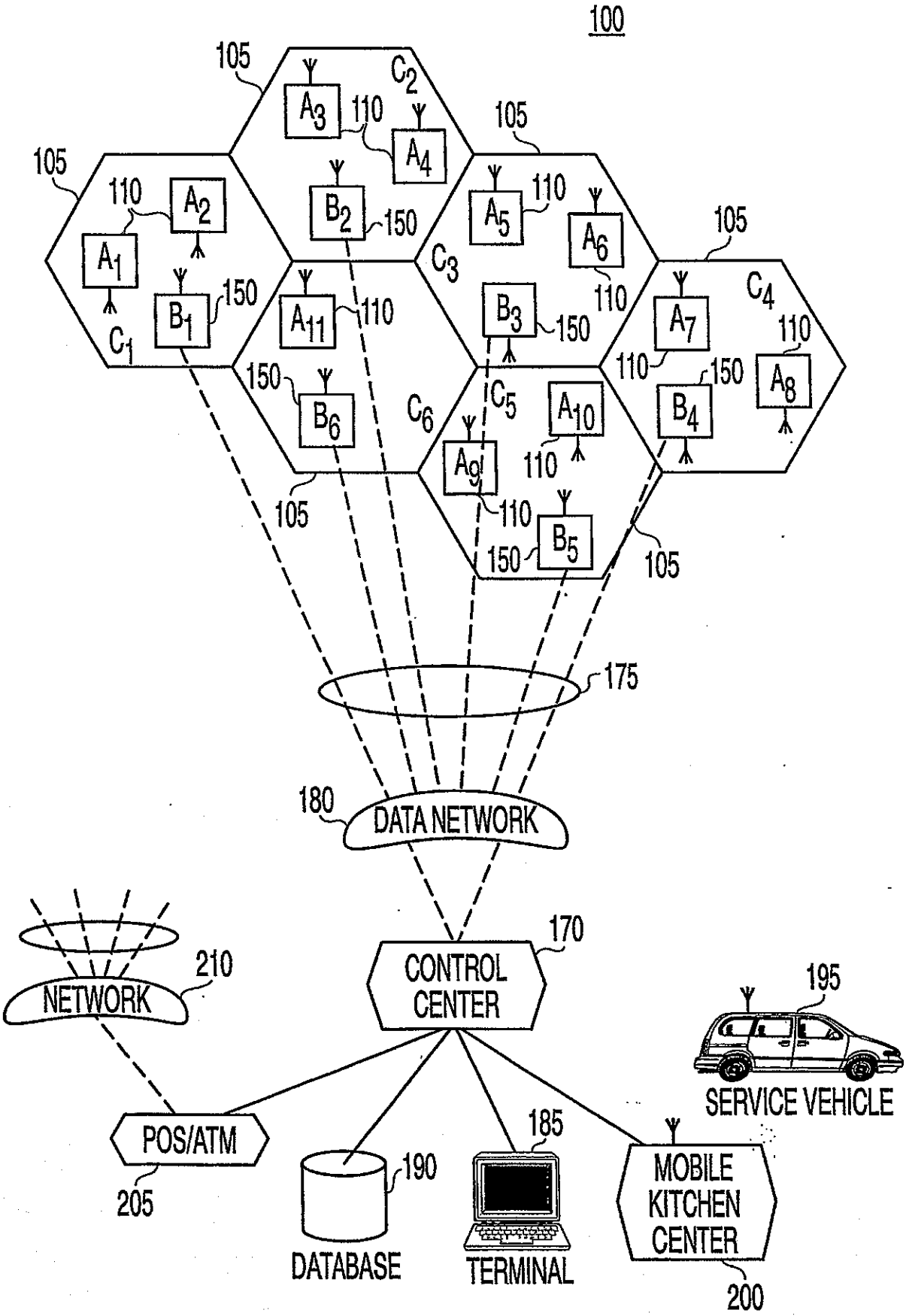

100
105
C2
A3
110
A4
105
105
110
A2
A1
B2
150
A5
110
A6
105
C3
150
B1
A11
110
B3
150
110
C4
C1
A7
110
110
150
A8
150
B6
C6
C5
A10
A9
110
110
105
110
B5
150
105
175
180
DATA NETWORK
170
CONTROL CENTER
210
NETWORK
195
SERVICE VEHICLE
POS/ATM
205
190
DATABASE
185
TERMINAL
MOBILE KITCHEN CENTER
200

