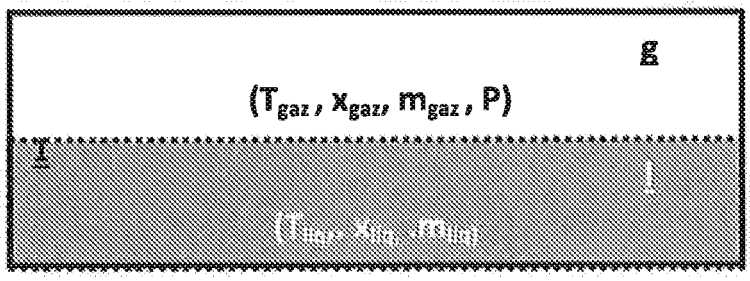
g
$(T_{gaz}, x_{gaz}, m_{gaz}, P)$
1
1
$(T_{liq}, x_{liq}, m_{liq})$

FIG. 1

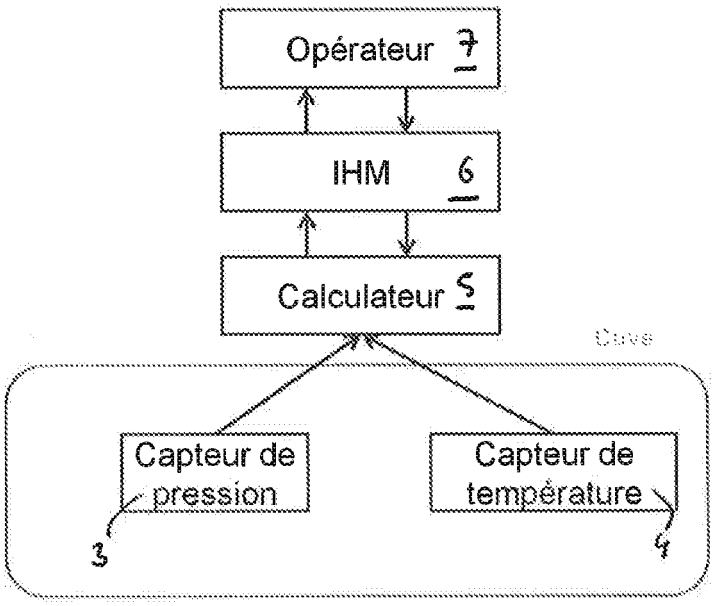
Opérateur 7
IHM 6
Calculateur 5
Capteur de pression
3
Capteur de température
4

