Basic Unit

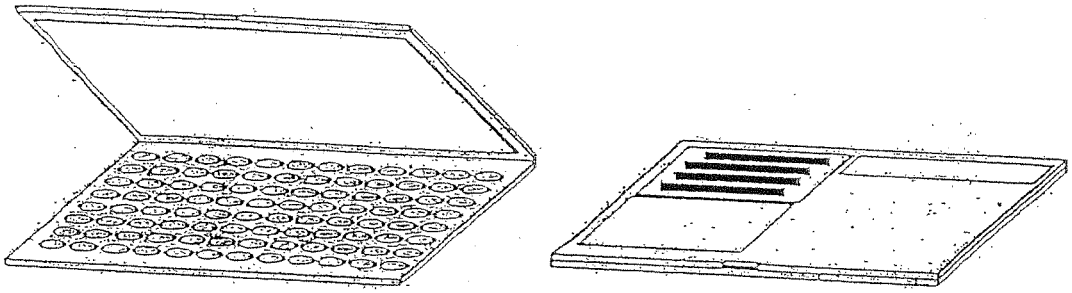


Figure 1

Pressure Module

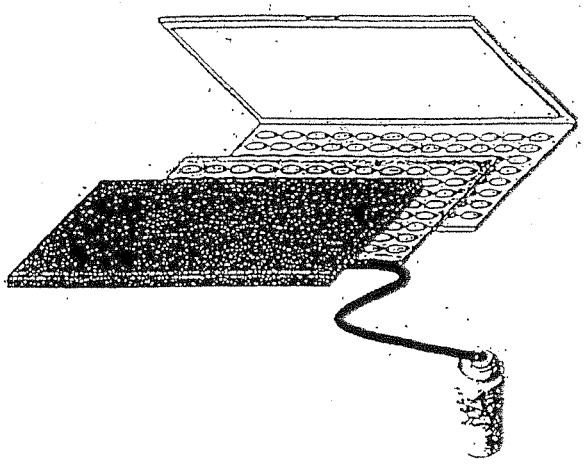


Figure 2

Design of the pressure unit with air channels

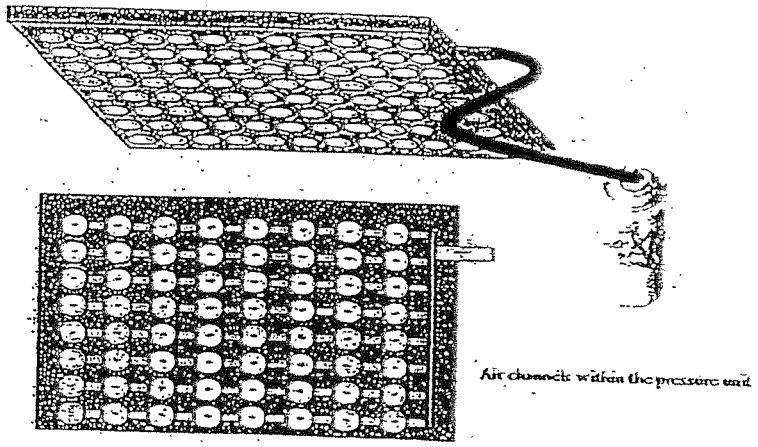
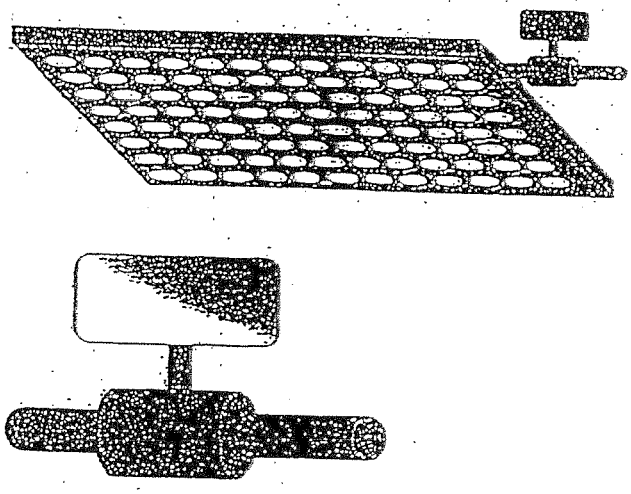


