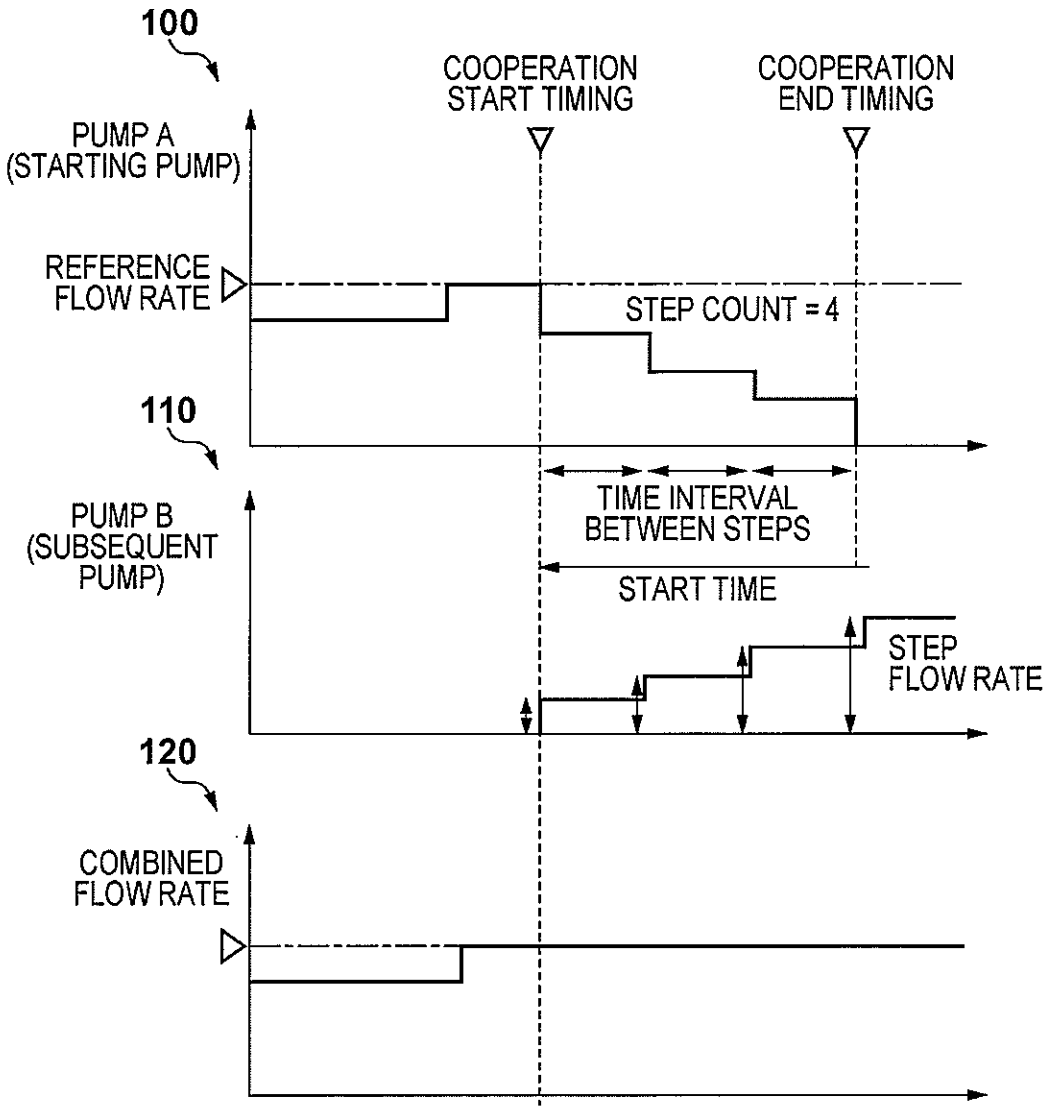

100
COOPERATION START TIMING
COOPERATION END TIMING
PUMP A (STARTING PUMP)
REFERENCE FLOW RATE
STEP COUNT = 4
110
TIME INTERVAL BETWEEN STEPS
PUMP B (SUBSEQUENT PUMP)
START TIME
STEP FLOW RATE
120
COMBINED FLOW RATE

