FIG. 1

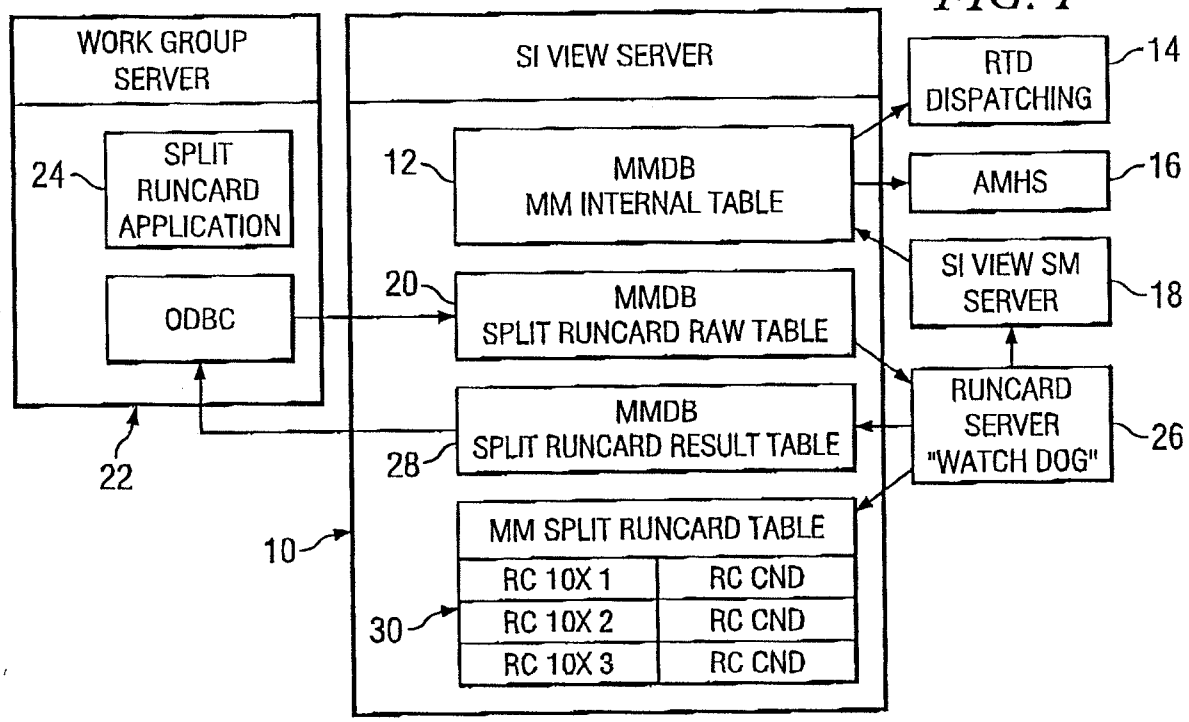
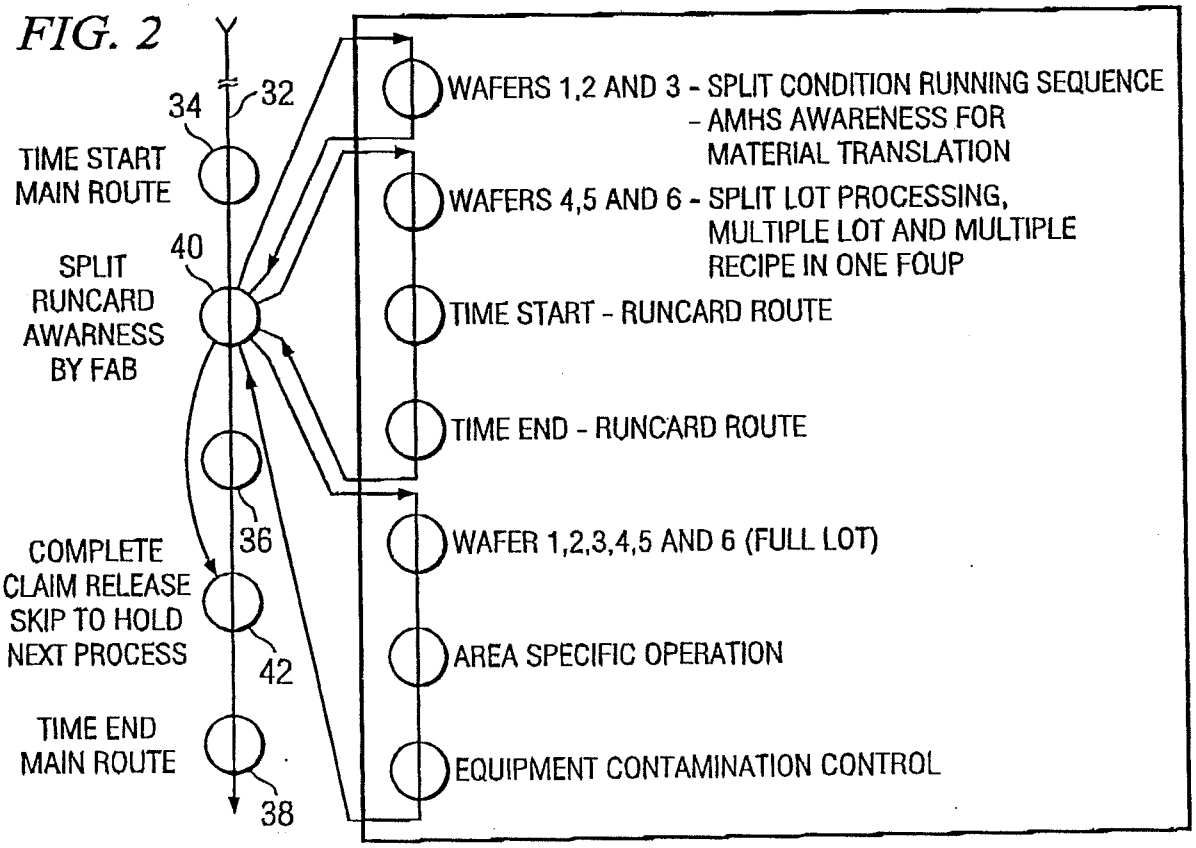