Figure 3



Air pressure
Regulating
valve

Figure 4

Standardized PCR Reagent Module

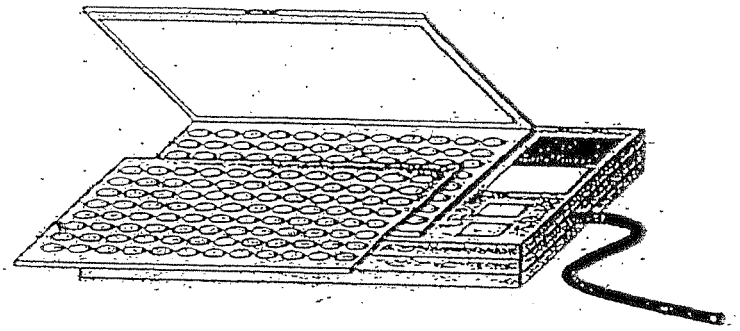


Figure 5

CloneGard shipping sleeve

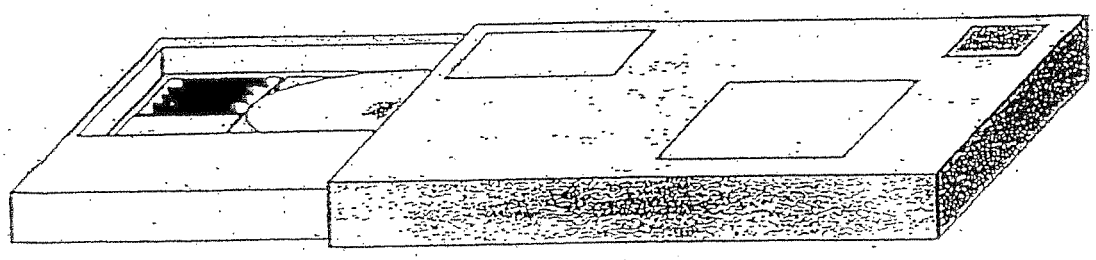


Figure 6

Stacking Rack

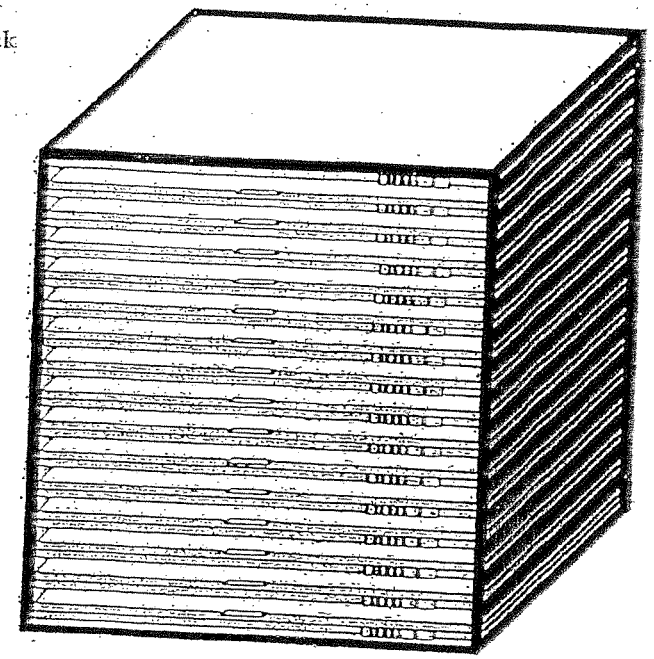


Figure 7

Less than 96 well solutions

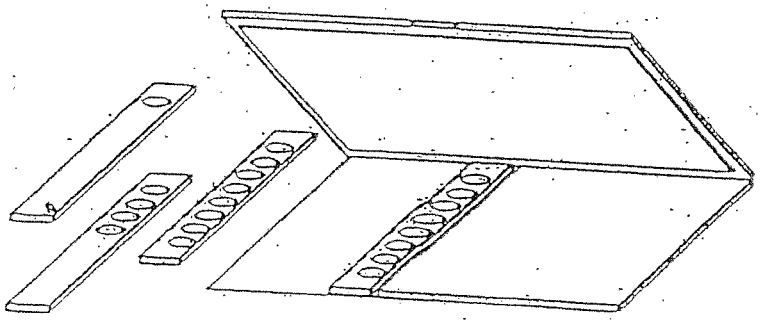


Figure 8

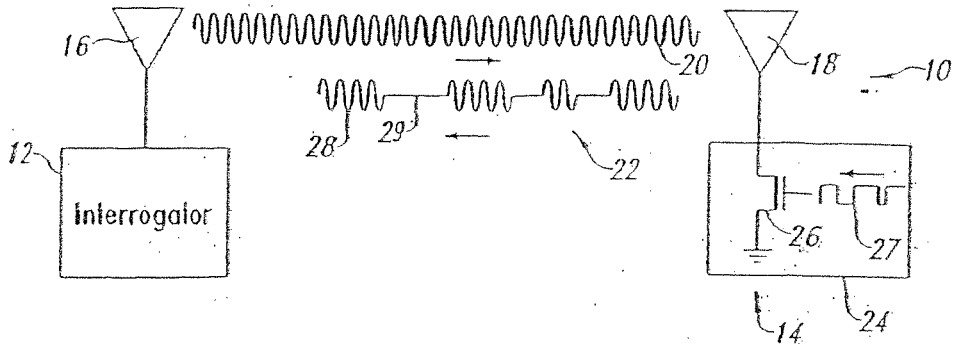


Fig. 9
(Prior Art)

