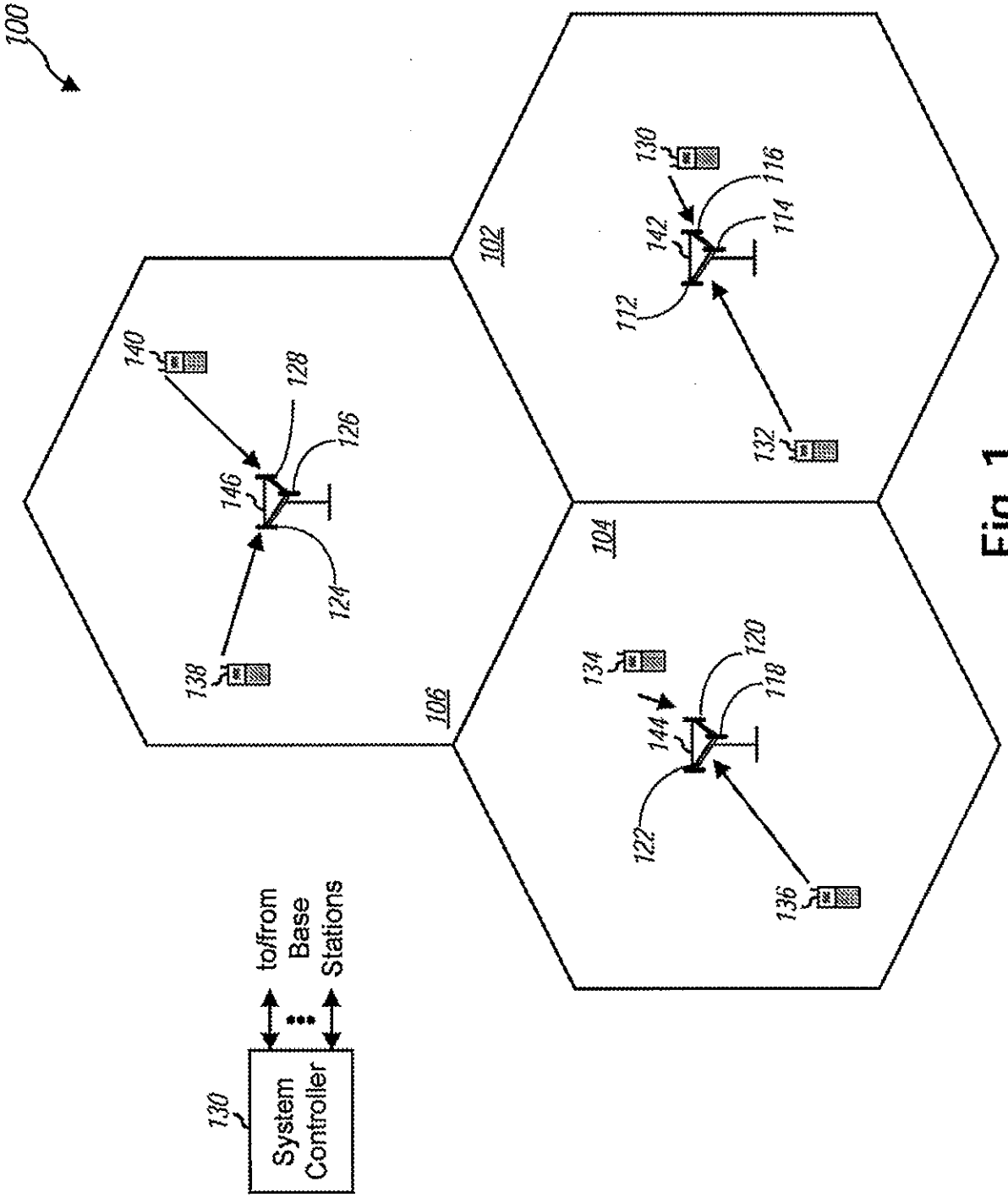

100
102
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146
130
System Controller
to/from Base Stations