FIG. 2

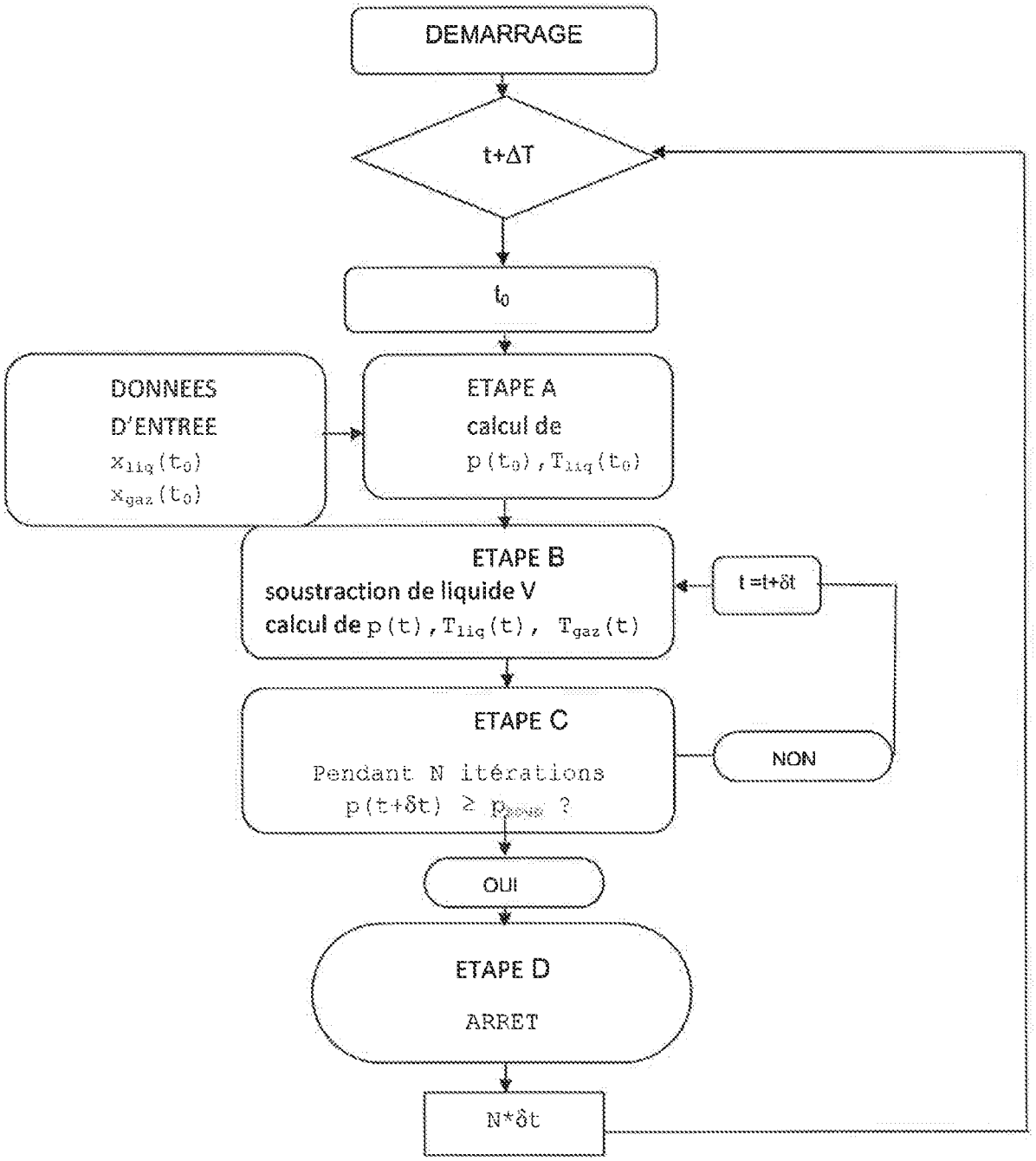
DEMARRAGE
t+ΔT
t_0
DONNEES
D'ENTREE
$x_{liq}(t_0)$
$x_{gaz}(t_0)$
ETAPE A
calcul de
$p(t_0), T_{liq}(t_0)$
ETAPE B
soustraction de liquide V
calcul de $p(t), T_{liq}(t), T_{gaz}(t)$
t =t+δt
ETAPE C
Pendant N itérations
$p(t+\delta t) \geq p_{sous}$?
NON
OUI
ETAPE D
ARRET
N*δt