WORK GROUP SERVER
SPLIT RUNCARD APPLICATION
ODBC
24
22
SI VIEW SERVER
MMDB MM INTERNAL TABLE
MMDB SPLIT RUNCARD RAW TABLE
MMDB SPLIT RUNCARD RESULT TABLE
MM SPLIT RUNCARD TABLE
RC 10X 1
RC CND
RC 10X 2
RC CND
RC 10X 3
RC CND
12
20
28
30
10
RTD DISPATCHING
AMHS
SI VIEW SM SERVER
RUNCARD SERVER "WATCH DOG"
14
16
18
26

FIG. 2


TIME START MAIN ROUTE
SPLIT RUNCARD AWARNESS BY FAB
COMPLETE CLAIM RELEASE SKIP TO HOLD NEXT PROCESS
TIME END MAIN ROUTE
32
34
36
38
40
42
WAFERS 1,2 AND 3 - SPLIT CONDITION RUNNING SEQUENCE - AMHS AWARENESS FOR MATERIAL TRANSLATION
WAFERS 4,5 AND 6 - SPLIT LOT PROCESSING, MULTIPLE LOT AND MULTIPLE RECIPE IN ONE FOUP
TIME START - RUNCARD ROUTE
TIME END - RUNCARD ROUTE
WAFER 1,2,3,4,5 AND 6 (FULL LOT)
AREA SPECIFIC OPERATION
EQUIPMENT CONTAMINATION CONTROL

40	CONDITION 1	RECIPE A	WAFER ID'S 1,3,5,7,9
42	CONDITION 2	RECIPE B	WAFER ID'S 2,4,6,8,10
44	CONDITION 3	RECIPE C	WAFER ID'S 2,4,6,8,10
46	CONDITION 4	RECIPE D	WAFER ID'S 1,2,3,4,5,6,7,8,9,10