FIG. 2A

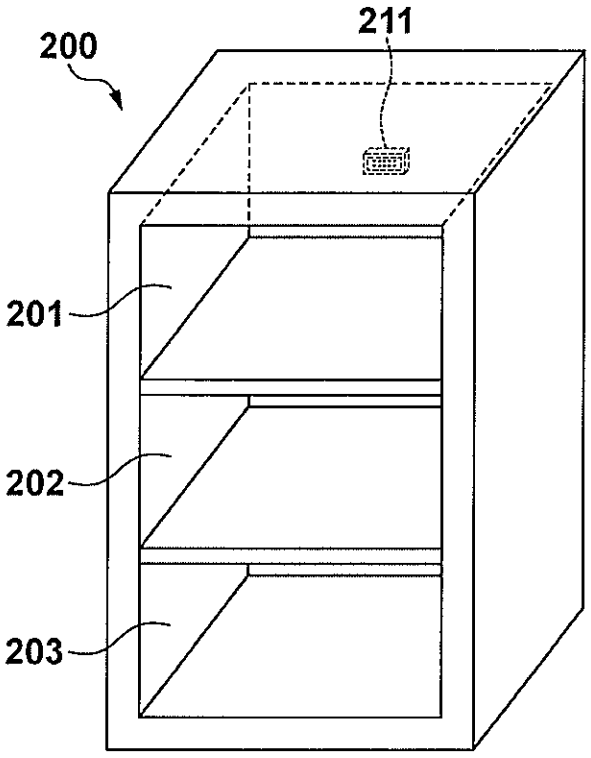


FIG. 2B

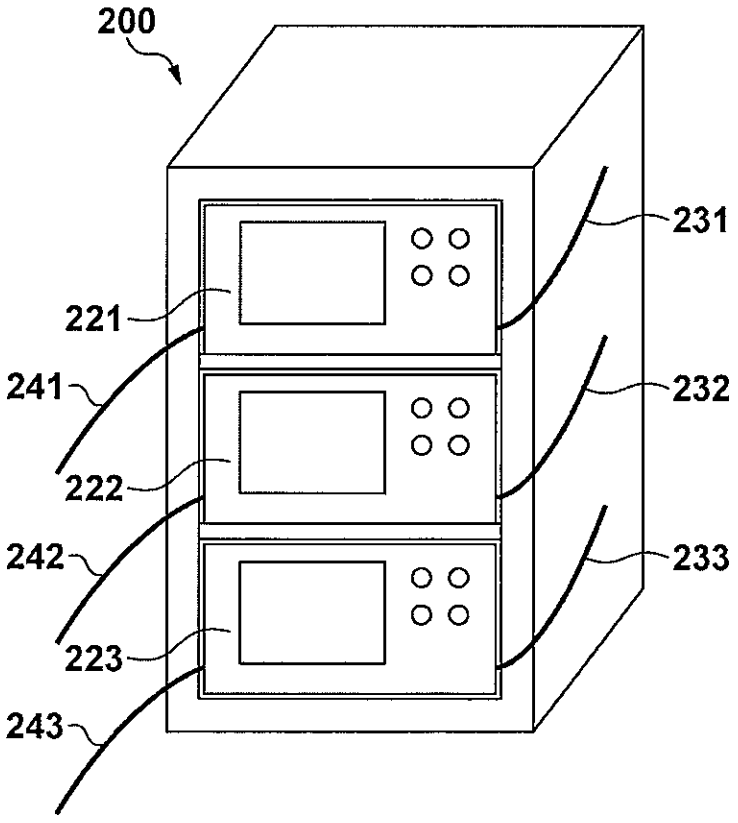


FIG. 3

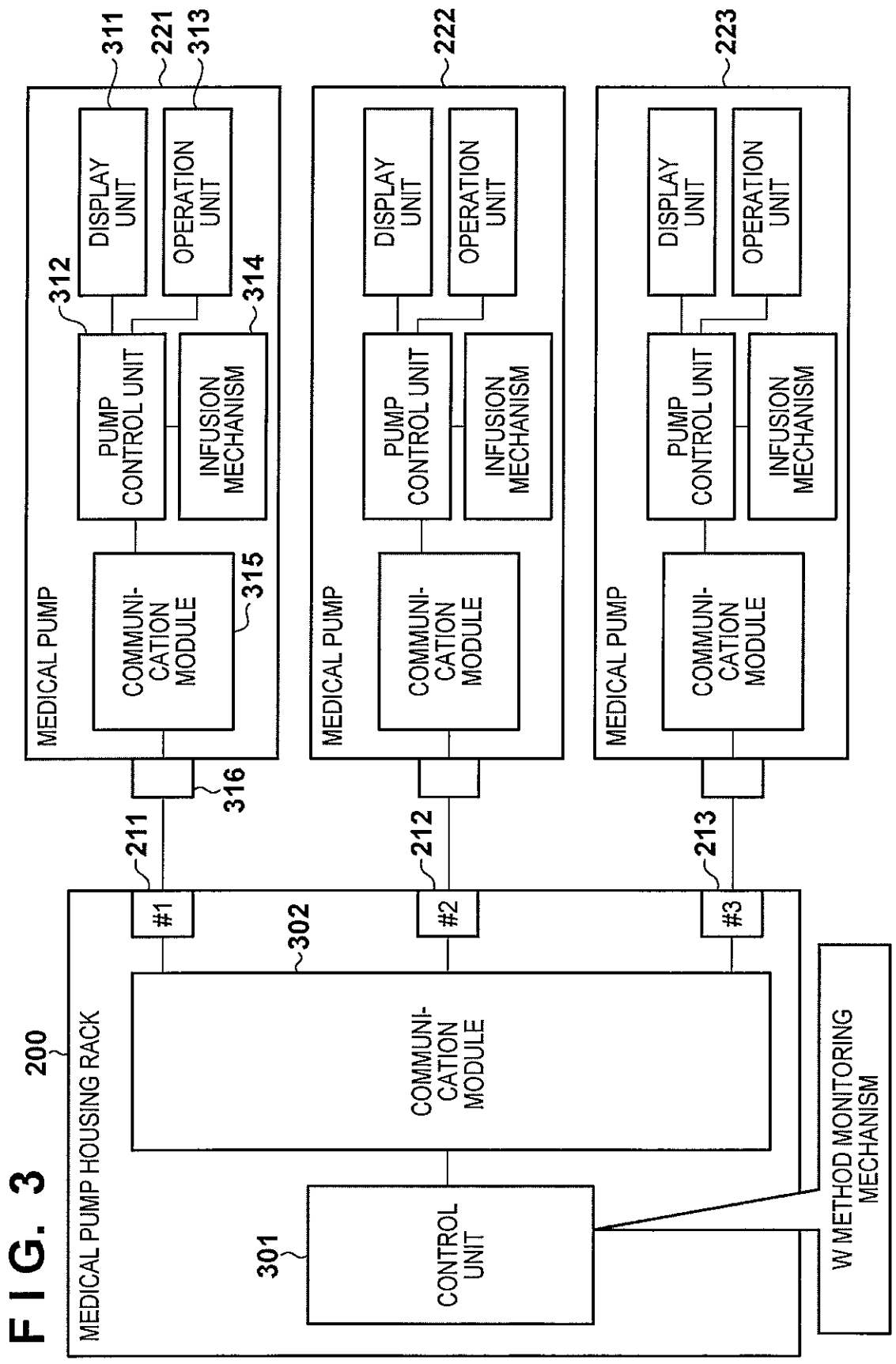

200
MEDICAL PUMP HOUSING RACK
301
CONTROL UNIT
302
COMMUNI-CATION MODULE
#1
#2
#3
211
212
213
316
MEDICAL PUMP
COMMUNI-CATION MODULE
315
PUMP CONTROL UNIT
312
INFUSION MECHANISM
314
DISPLAY UNIT
311
OPERATION UNIT
313
221
222
223
W METHOD MONITORING MECHANISM

