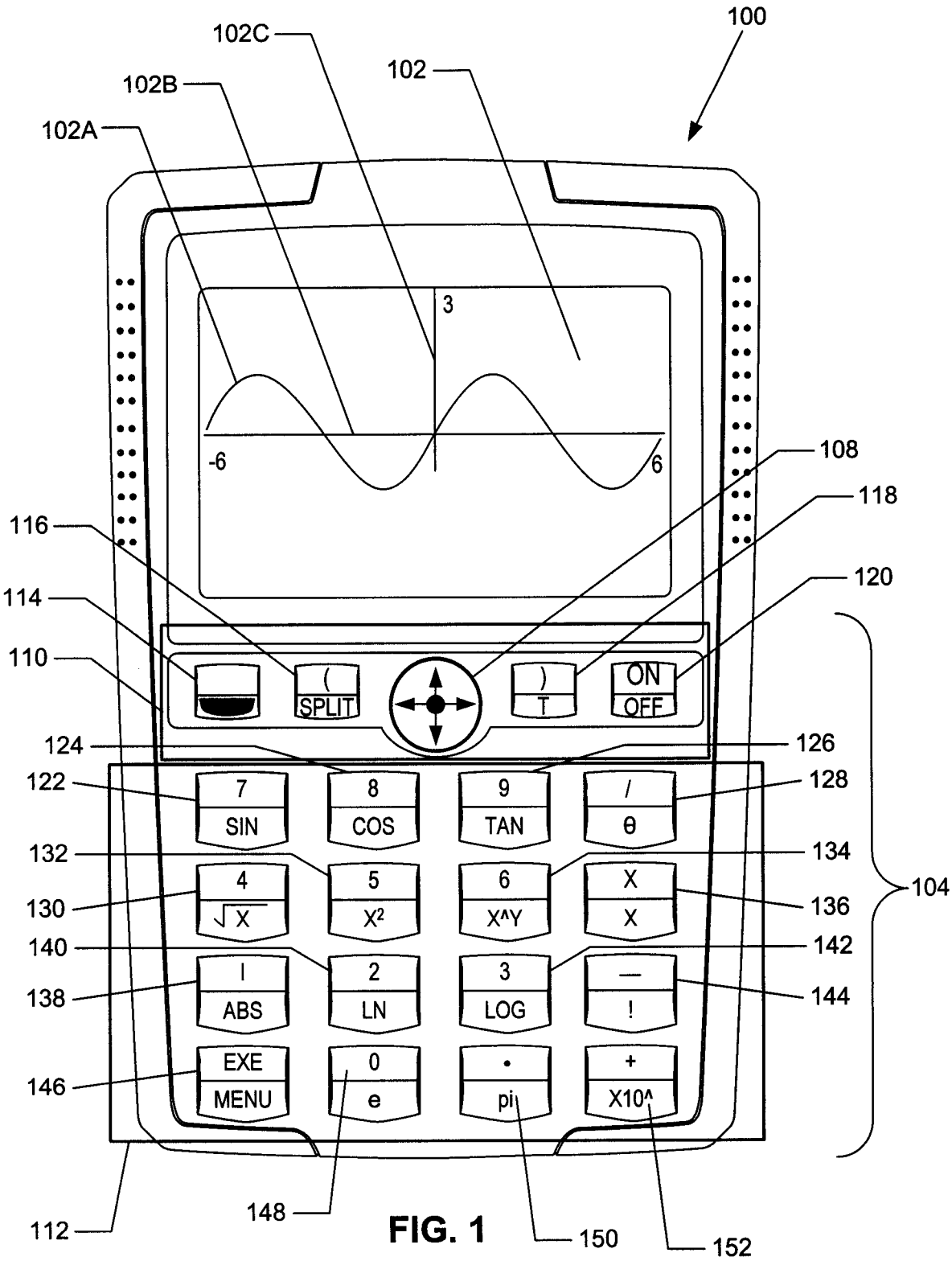

100
102C
102B
102A
102
3
-6
6
108
118
116
120
114
110
(
SPLIT
)
T
ON
OFF
124
126
122
128
7
SIN
8
COS
9
TAN
/
θ
132
134
4
√X
5
X²
6
X^Y
X
X
104
130
136
140
142
1
ABS
2
LN
3
LOG
—
!
138
144
EXE
MENU
0
e
•
pi
+
X10^
146
112
148
150
152