Fig. 1

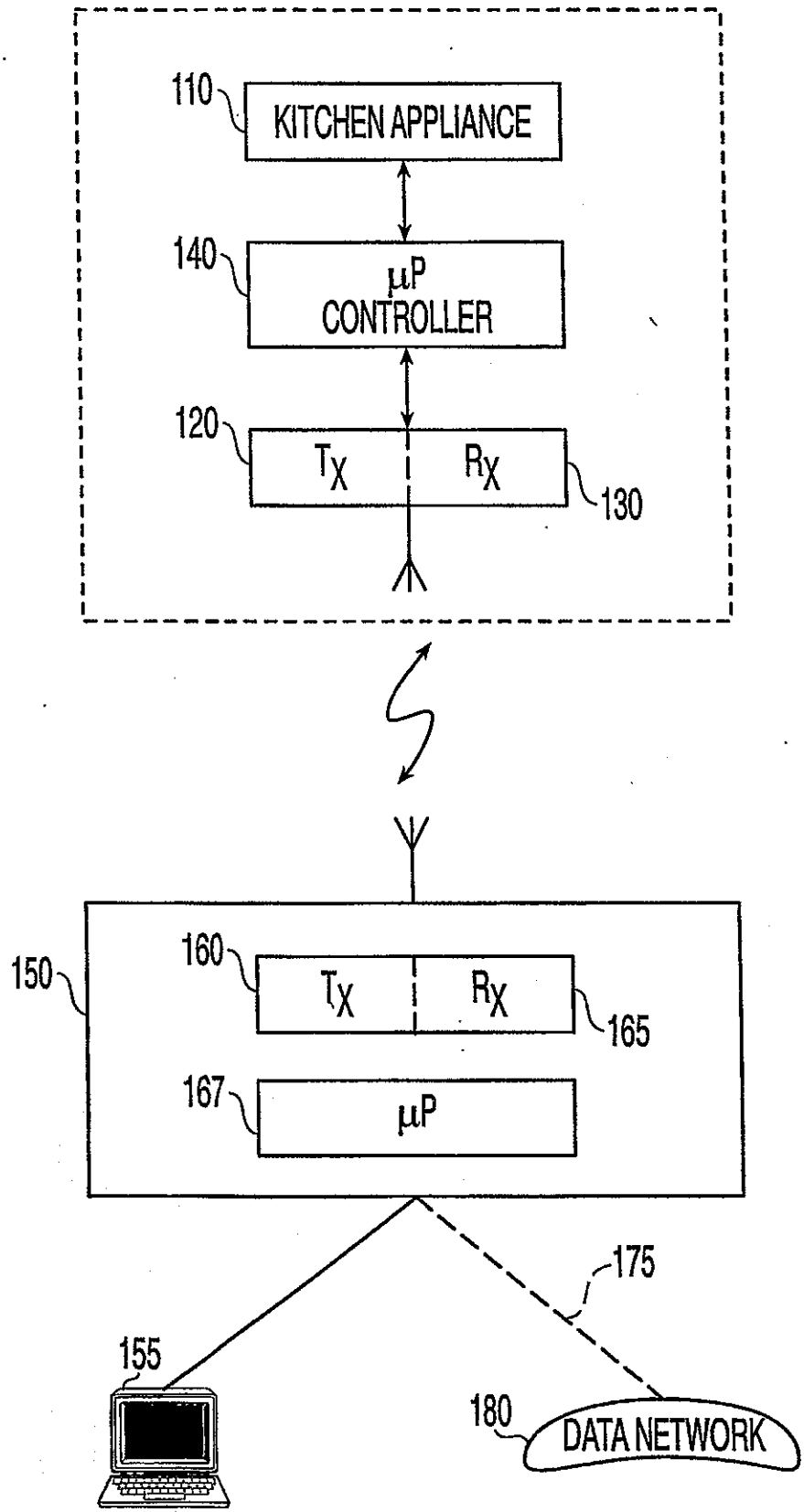

110
KITCHEN APPLIANCE
140
µP
CONTROLLER
120
TX
RX
130
150
160
TX
RX
165
167
µP
175
155
180
DATA NETWORK

Fig. 2

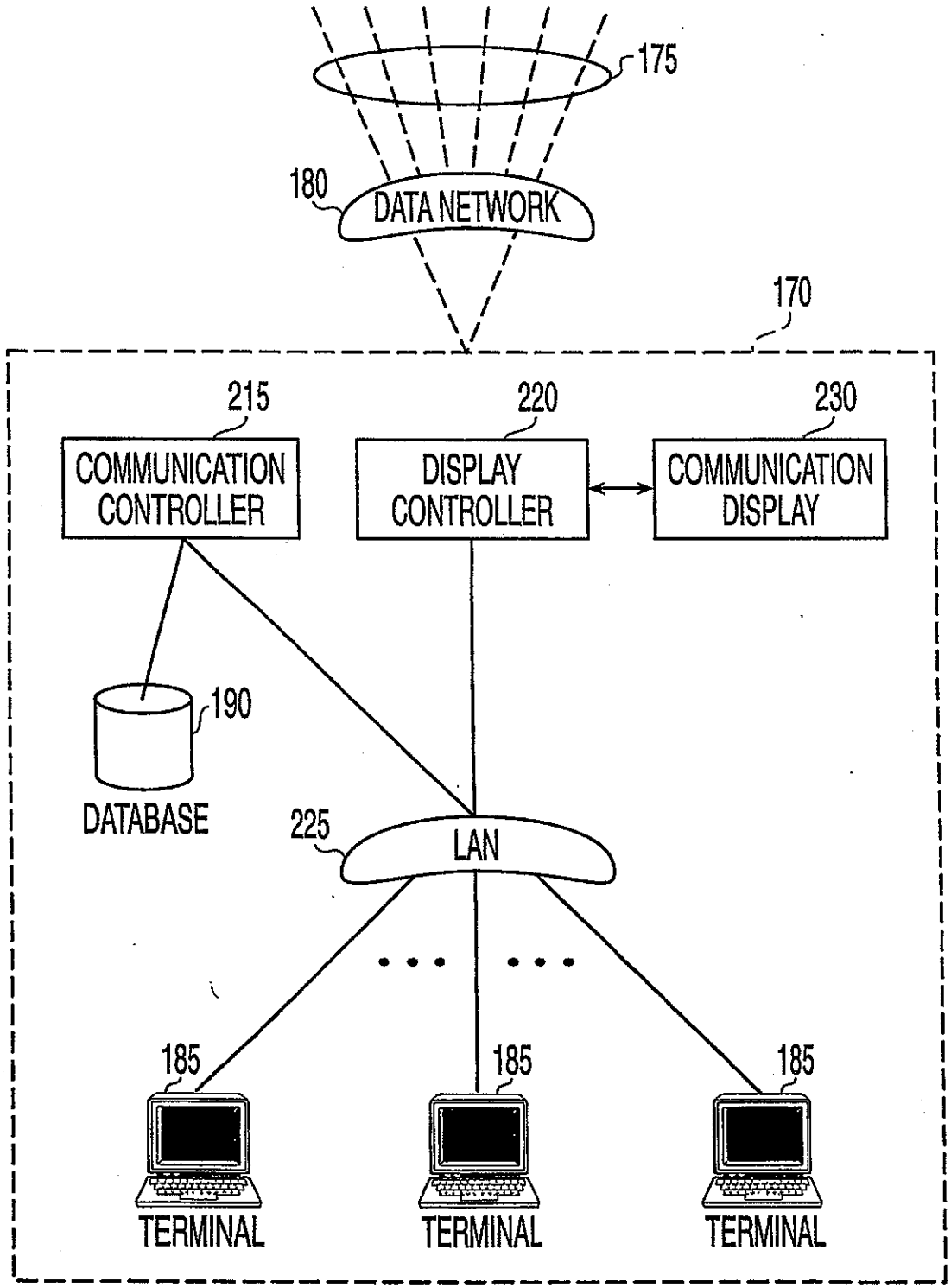

175
180
DATA NETWORK
170
215
220
230
COMMUNICATION CONTROLLER
DISPLAY CONTROLLER
COMMUNICATION DISPLAY
190
DATABASE
225
LAN
185
185
185
TERMINAL
TERMINAL
TERMINAL