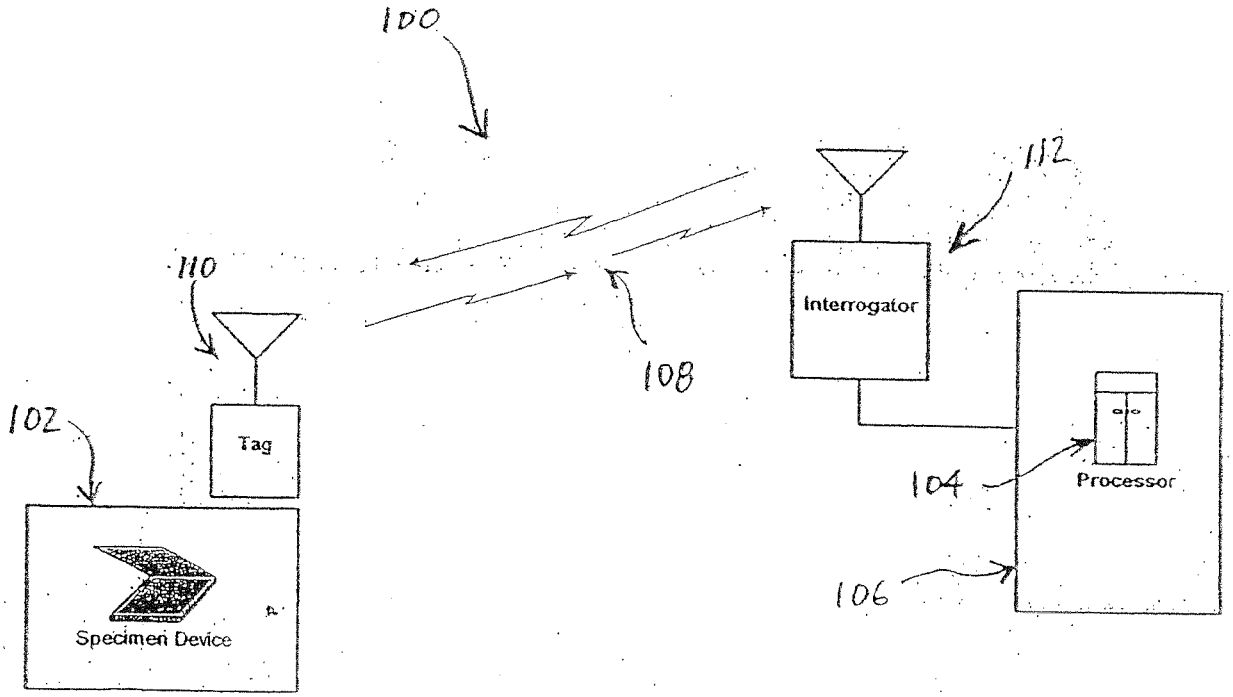
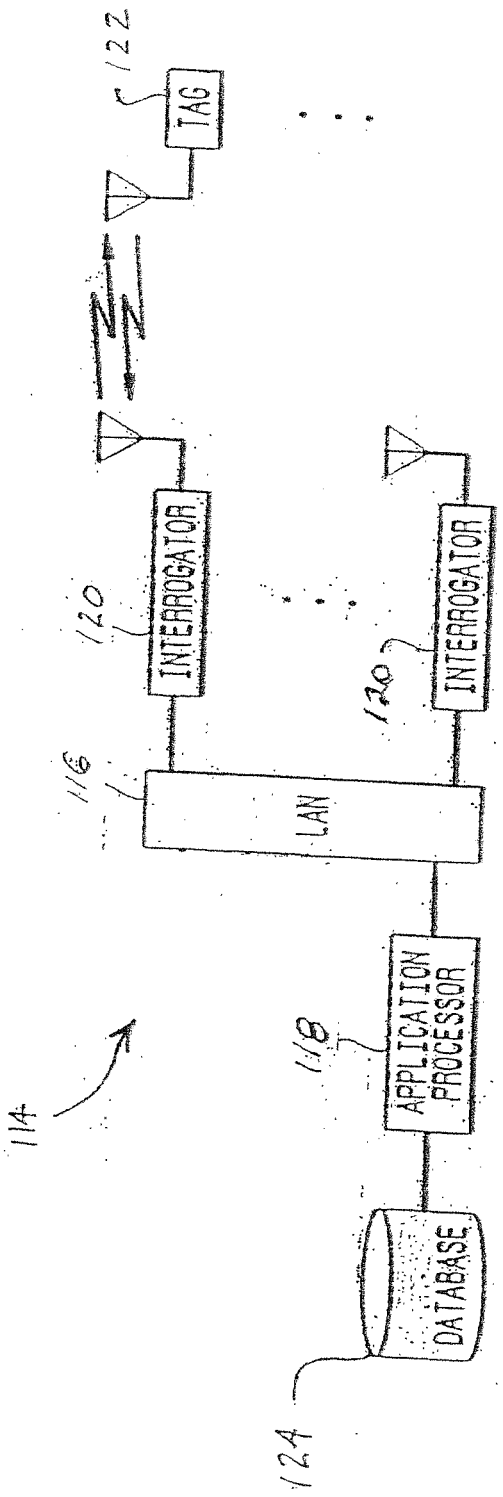