FIG. 3

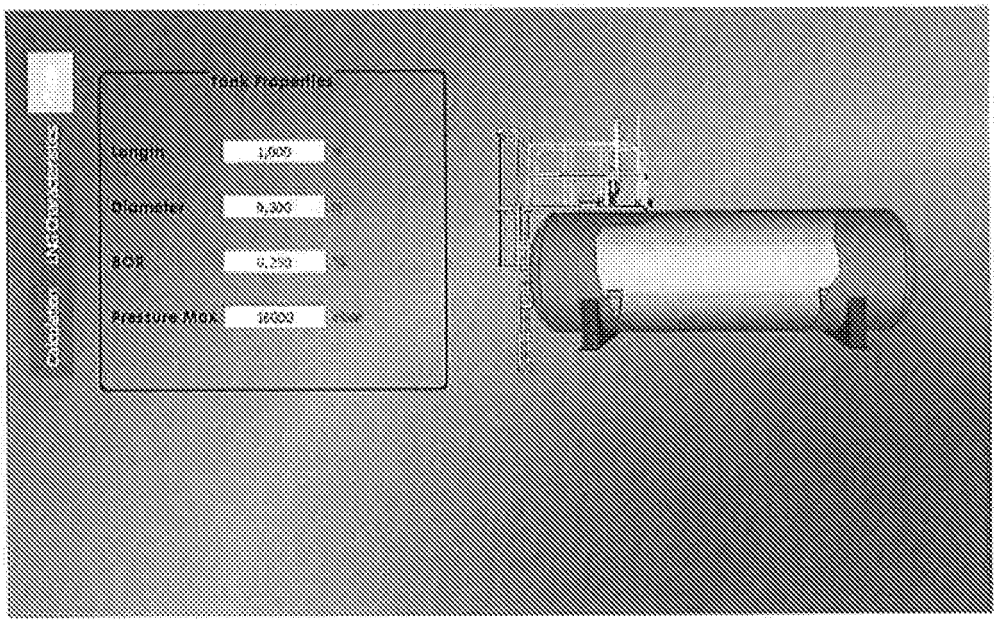
Tank Properties
Length
Diameter
Pressure Max.

FIG. 4

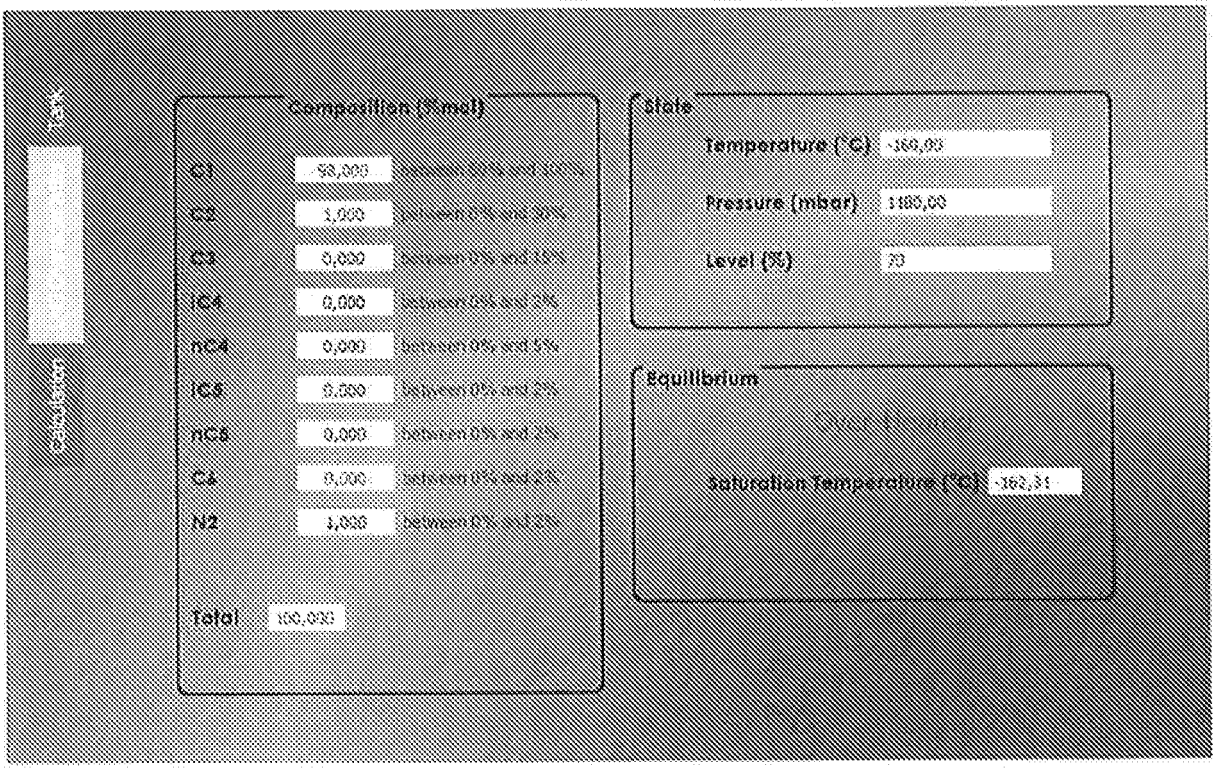
Composition (% mol)
C1
C2
C3
iC4
nC4
iC5
nC5
C6
N2
Total
State
Temperature (°C)
Pressure (mbar)
Level (%)
Equilibrium
Saturation temperature (°C)