Fig. 3

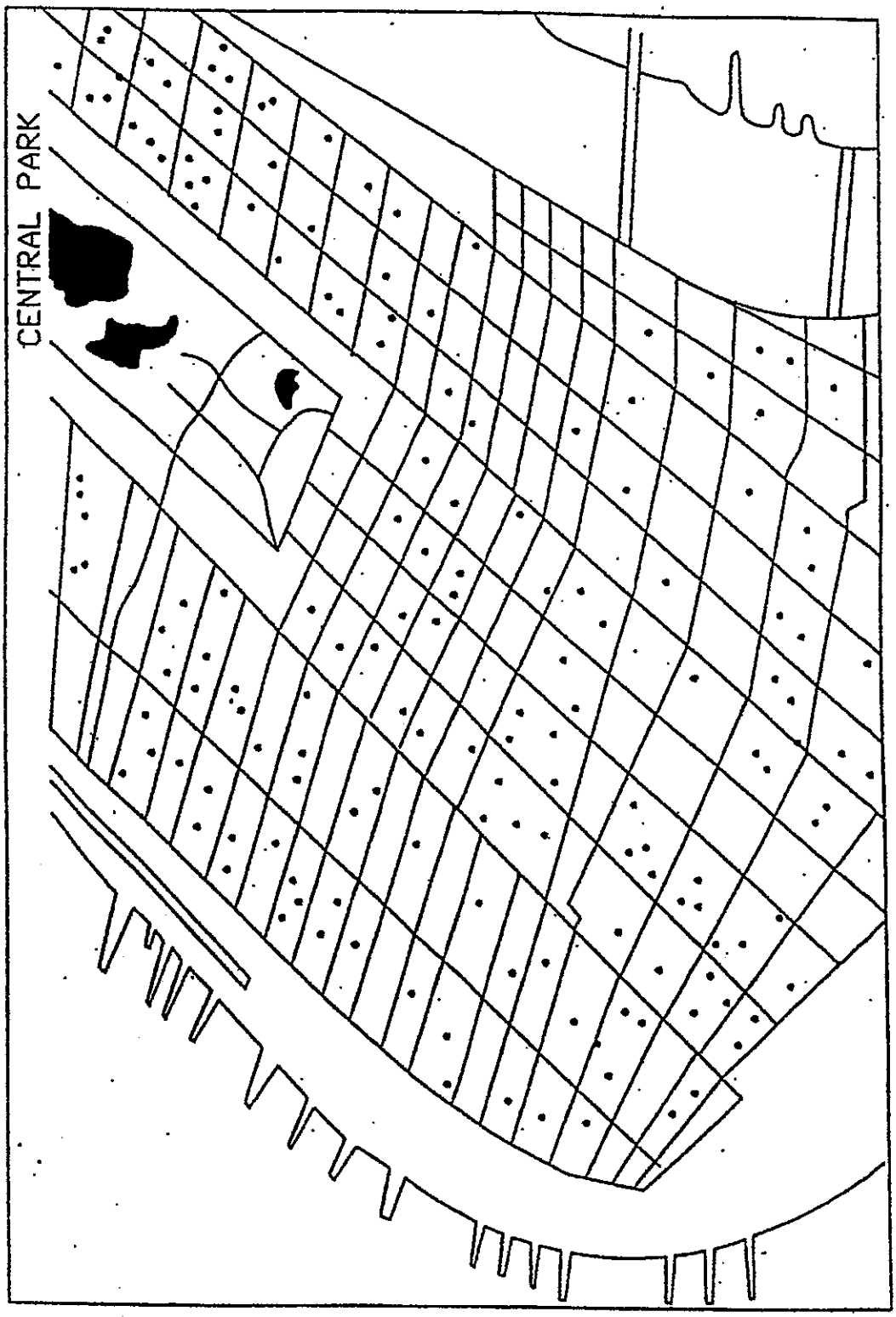


Fig. 4

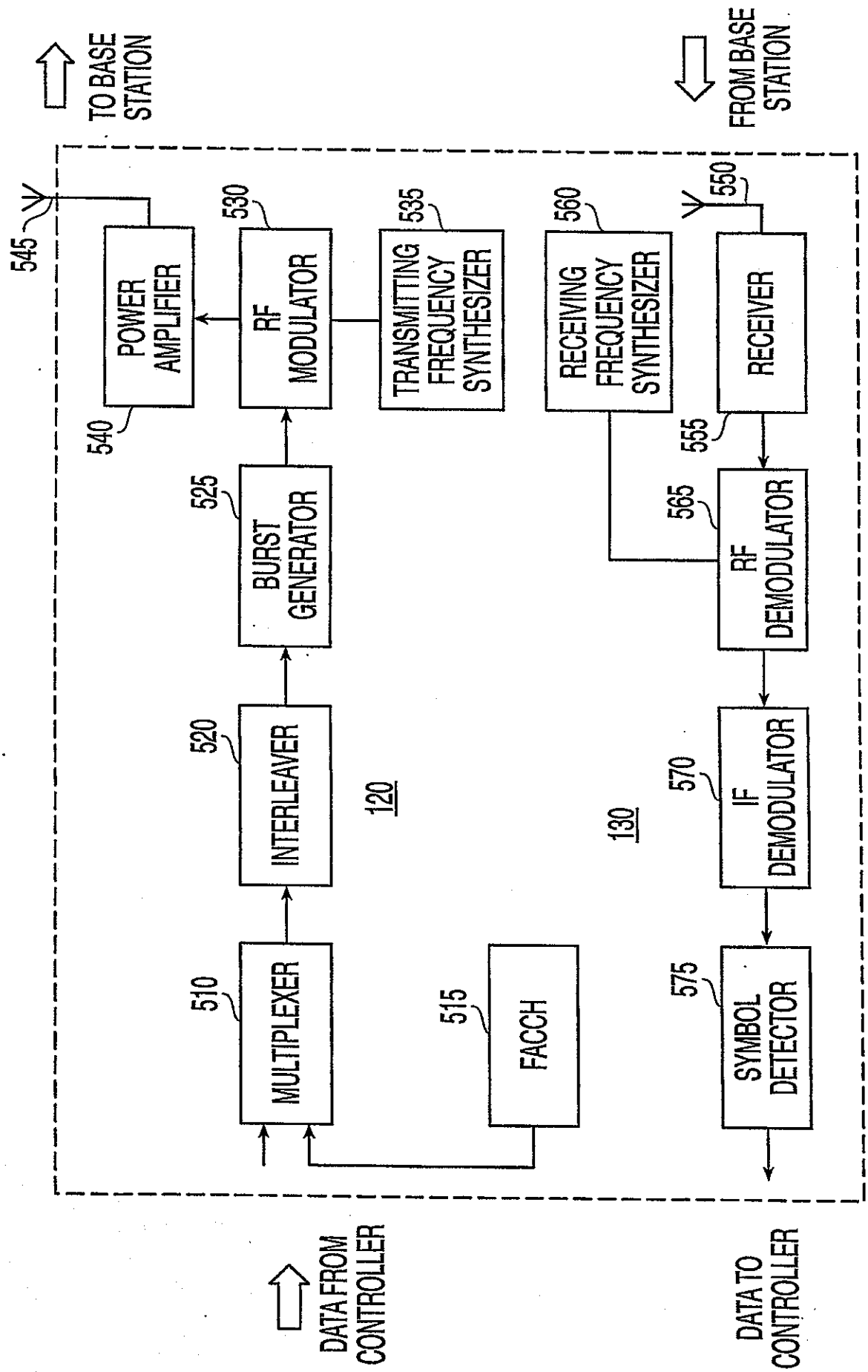

TO BASE STATION
FROM BASE STATION
545
POWER AMPLIFIER
540
530
RF MODULATOR
535
TRANSMITTING FREQUENCY SYNTHESIZER
560
RECEIVING FREQUENCY SYNTHESIZER
550
RECEIVER
555
525
BURST GENERATOR
565
RF DEMODULATOR
520
INTERLEAVER
120
130
570
IF DEMODULATOR
510
MULTIPLEXER
515
FACCH
575
SYMBOL DETECTOR
DATA FROM CONTROLLER
DATA TO CONTROLLER