FIG. 4

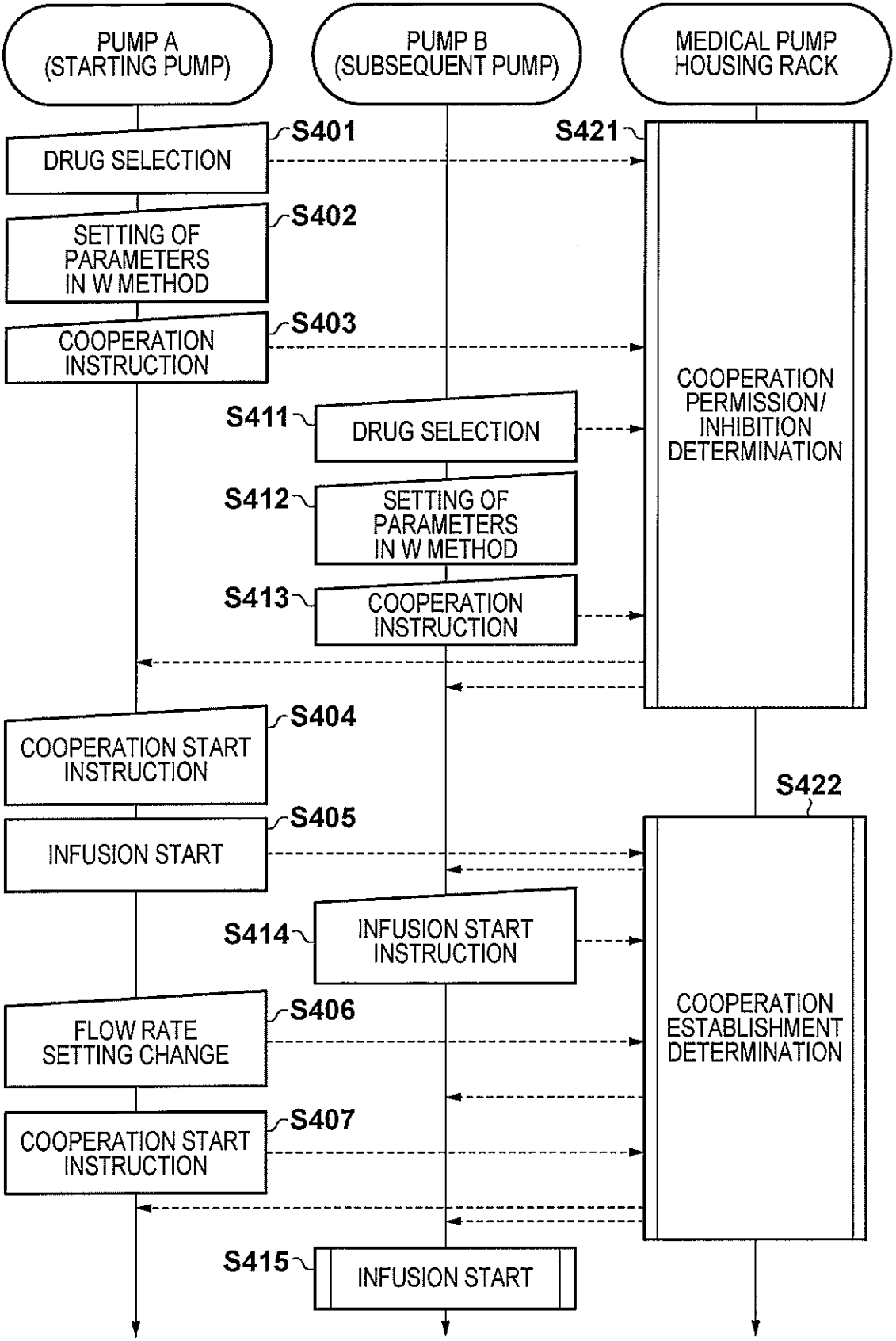

PUMP A (STARTING PUMP)
PUMP B (SUBSEQUENT PUMP)
MEDICAL PUMP HOUSING RACK
S401
DRUG SELECTION
S421
S402
SETTING OF PARAMETERS IN W METHOD
S403
COOPERATION INSTRUCTION
COOPERATION PERMISSION/ INHIBITION DETERMINATION
S411
DRUG SELECTION
S412
SETTING OF PARAMETERS IN W METHOD
S413
COOPERATION INSTRUCTION
S404
COOPERATION START INSTRUCTION
S422
S405
INFUSION START
S414
INFUSION START INSTRUCTION
S406
FLOW RATE SETTING CHANGE
COOPERATION ESTABLISHMENT DETERMINATION
S407
COOPERATION START INSTRUCTION
S415
INFUSION START