Fig. 10

FIG. 11


114
116
118
120
120
122
124
TAG
INTERROGATOR
INTERROGATOR
LAN
APPLICATION PROCESSOR
DATABASE

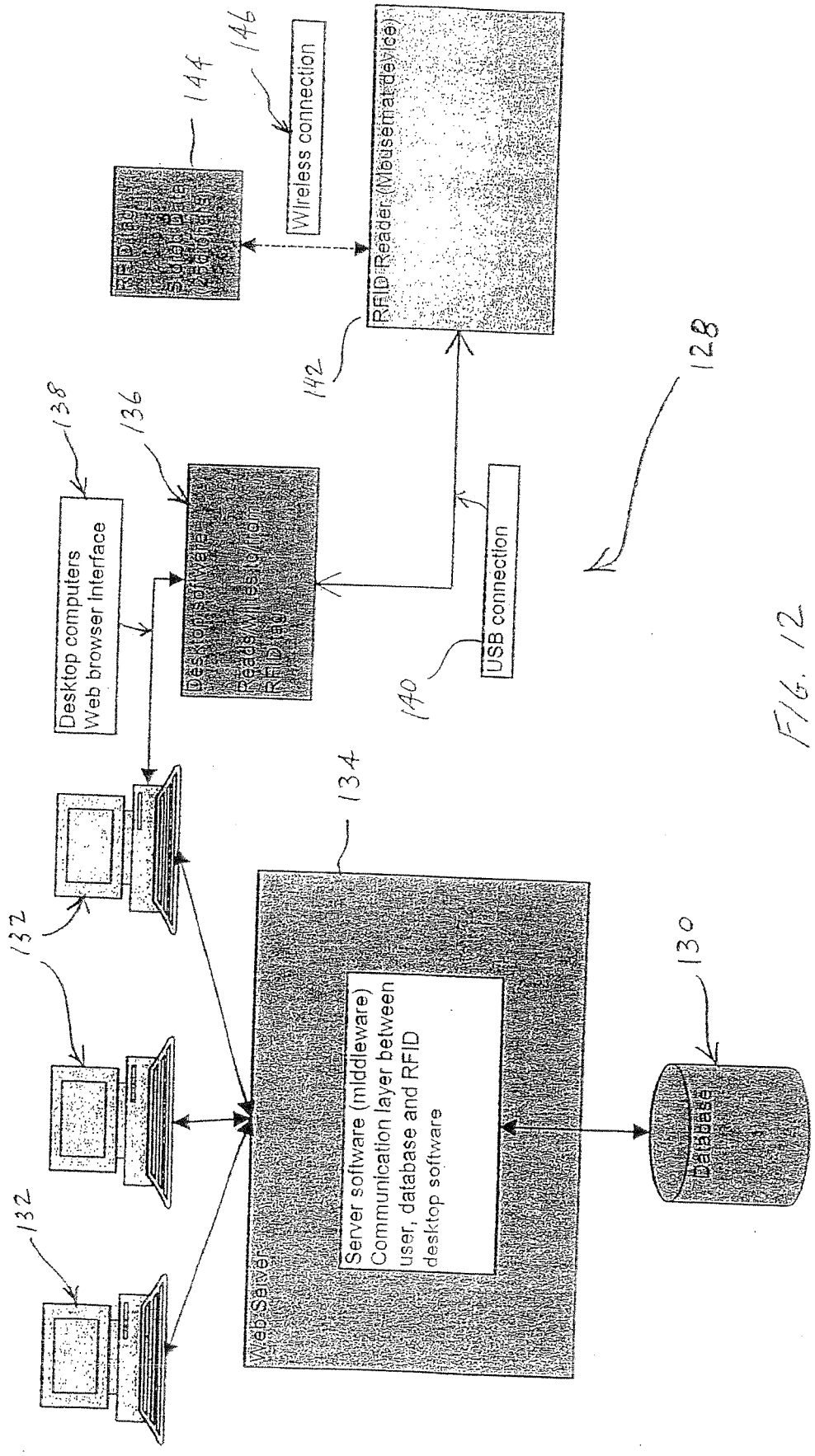

RFID tag
Wireless connection
RFID Reader (Mouse mat device)
Desktop computers
Web browser interface
Desktop software
USB connection
Web Server
Server software (middleware)
Communication layer between
user, database and RFID
desktop software
Database
128
130
132
132
134
136
138
140
142
144
146