Fig. 5

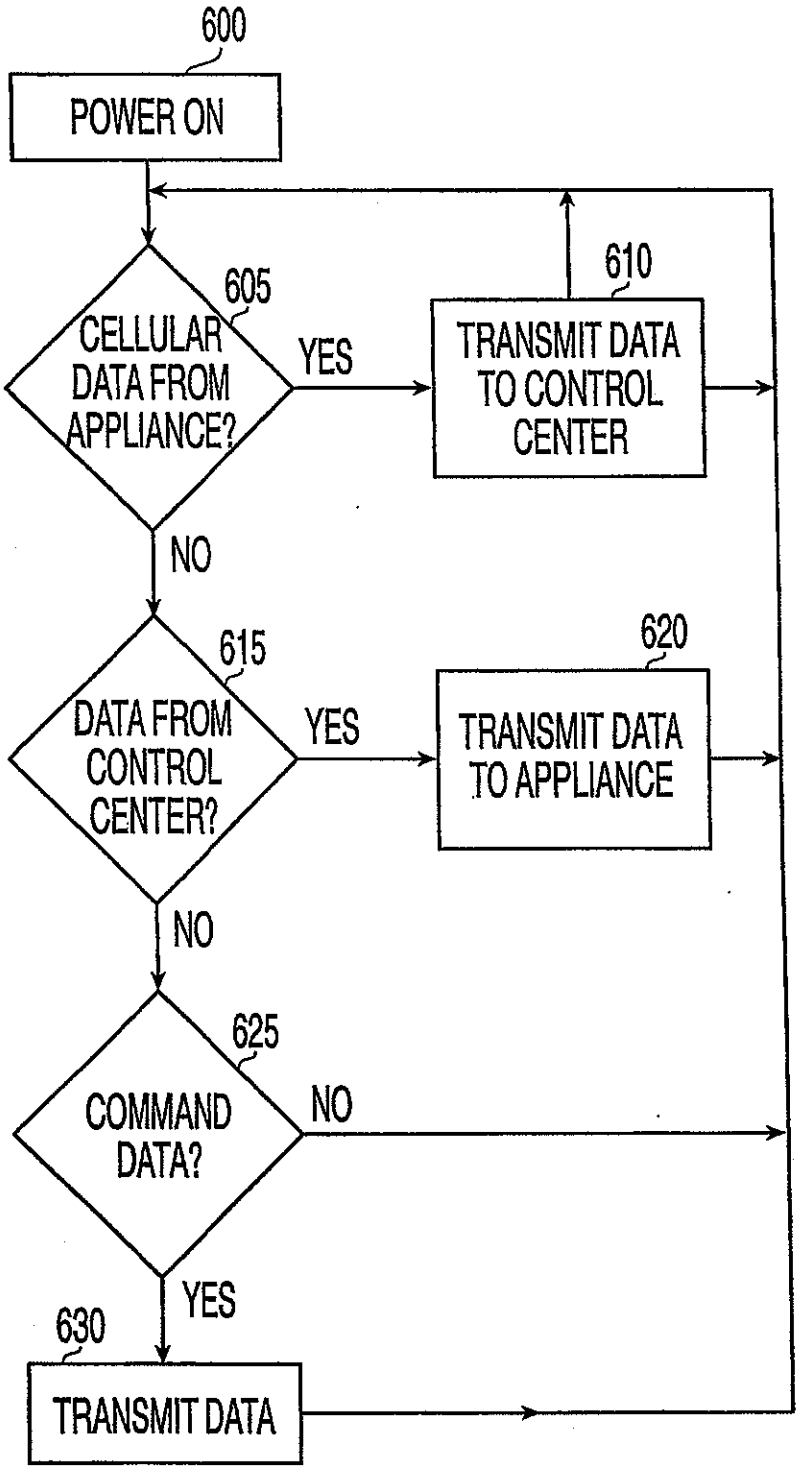

600
POWER ON
605
CELLULAR DATA FROM APPLIANCE?
YES
610
TRANSMIT DATA TO CONTROL CENTER
NO
615
DATA FROM CONTROL CENTER?
YES
620
TRANSMIT DATA TO APPLIANCE
NO
625
COMMAND DATA?
NO
YES
630
TRANSMIT DATA

Fig. 6

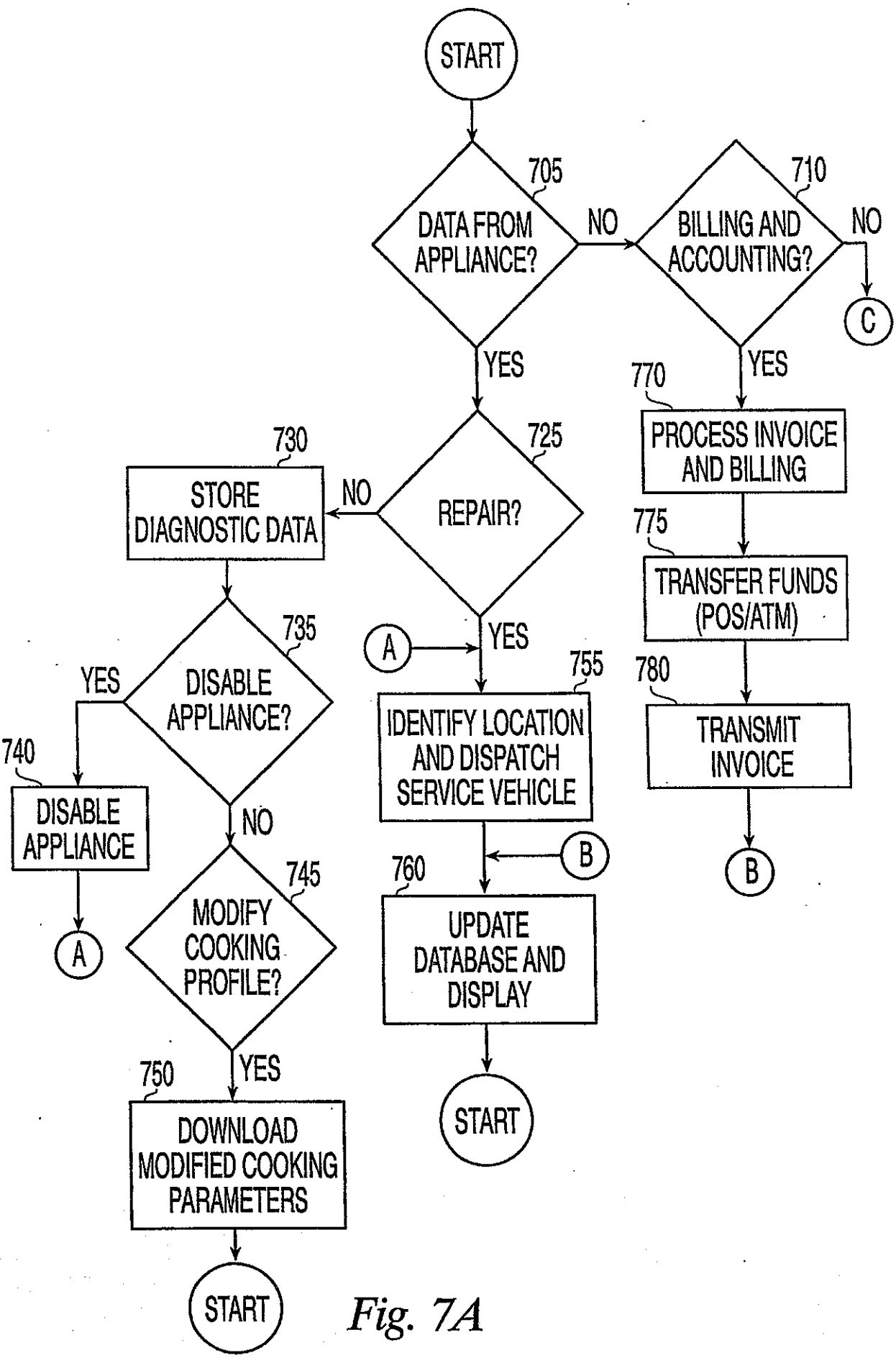

START
705
DATA FROM APPLIANCE?
NO
710
BILLING AND ACCOUNTING?
NO
C
YES
YES
770
PROCESS INVOICE AND BILLING
775
TRANSFER FUNDS (POS/ATM)
780
TRANSMIT INVOICE
B
725
REPAIR?
730
STORE DIAGNOSTIC DATA
NO
A
YES
755
IDENTIFY LOCATION AND DISPATCH SERVICE VEHICLE
B
760
UPDATE DATABASE AND DISPLAY
START
735
DISABLE APPLIANCE?
YES
740
DISABLE APPLIANCE
A
NO
745
MODIFY COOKING PROFILE?
YES
750
DOWNLOAD MODIFIED COOKING PARAMETERS
START