FIG. 5

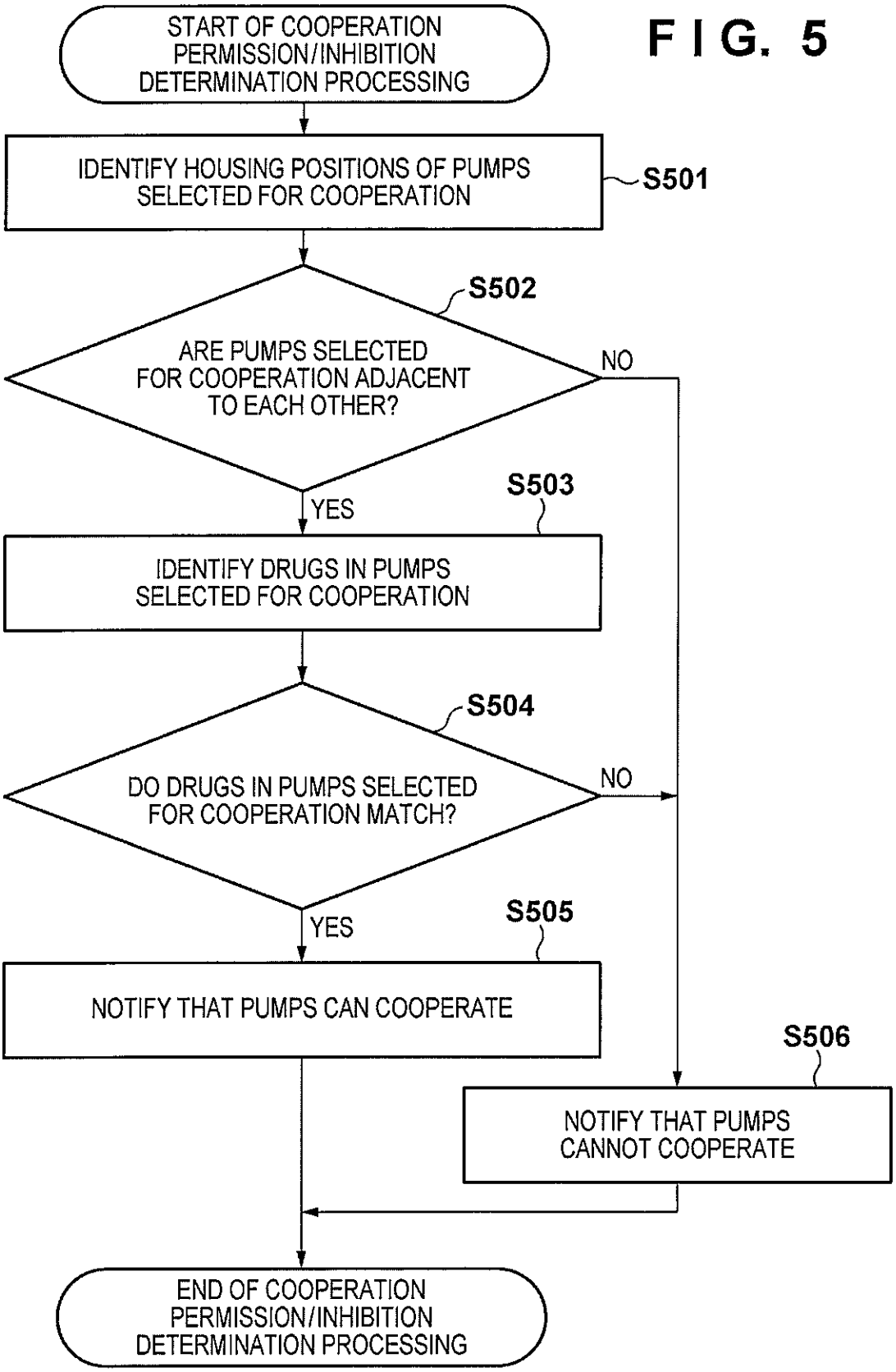

START OF COOPERATION PERMISSION/INHIBITION DETERMINATION PROCESSING
IDENTIFY HOUSING POSITIONS OF PUMPS SELECTED FOR COOPERATION
S501
S502
ARE PUMPS SELECTED FOR COOPERATION ADJACENT TO EACH OTHER?
NO
YES
S503
IDENTIFY DRUGS IN PUMPS SELECTED FOR COOPERATION
S504
DO DRUGS IN PUMPS SELECTED FOR COOPERATION MATCH?
NO
YES
S505
NOTIFY THAT PUMPS CAN COOPERATE
S506
NOTIFY THAT PUMPS CANNOT COOPERATE
END OF COOPERATION PERMISSION/INHIBITION DETERMINATION PROCESSING