Fig. 1

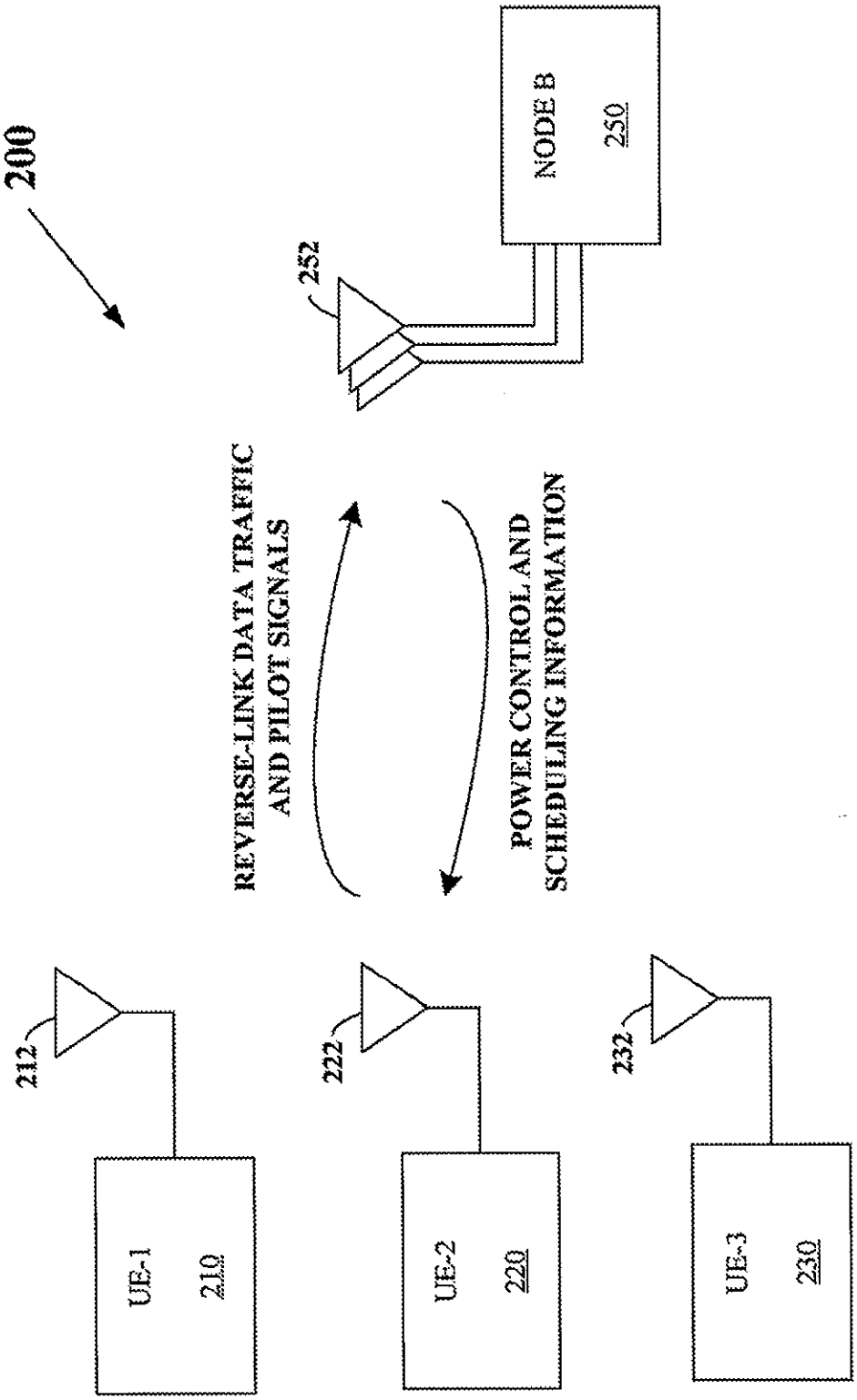

200
NODE B
250
252
REVERSE-LINK DATA TRAFFIC AND PILOT SIGNALS
POWER CONTROL AND SCHEDULING INFORMATION
212
222
232
UE-1
210
UE-2
220
UE-3
230