FIG. 3

FIG. 4

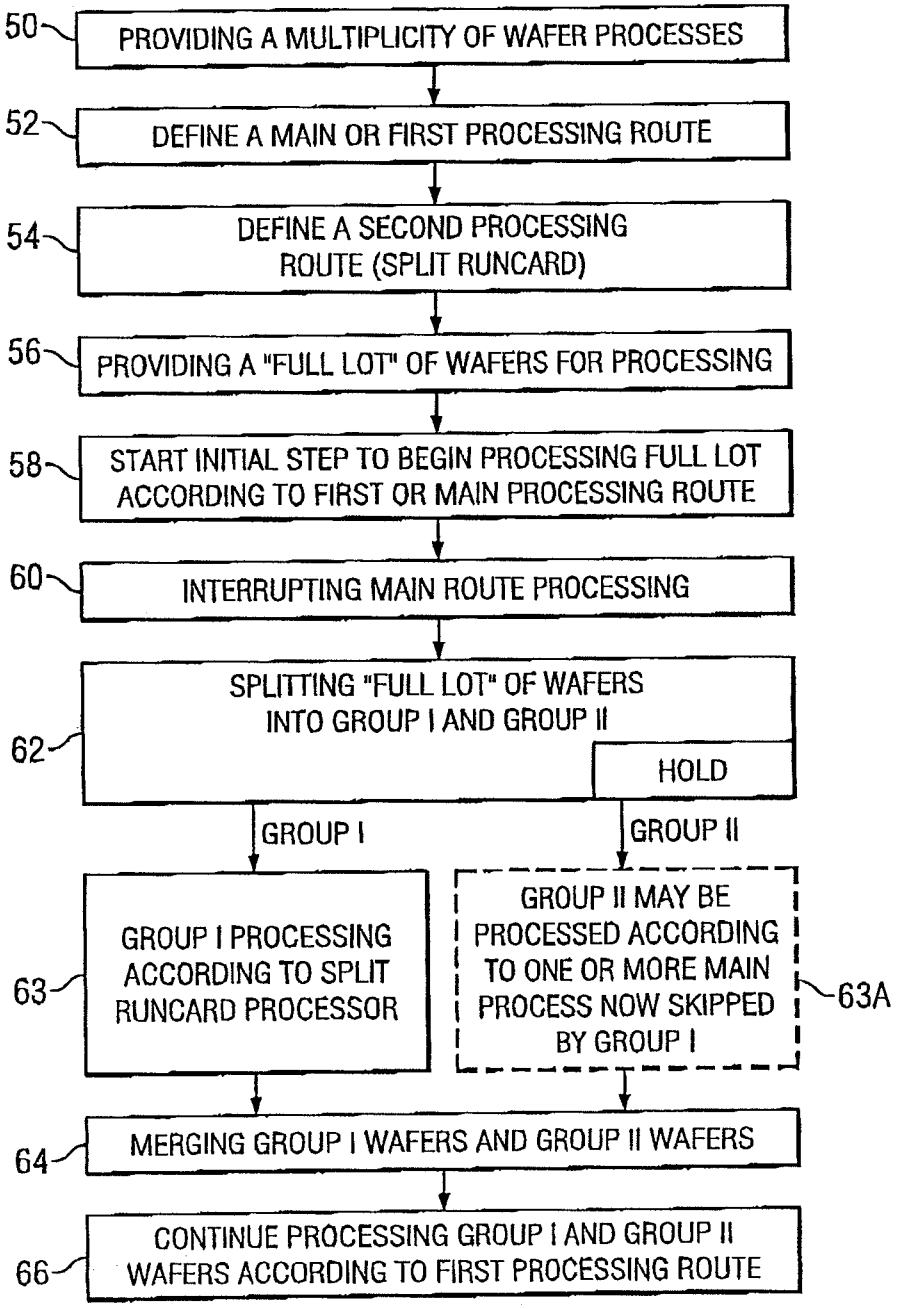


FIG. 5

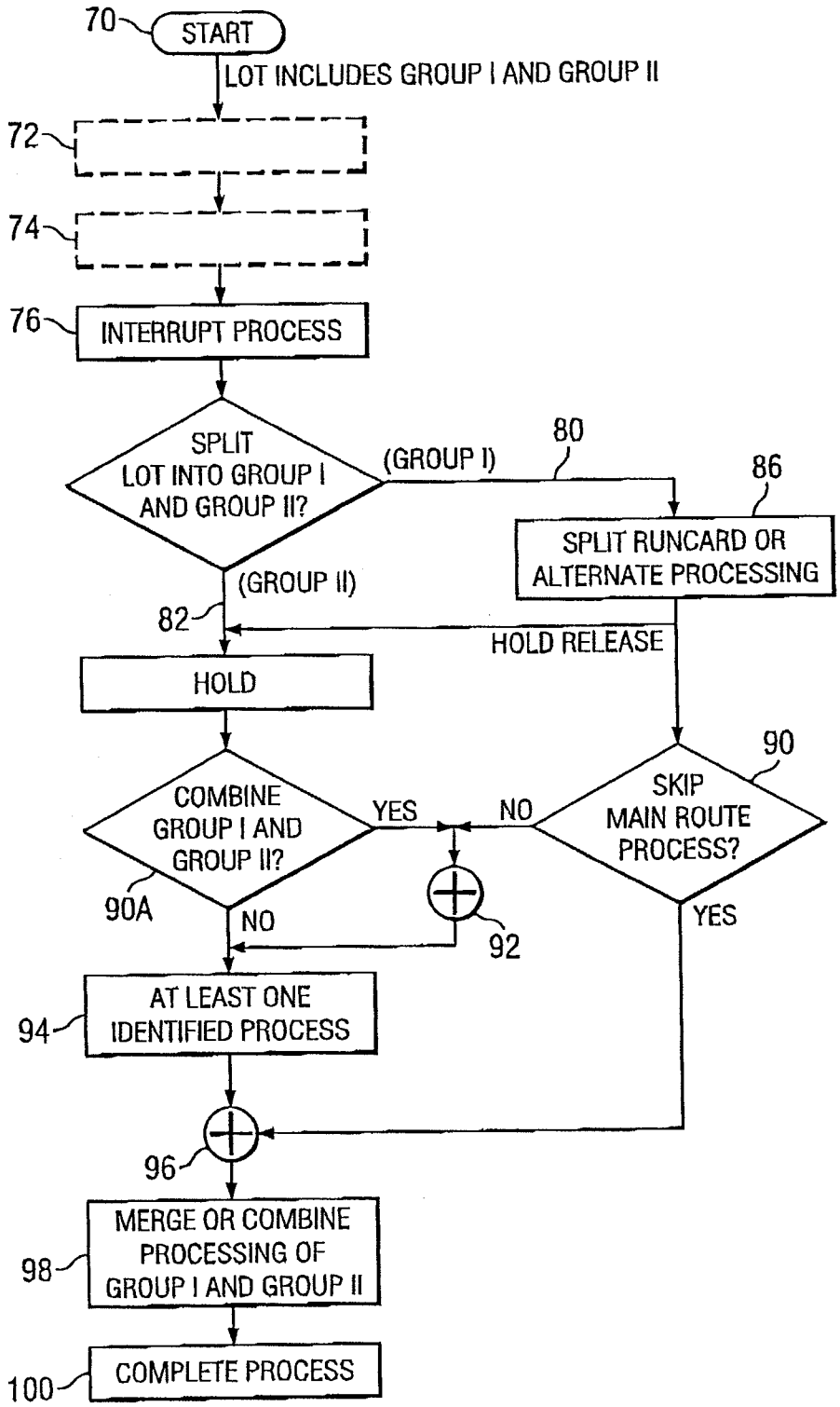

70
START
LOT INCLUDES GROUP I AND GROUP II
72
74
76
INTERRUPT PROCESS
SPLIT LOT INTO GROUP I AND GROUP II?
(GROUP I)
80
86
SPLIT RUNCARD OR ALTERNATE PROCESSING
(GROUP II)
82
HOLD RELEASE
HOLD
90
SKIP MAIN ROUTE PROCESS?
COMBINE GROUP I AND GROUP II?
YES
NO
90A
NO
YES
92
AT LEAST ONE IDENTIFIED PROCESS
94
96
MERGE OR COMBINE PROCESSING OF GROUP I AND GROUP II
98
COMPLETE PROCESS
100