FIG. 12

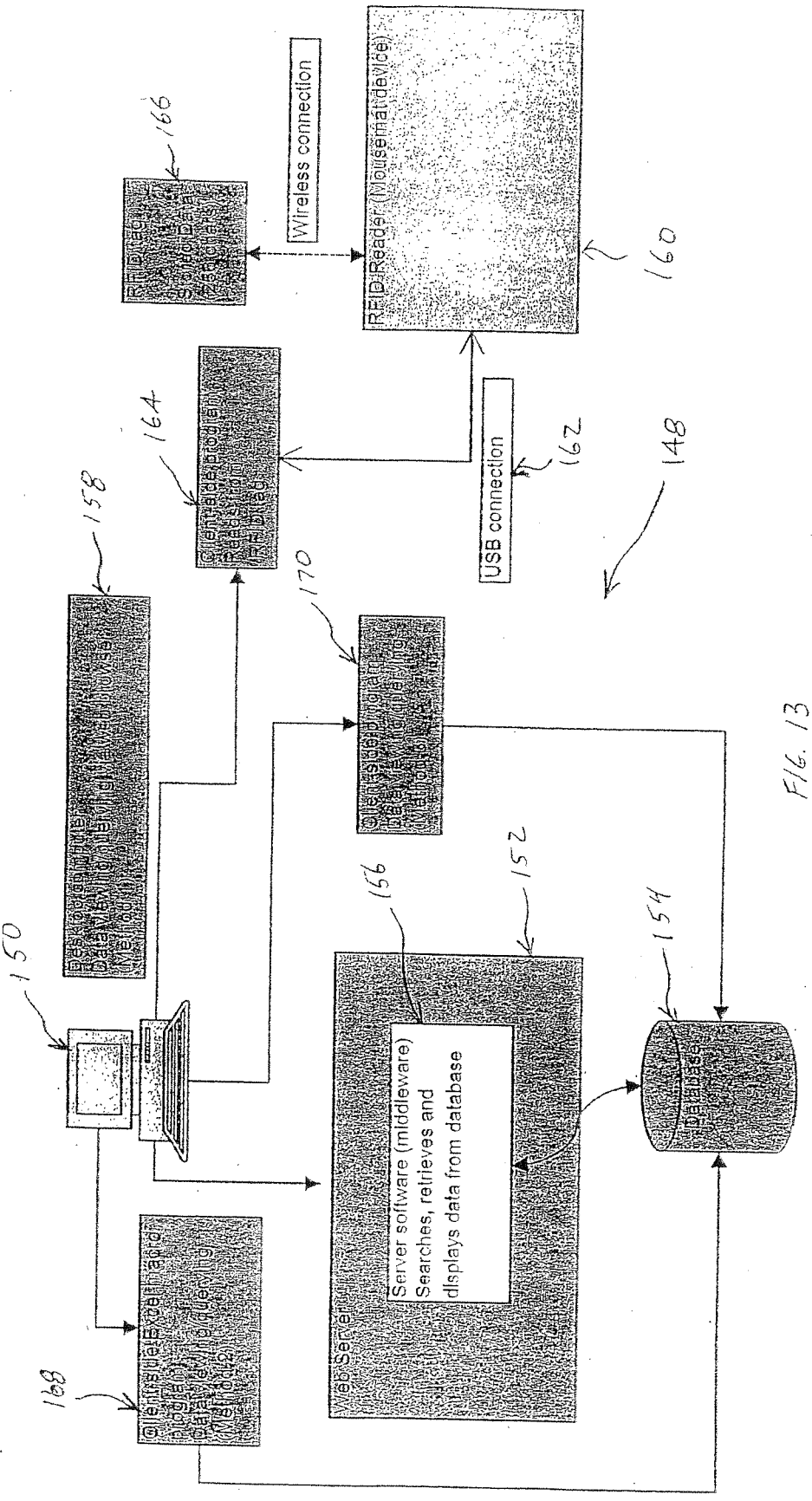

Wireless connection
166
RFID Reader (Mouse/handheld)
160
USB connection
162
164
158
148
170
150
156
152
154
Server software (middleware)
Searches, retrieves and
displays data from database
168

FIG. 13

FIGURE 14

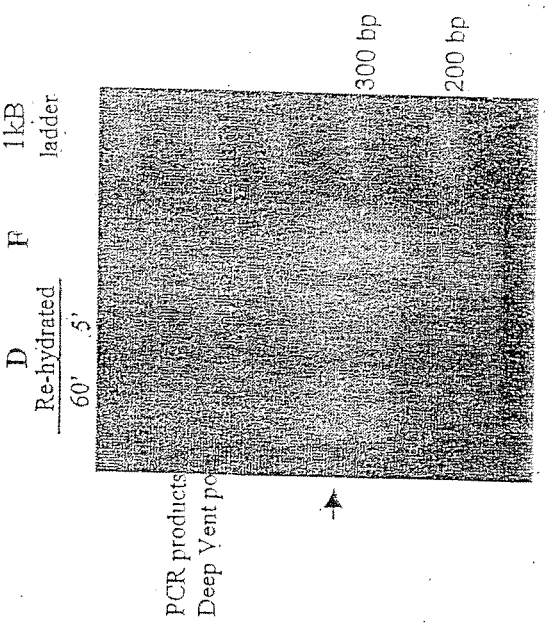
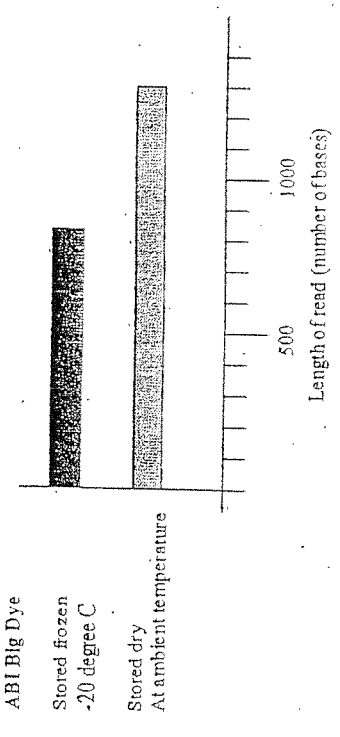