Fig. 2

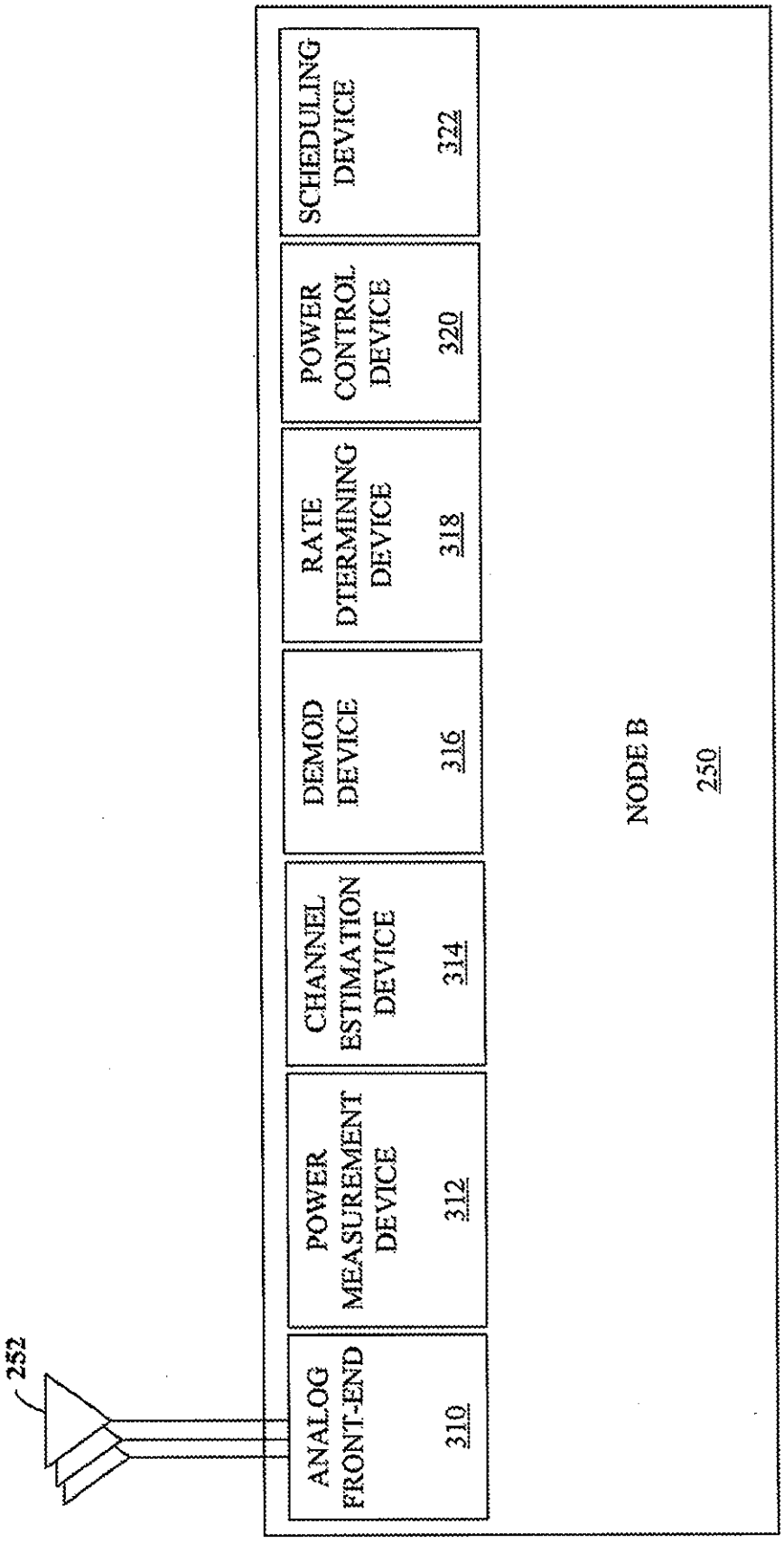

252
ANALOG FRONT-END 310
POWER MEASUREMENT DEVICE 312
CHANNEL ESTIMATION DEVICE 314
DEMOD DEVICE 316
RATE DTERMINING DEVICE 318
POWER CONTROL DEVICE 320
SCHEDULING DEVICE 322
NODE B 250