FIG. 6A

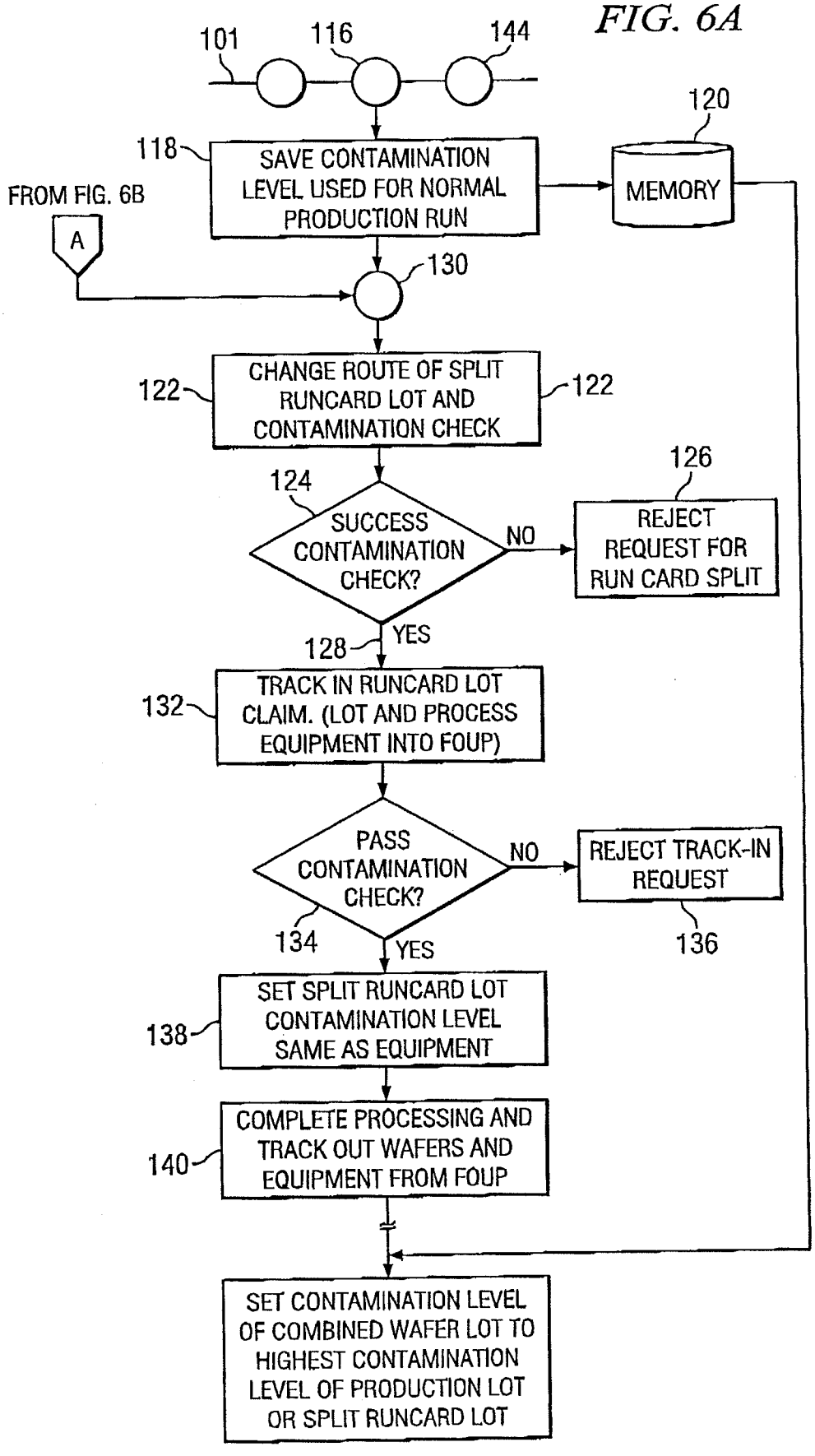
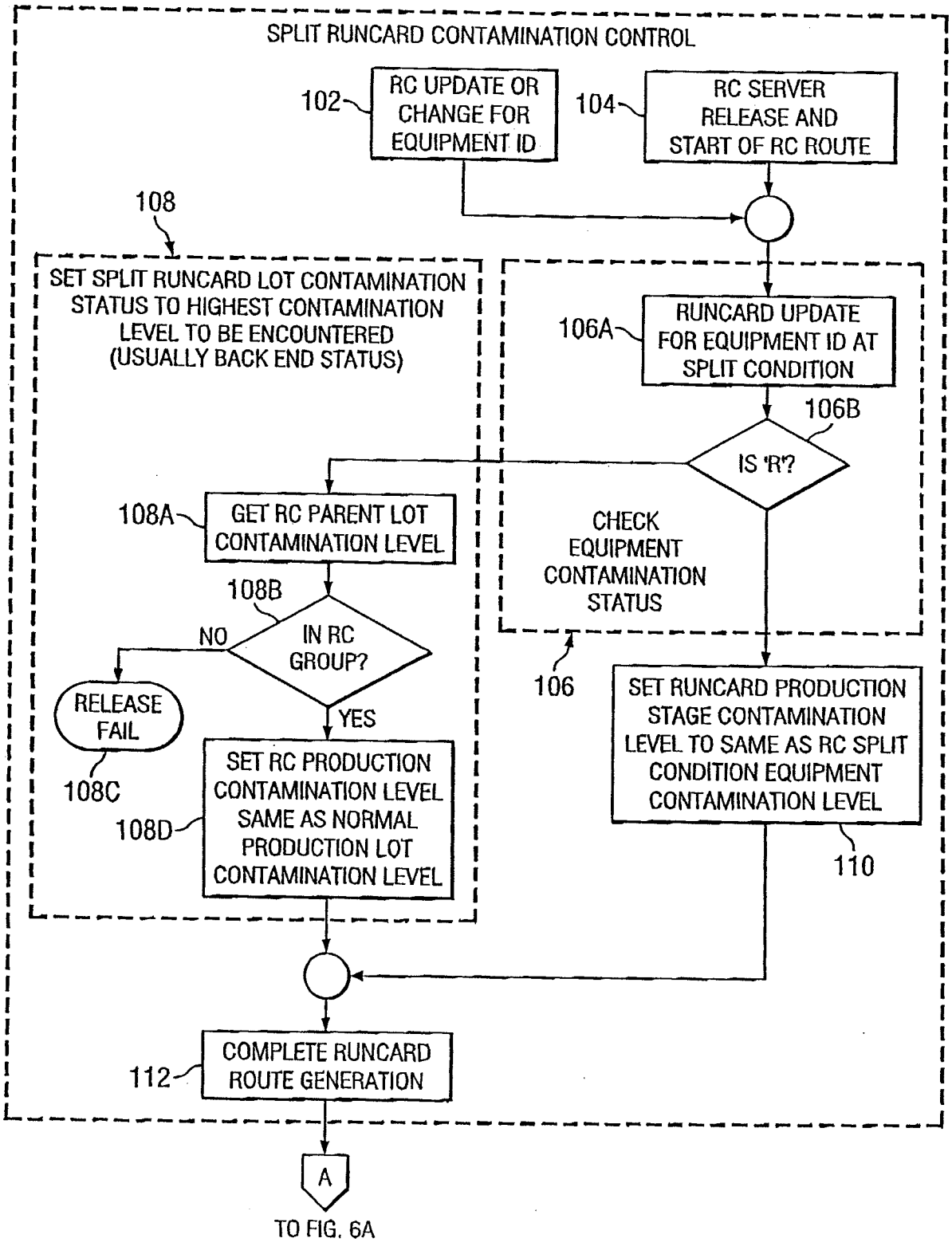