FIG. 5

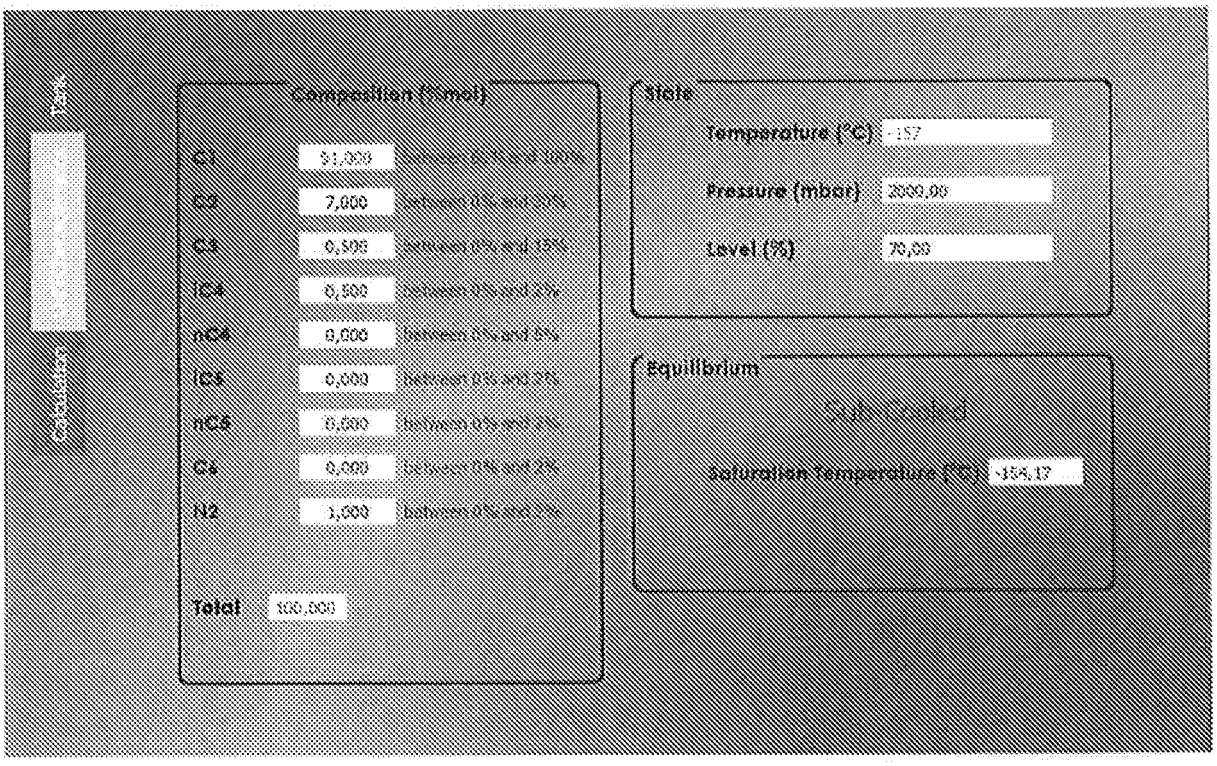
Composition (% mol)
C1
91,000
C2
7,000
C3
0,500
iC4
0,500
nC4
0,000
iC5
0,000
nC5
0,000
C6
0,000
N2
1,000
Total
100,000
State
Temperature (°C)
-157
Pressure (mbar)
2000,00
Level (%)
70,00
Equilibrium
Saturation temperature (°C)
-154,17