FIG. 6

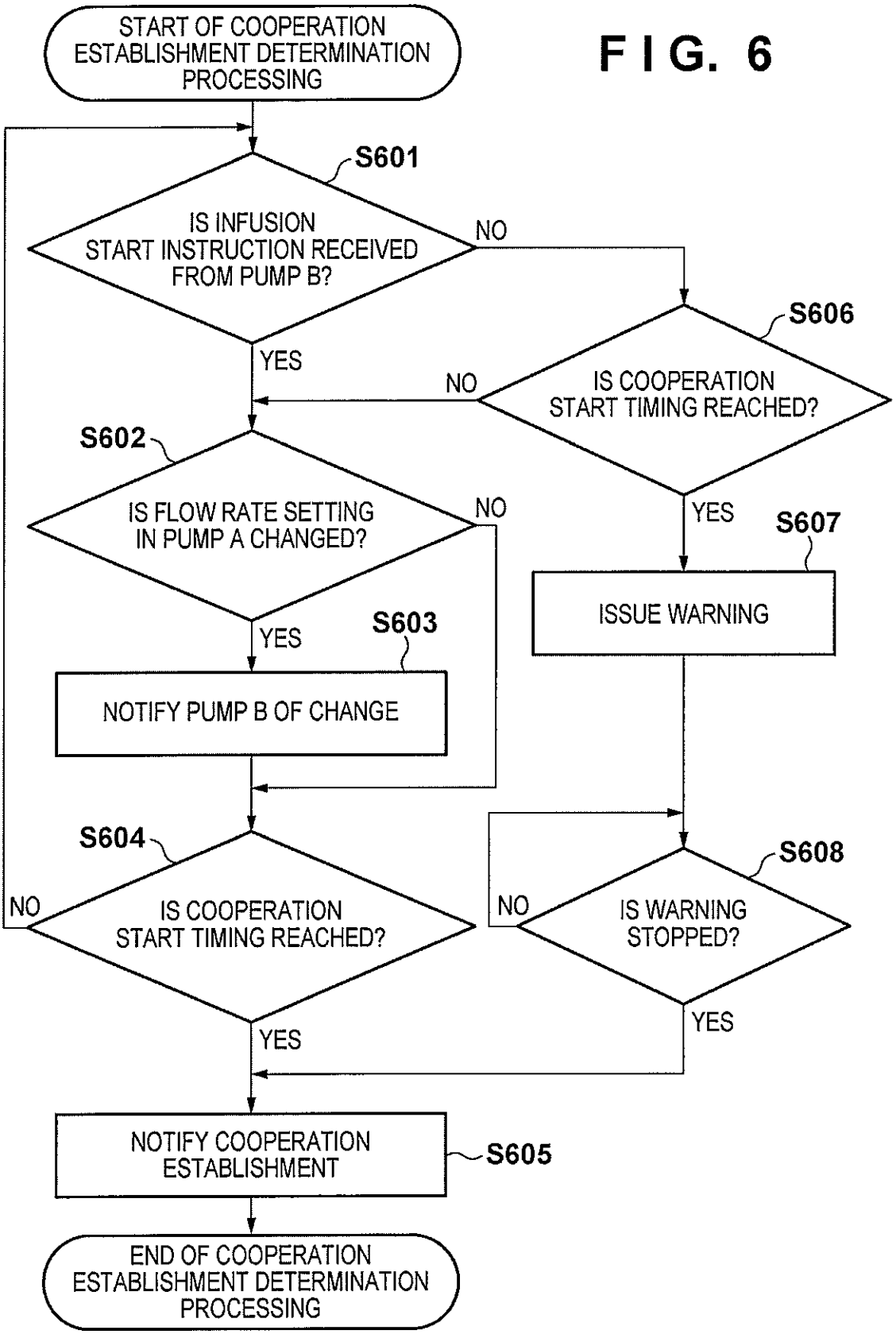
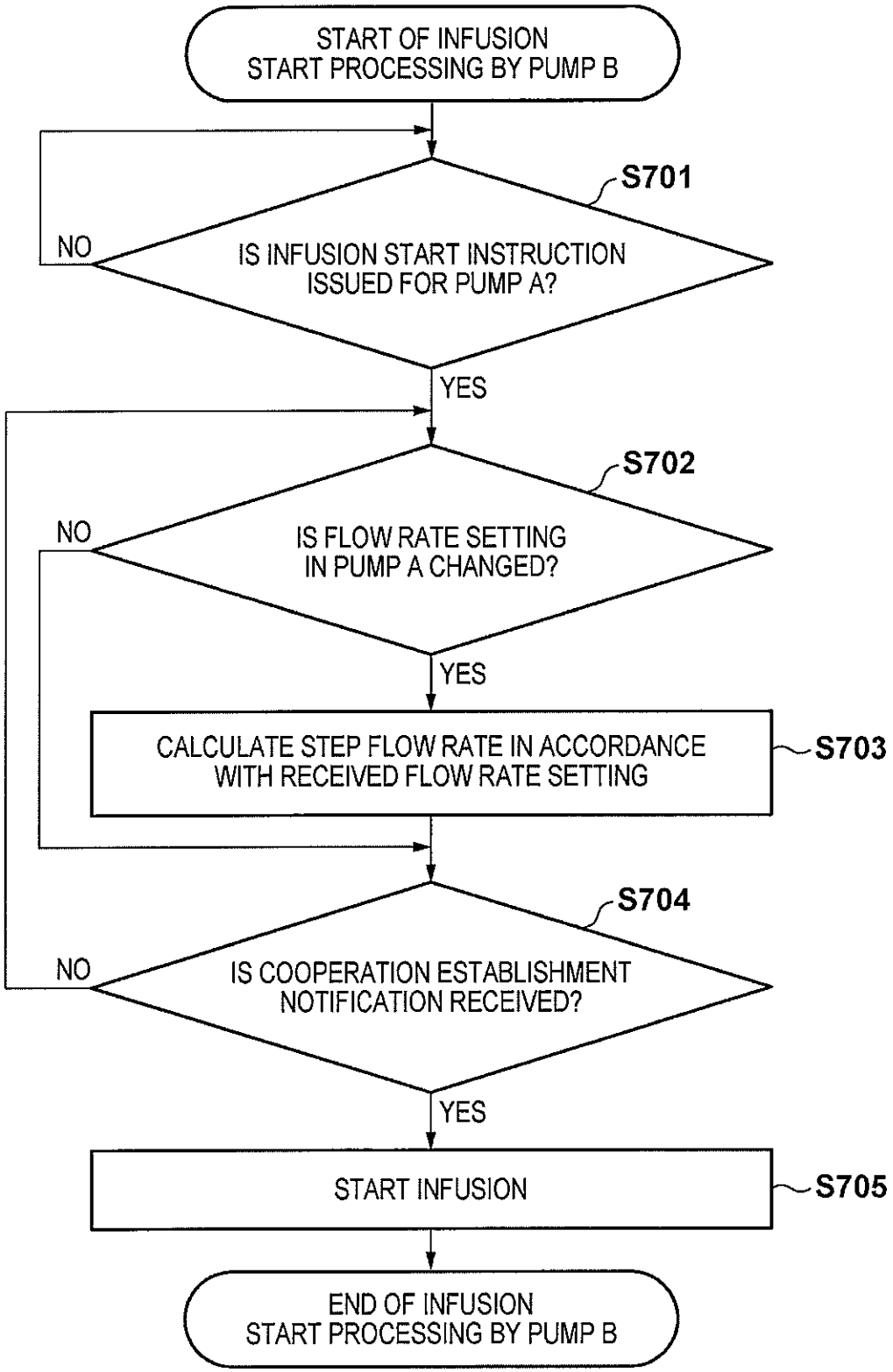