Fig. 7A

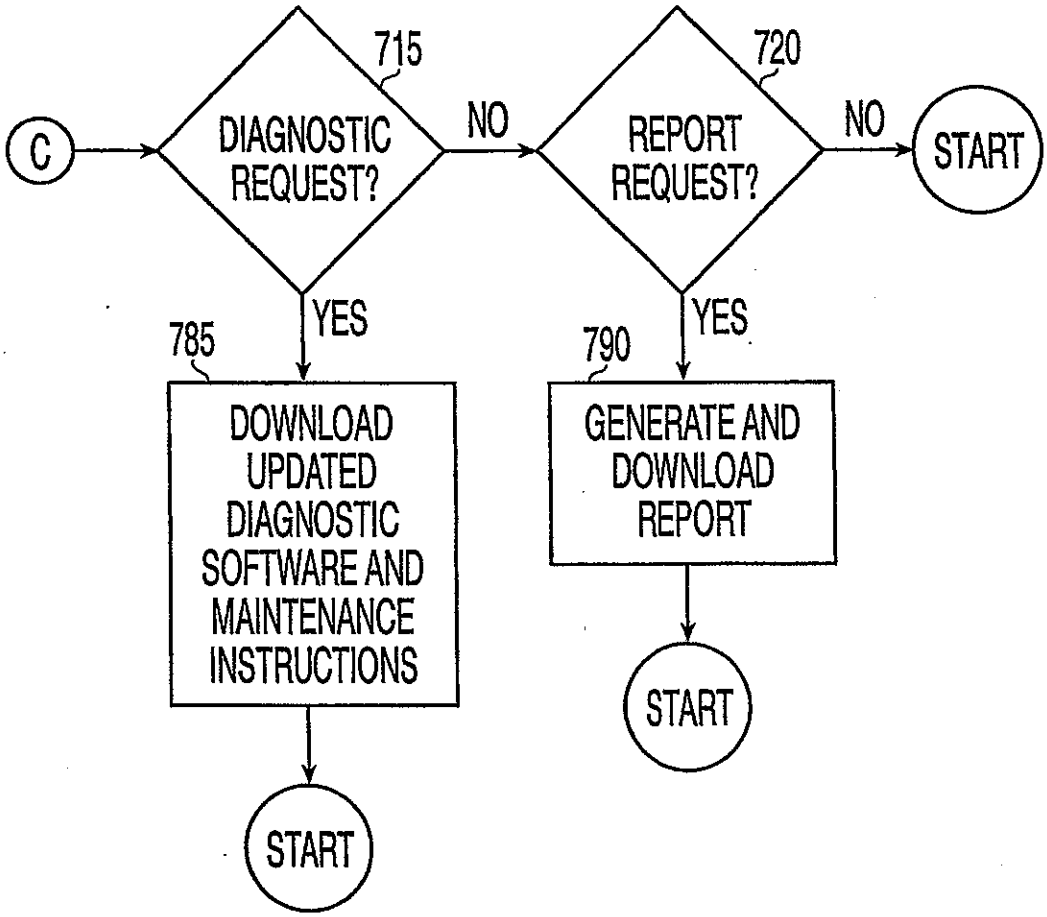

C
715
DIAGNOSTIC REQUEST?
NO
720
REPORT REQUEST?
NO
START
YES
785
DOWNLOAD UPDATED DIAGNOSTIC SOFTWARE AND MAINTENANCE INSTRUCTIONS
START
YES
790
GENERATE AND DOWNLOAD REPORT
START

Fig. 7B

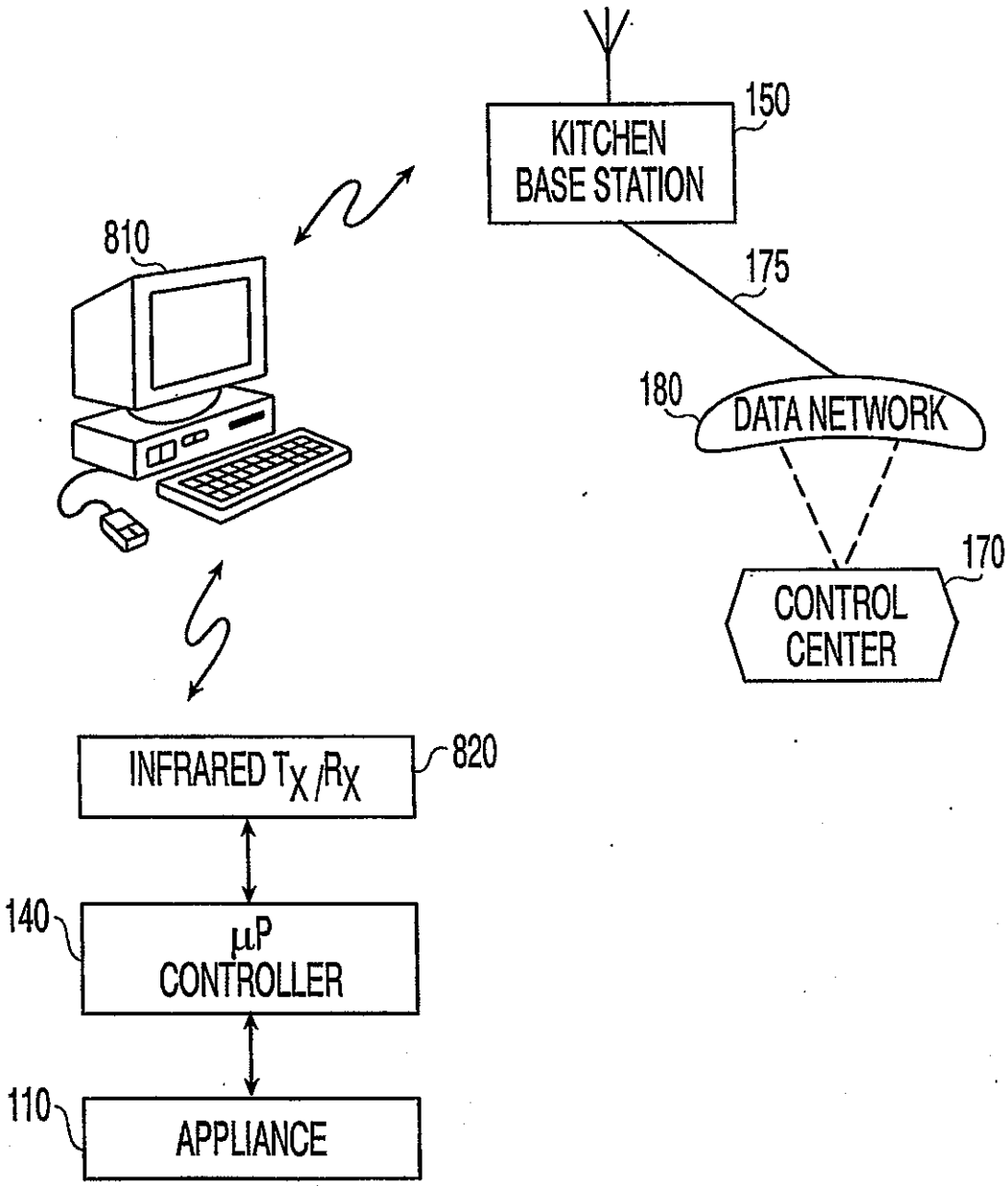

KITCHEN BASE STATION
150
175
180
DATA NETWORK
170
CONTROL CENTER
810
INFRARED T_X/R_X
820
140
µP CONTROLLER
110
APPLIANCE