FIG. 1

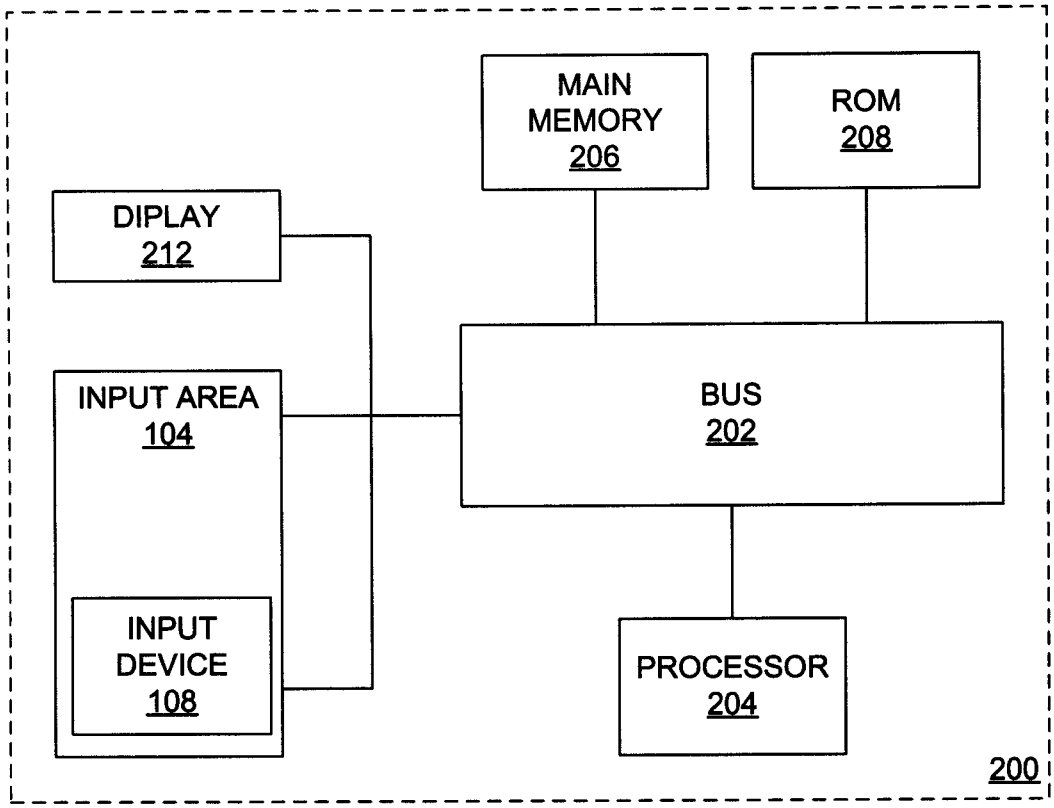

MAIN
MEMORY
206
ROM
208
DIPLAY
212
INPUT AREA
104
BUS
202
INPUT
DEVICE
108
PROCESSOR
204
200

FIG. 2

The Menu

Press the Menu Key, a menu appears.

The UP and DOWN keys change the selection to the previous or next item.

Validates the selected item.

cancels the menu.

The menu gives you access to new functions like the Linear System Solver.

Drawing a graph

To draw the graph of function, enter an expression depending upon the X variable (Enter X using the Keys) then Validate with the key.

Example: SIN(X)

Drawing a polar graph

To draw a polar graph, enter an expression depending upon the θ variable (Enter θ using the Key).

Example: SIN(5*θ)*3

Using the Keyboard

On Prometheus, each key has two different functions:

Pressing a key will activate it's primary function (shown in white).

Pressing a key immediately after pressing the Shift Key will activate the secondary function (shown in blue.)

Example: Pressing the key then the key enters a square root symbol.

Turning On and Off the Calculator

To turn on the calculator, press the Key.

To turn off the calculator, press the Keys.

While the Calculator is on the Key act as a cancel.

The Normal environment

The normal environment is the place where you enter computations. It also shows you your last 4 computations.

In the normal environment,

- Pressing a numeric or function key adds the number or function in the current command line. Note: You can also enter a function through the menu.
- Pressing the right/left key will move the insertion cursor right and left in the command line.
  Pressing Shift right/left key will move the insertion cursor right and left in the command line.
- Pressing Shift right/left will delete the character on the right or the left of the cursor.
- Pressing UP and Down allows you to insert a previous expression or result in the command line.
- To clear the display, press the ON key twice in a row.

Drawing a parametric graph

To draw a parametric graph, enter a set of two expression depending upon the T variable separated by the & sign. Enter T using the Keys Enter & using the Menu.

Example: COS(T)*3&SIN(3*T)*3

Drawing more than one graph at once

To draw more than one graph at once:

- Enter the expression for the first graph
- Enter an '&' sing using the menu
- Enter the expression for the 2nd graph
- Press ENTER

You can draw up to 5 graph simultaneously. You can not draw two different types of graphs simultaneously,

Example: SIN(5*θ)*3&3

FIG. 3A

The linear system solver

To solve a 2 or 3 unknown linear system,

- Run the 'Linear Solve' aplet through the Menu Key
- Select 2 or 3 unknown with the check box
- Enter the coefficients for the 6 or 12 fields (You can move the selection from one field to an other using the arrow keys)

The answer appears on the top of the screen.

The Graphical Environment

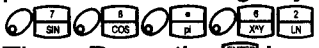
When you are in the graphical environment,

- The Left and Right arrow allow you to move the cursor left and right on the equation. This updates the display of the dependent and independents variables on the last line.
- The Up and Down arrow allow you to select the previous or Next equation.
- Shifting a direction key allow you to move the graphical window.
- The Plus and Minus keys will perform a zoom in or out.
- The ON key will toggle the table split view on and off.
- Any other key will bring you back into the normal environment.

Performing a calculation

To compute the value of an expression, enter it like you would write it on a paper.

Example: to compute SIN(COS(π^2)) press the following keys



Then, Press the ENTER key to validate the expression.

The calculator answers: -0.7849..

Working with fractions and proportions

To work with fraction, enter and expression that contains only divisions, additions, subtraction and multiplication of integers. The calculator answer will contain both the fractional form and the real form ofd the result.

Example: Enter 3+2/3+1+2/5.

The calculator answers: 79/15=5.0666...

The simulator

On the PC emulator:

- You must click on the keys with the mouse
- You can move the calculator window by drag & drop of the calculator of the calculator image
- In order to trace a graph in the graphical environment, you should use the arrow buttons of your PC keyboard (handle keyboard repetition)
- In the linear system solver, you have to move from field to field with the mouse. You have to enter the value with your PC keyboard.

Please note that the PC application is a simulator, a program designed to simulate the functionality of Prometheus, it is not an emulator designed to give an exact representation of the final product.

FIG. 3B