D
Re-hydrated
60'
5'
F
1kB
ladder
300 bp
200 bp
PCR products
Deep Vent po

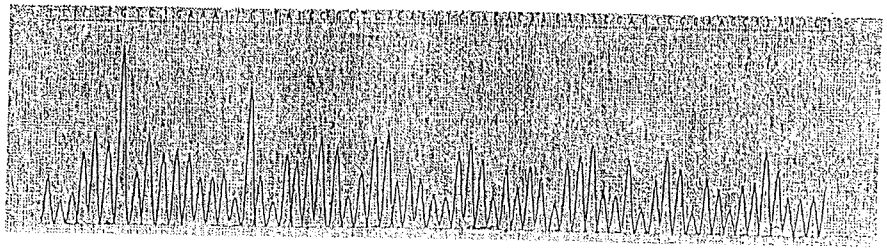
FIGURE 15A


ABI Big Dye
Stored frozen
-20 degree C
Stored dry
At ambient temperature
500
1000
Length of read (number of bases)

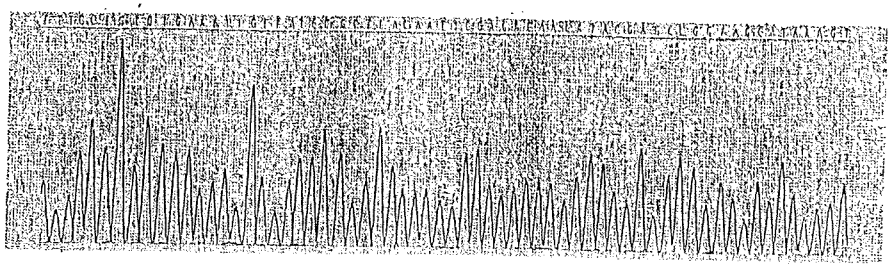
Cycle sequencing

Stored dry on matrix

Dry Storage on matrix



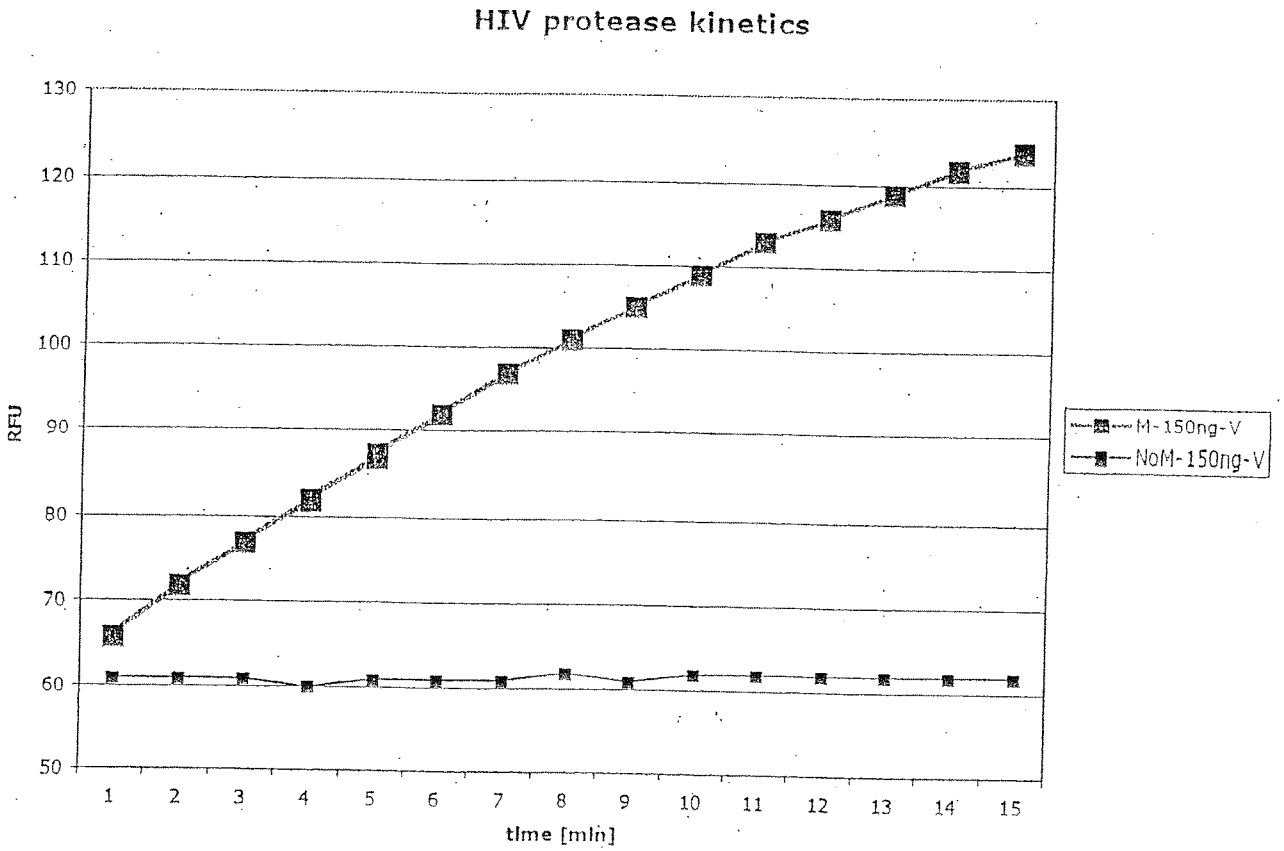
Frozen Storage (-20°C)