101
116
144
120
118
SAVE CONTAMINATION LEVEL USED FOR NORMAL PRODUCTION RUN
MEMORY
FROM FIG. 6B
A
130
122
CHANGE ROUTE OF SPLIT RUNCARD LOT AND CONTAMINATION CHECK
122
126
124
SUCCESS CONTAMINATION CHECK?
NO
REJECT REQUEST FOR RUN CARD SPLIT
YES
128
132
TRACK IN RUNCARD LOT CLAIM. (LOT AND PROCESS EQUIPMENT INTO FOUP)
PASS CONTAMINATION CHECK?
NO
REJECT TRACK-IN REQUEST
134
YES
136
138
SET SPLIT RUNCARD LOT CONTAMINATION LEVEL SAME AS EQUIPMENT
140
COMPLETE PROCESSING AND TRACK OUT WAFERS AND EQUIPMENT FROM FOUP
SET CONTAMINATION LEVEL OF COMBINED WAFER LOT TO HIGHEST CONTAMINATION LEVEL OF PRODUCTION LOT OR SPLIT RUNCARD LOT

FIG. 6B


SPLIT RUNCARD CONTAMINATION CONTROL
102
RC UPDATE OR CHANGE FOR EQUIPMENT ID
104
RC SERVER RELEASE AND START OF RC ROUTE
108
SET SPLIT RUNCARD LOT CONTAMINATION STATUS TO HIGHEST CONTAMINATION LEVEL TO BE ENCOUNTERED (USUALLY BACK END STATUS)
106A
RUNCARD UPDATE FOR EQUIPMENT ID AT SPLIT CONDITION
106B
IS 'R'?
CHECK EQUIPMENT CONTAMINATION STATUS
108A
GET RC PARENT LOT CONTAMINATION LEVEL
108B
IN RC GROUP?
NO
YES
RELEASE FAIL
108C
108D
SET RC PRODUCTION CONTAMINATION LEVEL SAME AS NORMAL PRODUCTION LOT CONTAMINATION LEVEL
106
SET RUNCARD PRODUCTION STAGE CONTAMINATION LEVEL TO SAME AS RC SPLIT CONDITION EQUIPMENT CONTAMINATION LEVEL
110
112
COMPLETE RUNCARD ROUTE GENERATION
A
TO FIG. 6A