Fig. 8

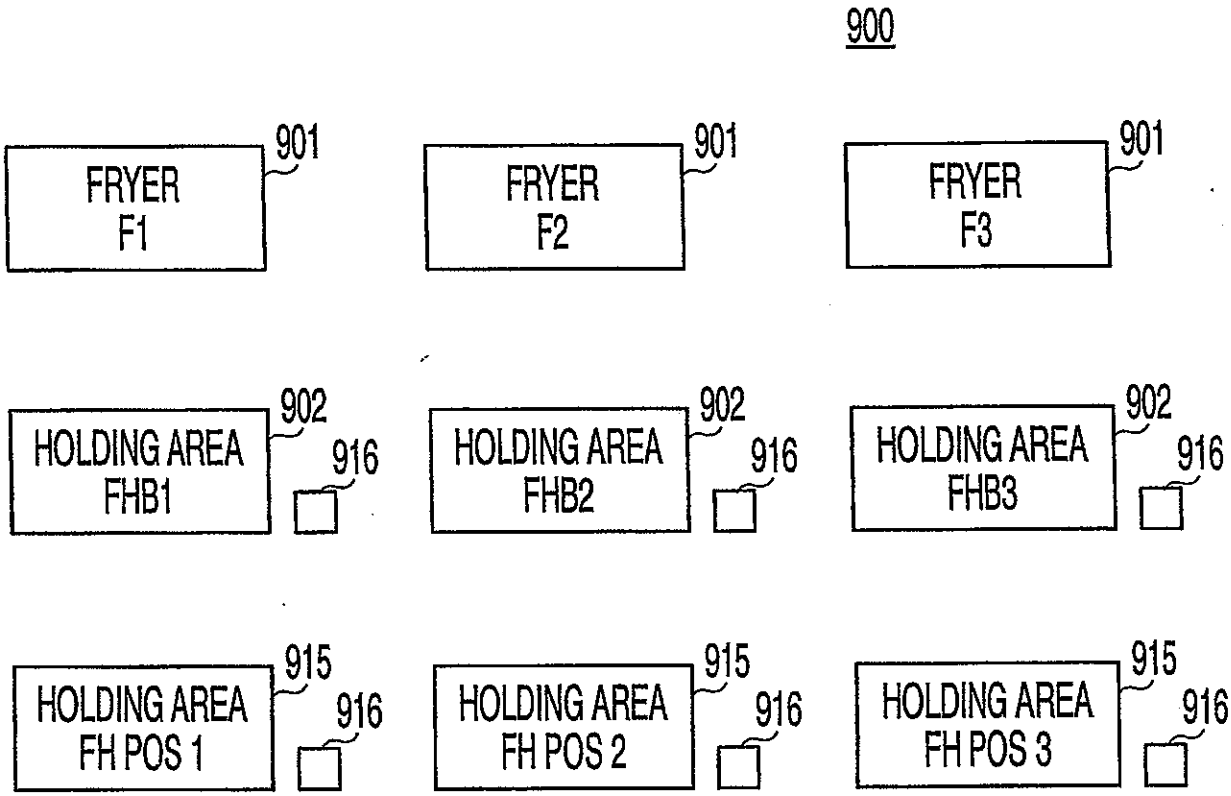

900
FRYER F1
901
FRYER F2
901
FRYER F3
901
HOLDING AREA FHB1
902
916
HOLDING AREA FHB2
902
916
HOLDING AREA FHB3
902
916
HOLDING AREA FH POS 1
915
916
HOLDING AREA FH POS 2
915
916
HOLDING AREA FH POS 3
915
916