Stored frozen -20oC in TE

FIGURE 15B

FIGURE 16



Protease activity assay with purified HIV protease and FRET based labeled peptide substrate: The cleavage of the substrate by the protease results in a light emission. The emission is read by the fluorescent plate reader (Packard, Fusion). X axis Represents time and Y axis represents fluorescent intensity. The orange

FIGURE 17

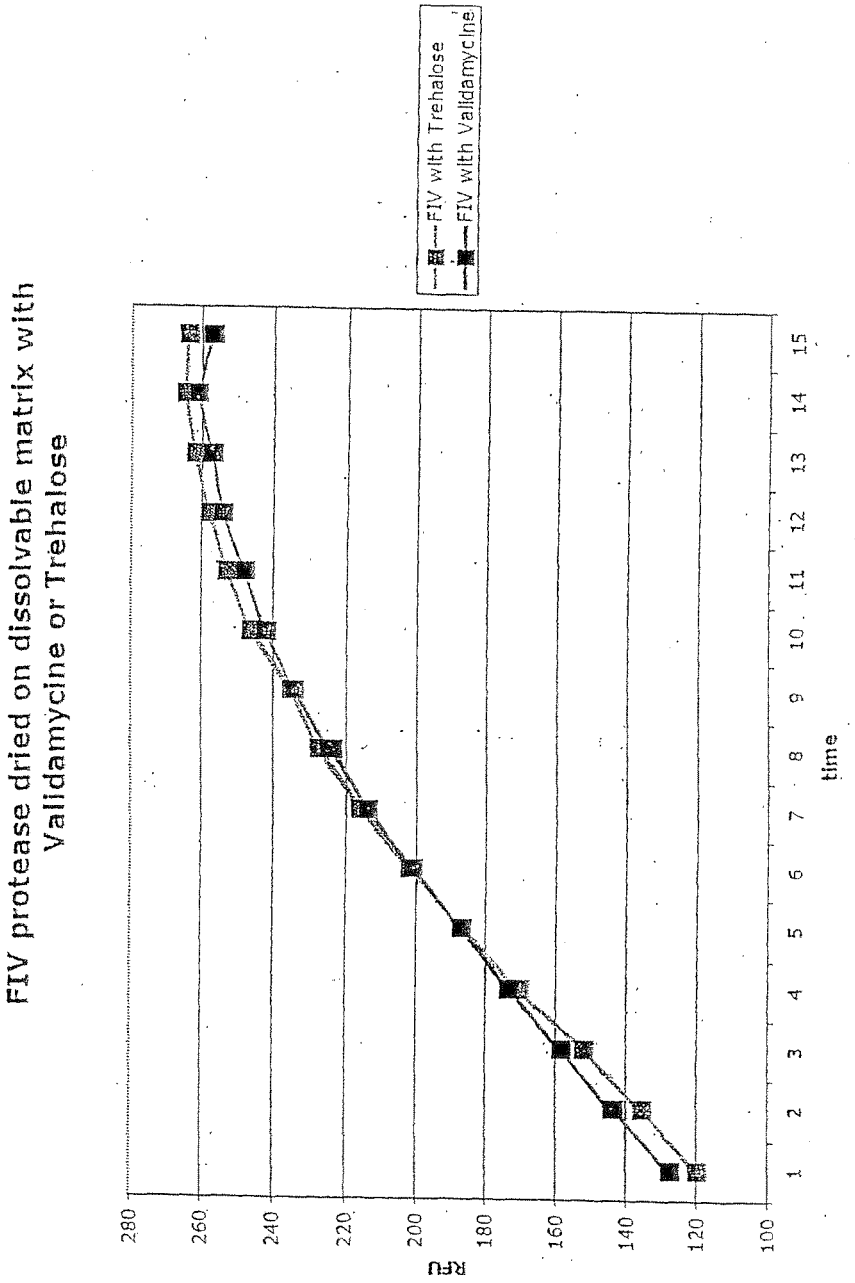

FIV protease dried on dissolvable matrix with Validamycine or Trehalose
FIV with Trehalose
FIV with Validamycine
RFU
time
280
260
240
220
200
180
160
140
120
100
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