FIG. 6

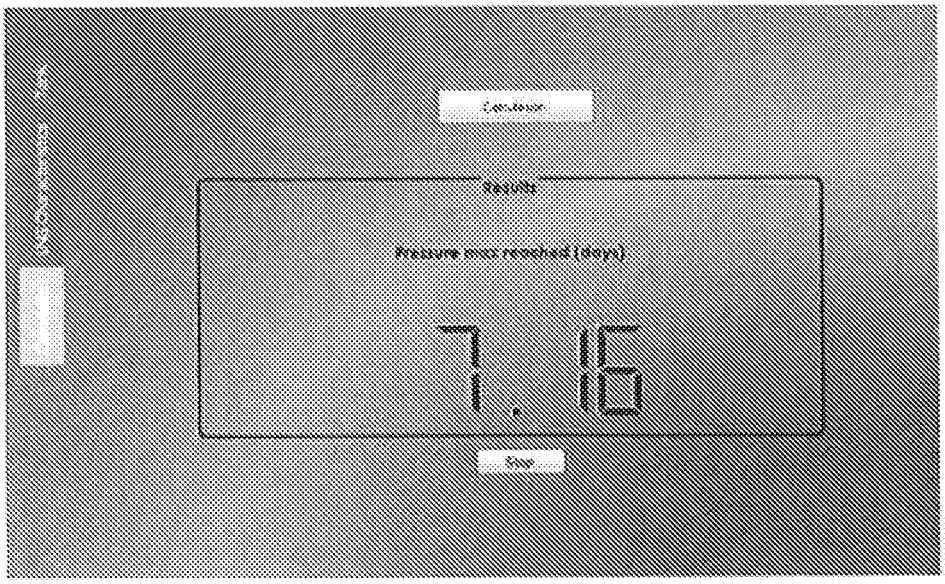
Results
Pressure max reached (days)
16
Stop

FIG. 7

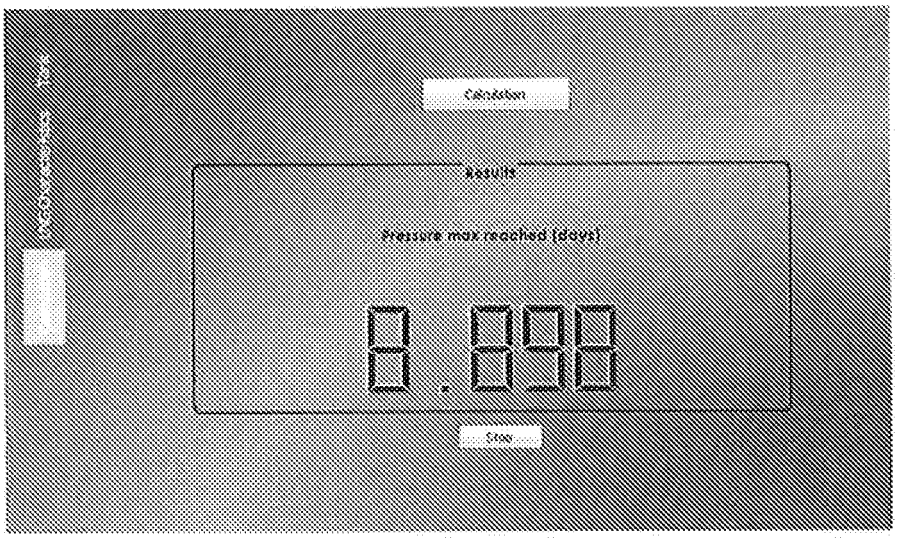

FIG. 8