Fig. 9A

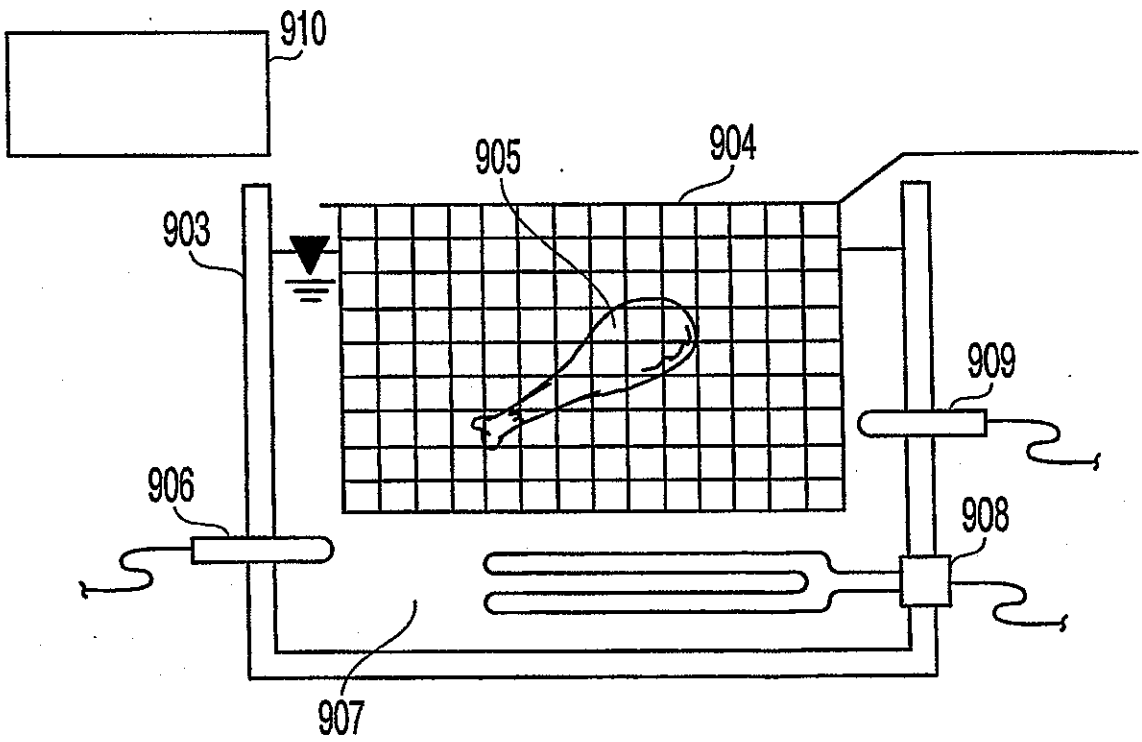

910
905
904
903
909
906
908
907

Fig. 9B

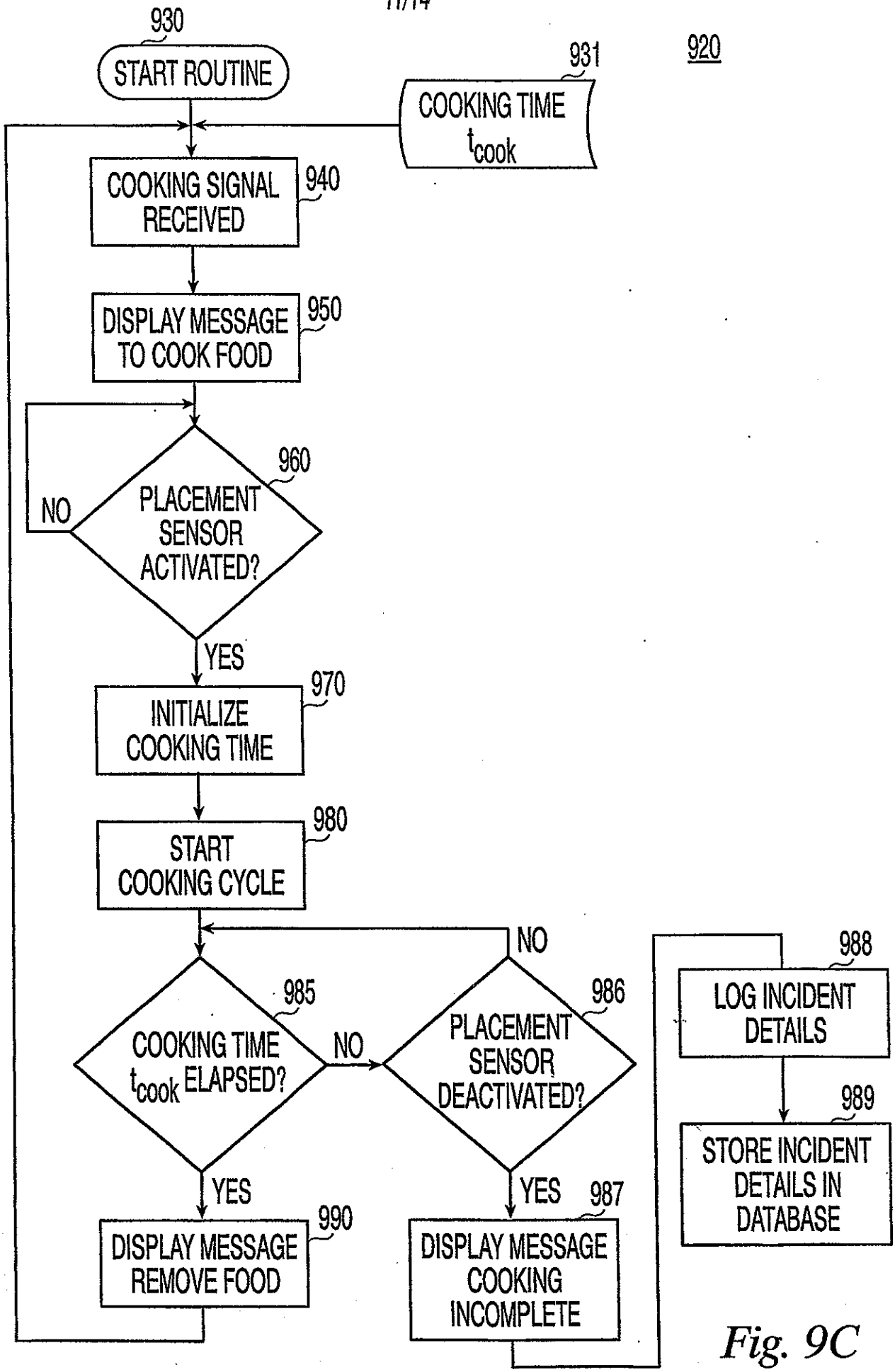

920
930
START ROUTINE
931
COOKING TIME
t_{cook}
940
COOKING SIGNAL RECEIVED
950
DISPLAY MESSAGE TO COOK FOOD
960
NO
PLACEMENT SENSOR ACTIVATED?
YES
970
INITIALIZE COOKING TIME
980
START COOKING CYCLE
NO
985
COOKING TIME t_{cook} ELAPSED?
NO
986
PLACEMENT SENSOR DEACTIVATED?
YES
990
DISPLAY MESSAGE REMOVE FOOD
YES
987
DISPLAY MESSAGE COOKING INCOMPLETE
988
LOG INCIDENT DETAILS
989
STORE INCIDENT DETAILS IN DATABASE

Fig. 9C

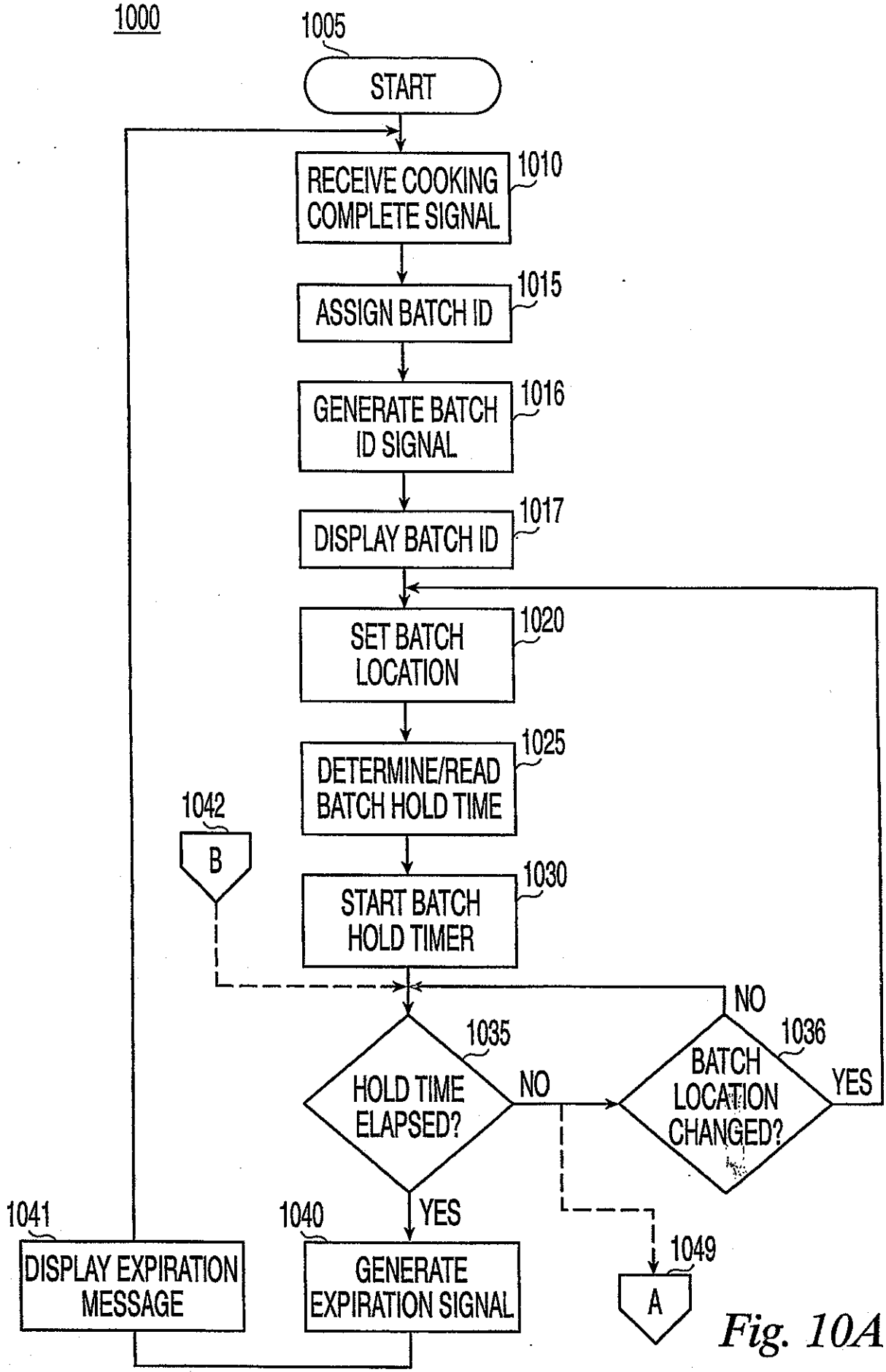

1000
1005
START
RECEIVE COOKING COMPLETE SIGNAL
1010
ASSIGN BATCH ID
1015
GENERATE BATCH ID SIGNAL
1016
DISPLAY BATCH ID
1017
SET BATCH LOCATION
1020
DETERMINE/READ BATCH HOLD TIME
1025
1042
B
START BATCH HOLD TIMER
1030
NO
1035
HOLD TIME ELAPSED?
NO
1036
BATCH LOCATION CHANGED?
YES
1041
DISPLAY EXPIRATION MESSAGE
1040
YES
GENERATE EXPIRATION SIGNAL
1049
A