FIGURE 18

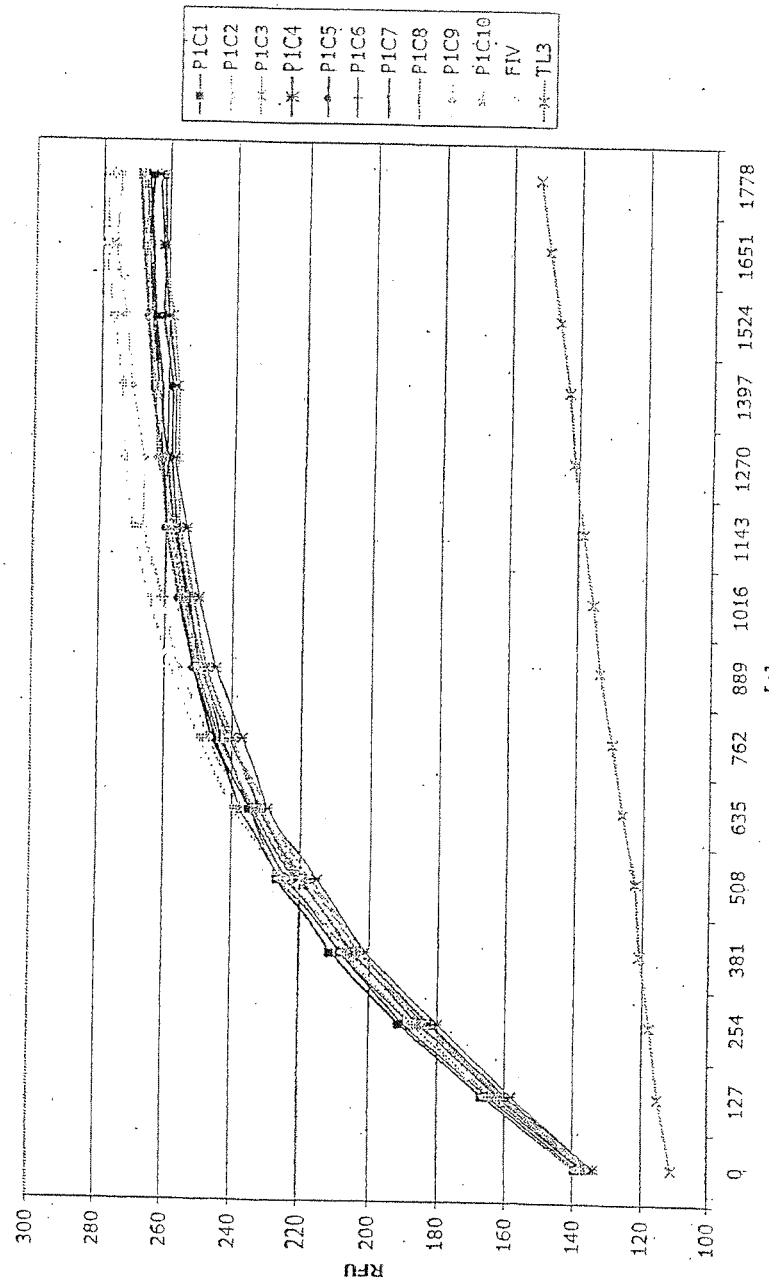
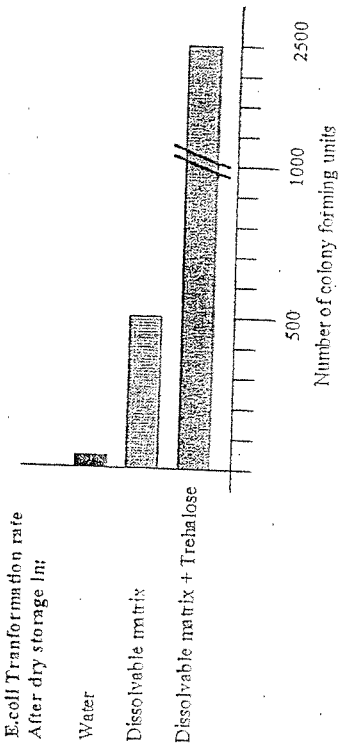

P1C
P1C1
P1C2
P1C3
P1C4
P1C5
P1C6
P1C7
P1C8
P1C9
P1C10
FIV
TL3
RFU
300
280
260
240
220
200
180
160
140
120
100
0
127
254
381
508
635
762
889
1016
1143
1270
1397
1524
1651
1778
[s]

FIGURE 19


E.coli Tranformation rate
After dry storage In:
Water
Dissolvable matrix
Dissolvable matrix + Trehalose
500
1000
2500
Number of colony forming units