START OF COOPERATION ESTABLISHMENT DETERMINATION PROCESSING
S601
IS INFUSION START INSTRUCTION RECEIVED FROM PUMP B?
NO
YES
S606
IS COOPERATION START TIMING REACHED?
NO
YES
S602
IS FLOW RATE SETTING IN PUMP A CHANGED?
NO
YES
S607
ISSUE WARNING
S603
NOTIFY PUMP B OF CHANGE
S604
IS COOPERATION START TIMING REACHED?
NO
YES
S608
IS WARNING STOPPED?
NO
YES
NOTIFY COOPERATION ESTABLISHMENT
S605
END OF COOPERATION ESTABLISHMENT DETERMINATION PROCESSING

FIG. 7


START OF INFUSION
START PROCESSING BY PUMP B
S701
IS INFUSION START INSTRUCTION
ISSUED FOR PUMP A?
NO
YES
S702
IS FLOW RATE SETTING
IN PUMP A CHANGED?
NO
YES
CALCULATE STEP FLOW RATE IN ACCORDANCE
WITH RECEIVED FLOW RATE SETTING
S703
S704
IS COOPERATION ESTABLISHMENT
NOTIFICATION RECEIVED?
NO
YES
START INFUSION
S705
END OF INFUSION
START PROCESSING BY PUMP B