Fig. 10A

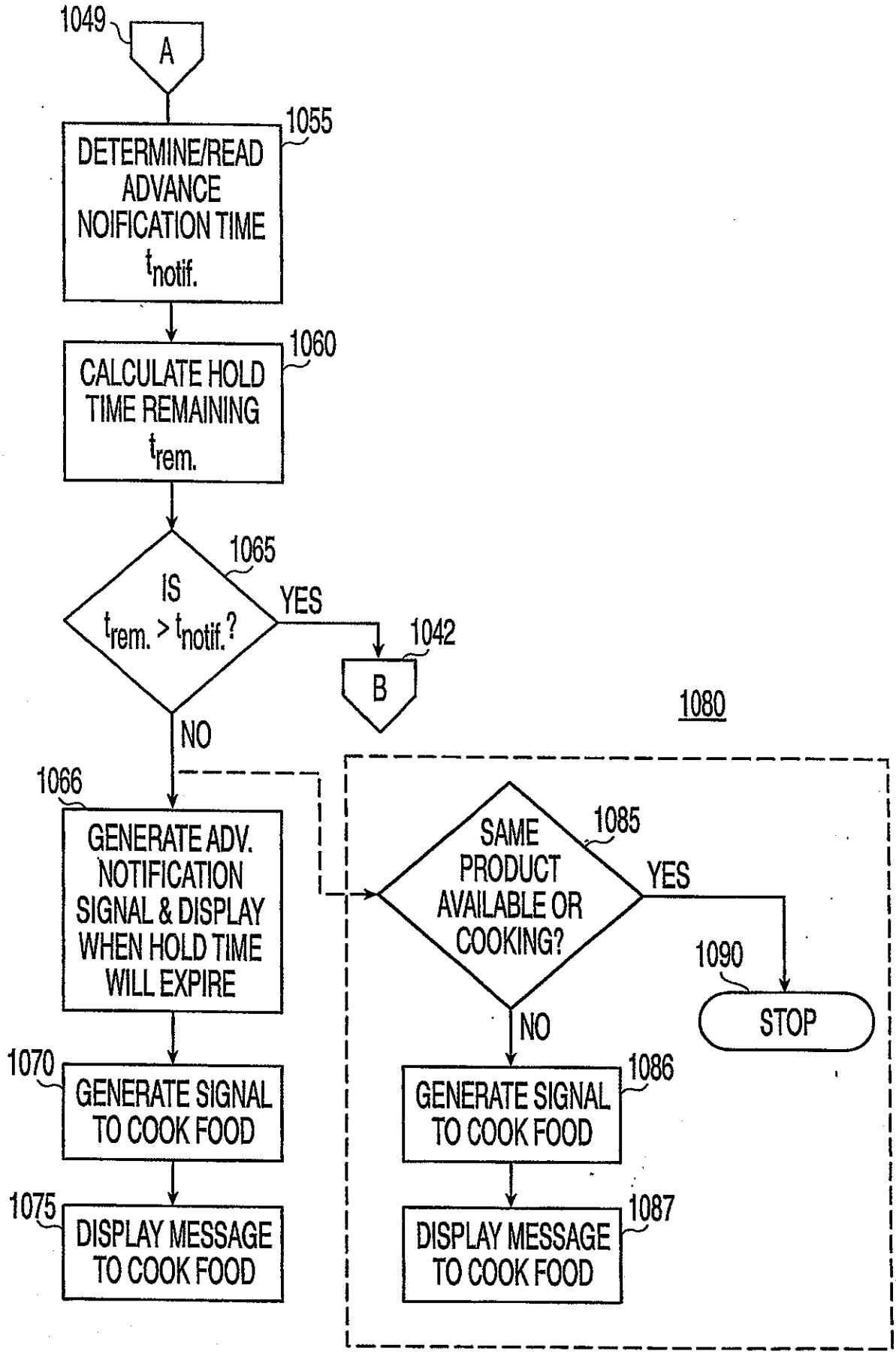

1049
A
1055
DETERMINE/READ ADVANCE NOIFICATION TIME $t_{notif.}$
1060
CALCULATE HOLD TIME REMAINING $t_{rem.}$
1065
IS $t_{rem.} > t_{notif.}$?
YES
1042
B
NO
1080
1066
GENERATE ADV. NOTIFICATION SIGNAL & DISPLAY WHEN HOLD TIME WILL EXPIRE
1085
SAME PRODUCT AVAILABLE OR COOKING?
YES
1090
STOP
NO
1070
GENERATE SIGNAL TO COOK FOOD
1086
GENERATE SIGNAL TO COOK FOOD
1075
DISPLAY MESSAGE TO COOK FOOD
1087
DISPLAY MESSAGE TO COOK FOOD

Fig. 10B

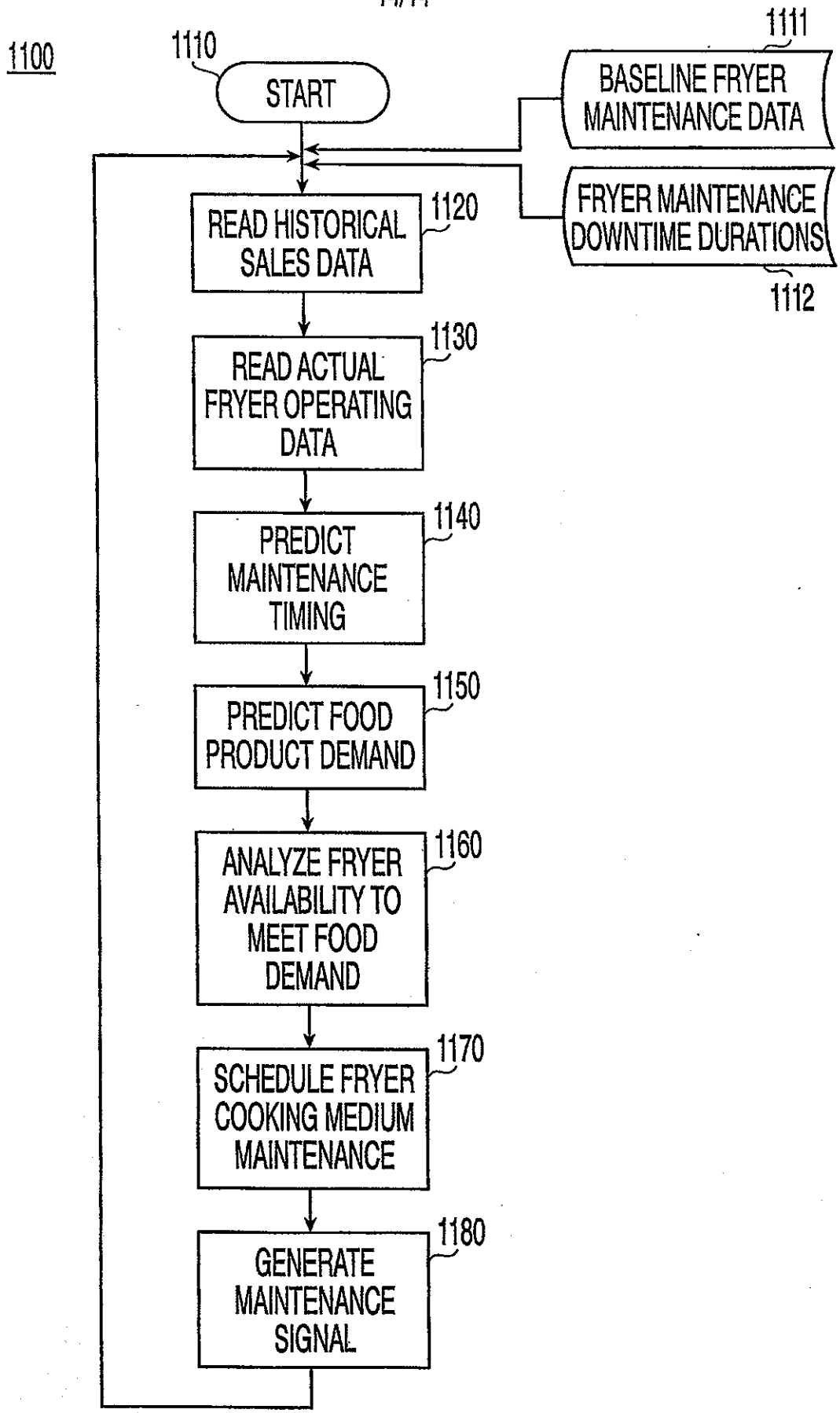

1100
1110
START
1111
BASELINE FRYER MAINTENANCE DATA
FRYER MAINTENANCE DOWNTIME DURATIONS
1112
READ HISTORICAL SALES DATA
1120
READ ACTUAL FRYER OPERATING DATA
1130
PREDICT MAINTENANCE TIMING
1140
PREDICT FOOD PRODUCT DEMAND
1150
ANALYZE FRYER AVAILABILITY TO MEET FOOD DEMAND
1160
SCHEDULE FRYER COOKING MEDIUM MAINTENANCE
1170
GENERATE MAINTENANCE SIGNAL
1180

Fig. 11