Fig. 3

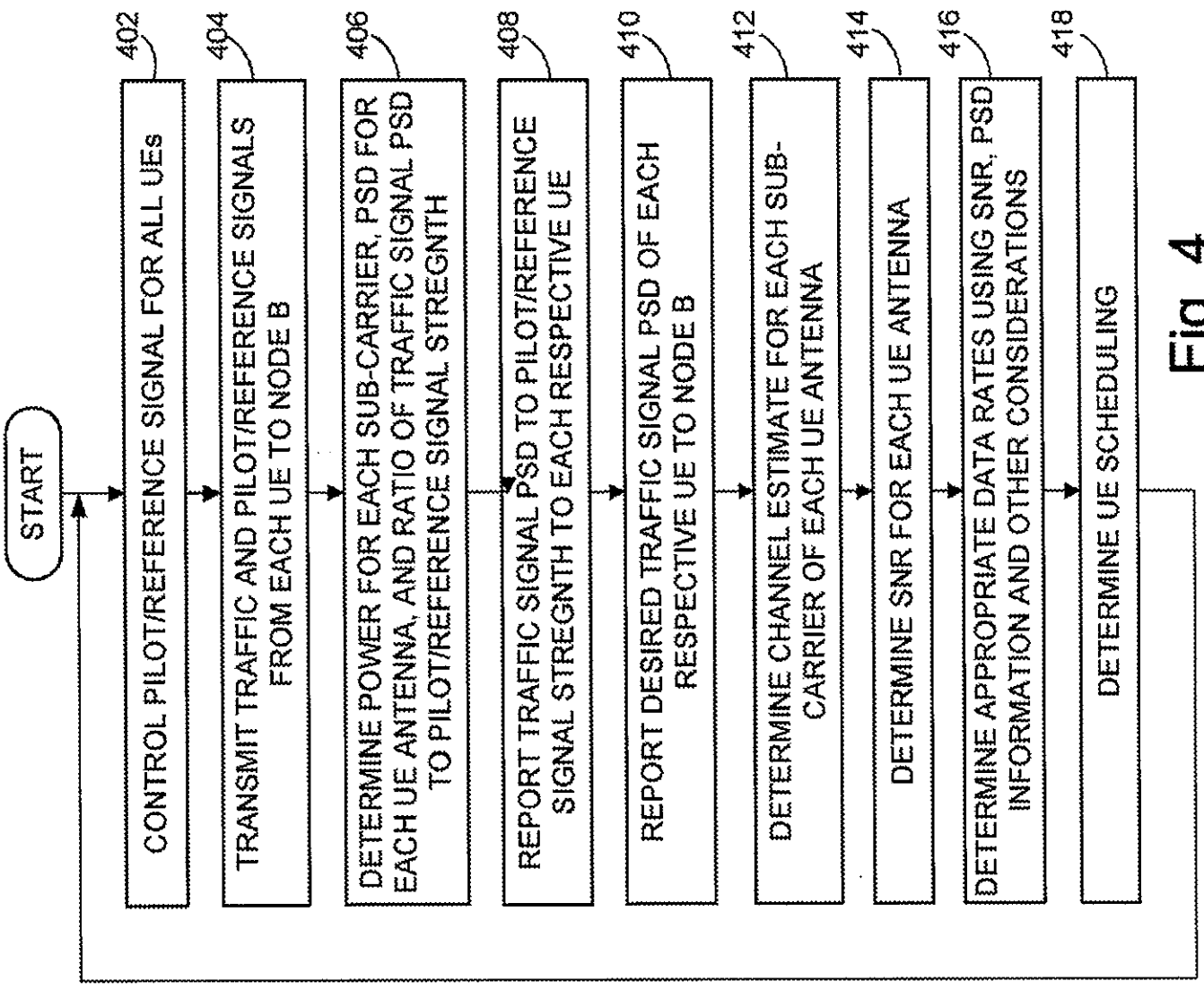

START
CONTROL PILOT/REFERENCE SIGNAL FOR ALL UEs
402
TRANSMIT TRAFFIC AND PILOT/REFERENCE SIGNALS FROM EACH UE TO NODE B
404
DETERMINE POWER FOR EACH SUB-CARRIER, PSD FOR EACH UE ANTENNA, AND RATIO OF TRAFFIC SIGNAL PSD TO PILOT/REFERENCE SIGNAL STREGNTH
406
REPORT TRAFFIC SIGNAL PSD TO PILOT/REFERENCE SIGNAL STREGNTH TO EACH RESPECTIVE UE
408
REPORT DESIRED TRAFFIC SIGNAL PSD OF EACH RESPECTIVE UE TO NODE B
410
DETERMINE CHANNEL ESTIMATE FOR EACH SUB-CARRIER OF EACH UE ANTENNA
412
DETERMINE SNR FOR EACH UE ANTENNA
414
DETERMINE APPROPRIATE DATA RATES USING SNR, PSD INFORMATION AND OTHER CONSIDERATIONS
416
DETERMINE UE SCHEDULING
418

Fig. 4