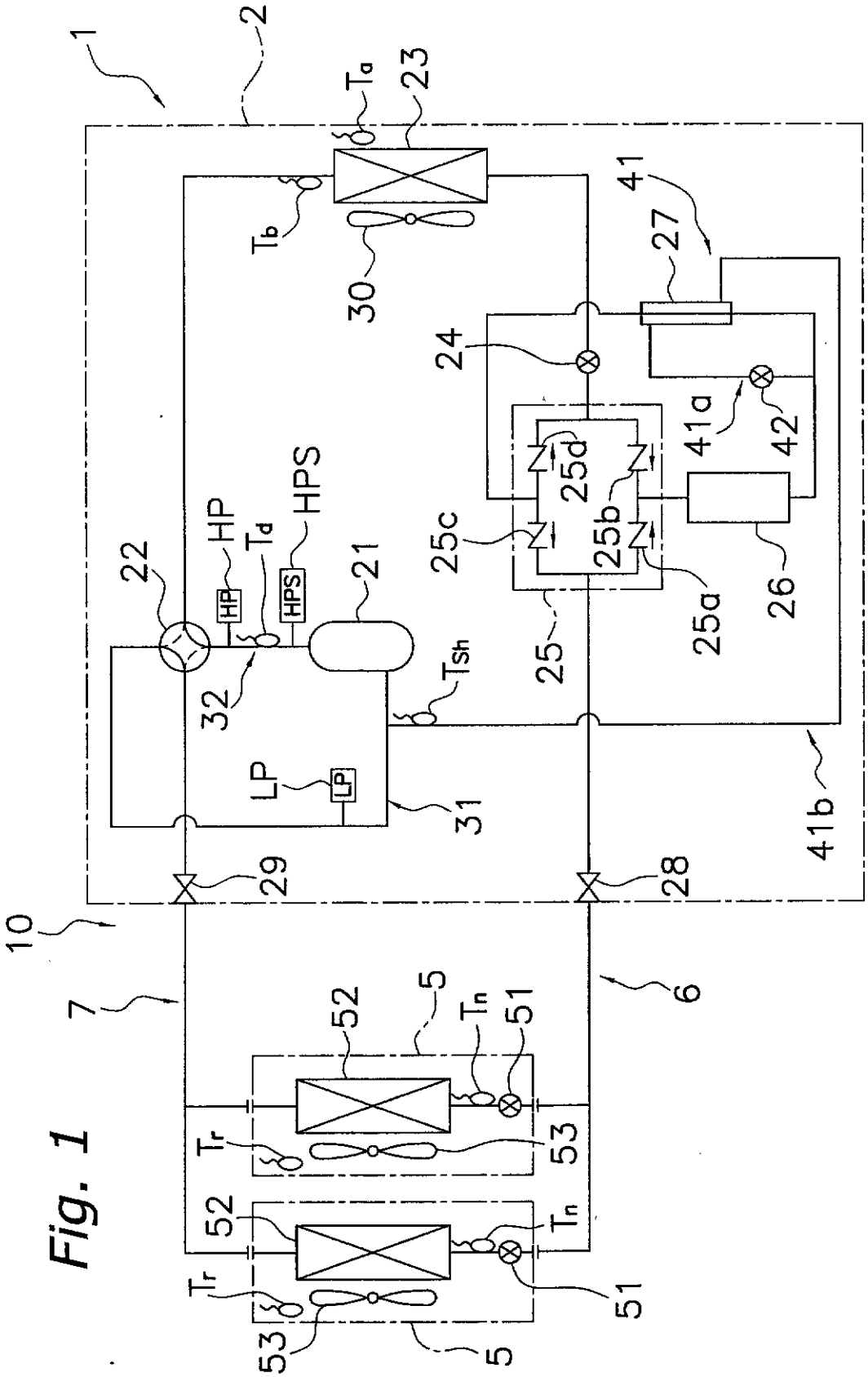

1
2
Ta
23
Tb
30
41
27
24
41a
42
25d
25b
25c
25a
26
25
HP
Td
HPS
22
21
Tsh
32
LP
31
41b
29
28
10
7
6
5
52
Tn
51
Tr
53

Fig. 1

Fig. 2

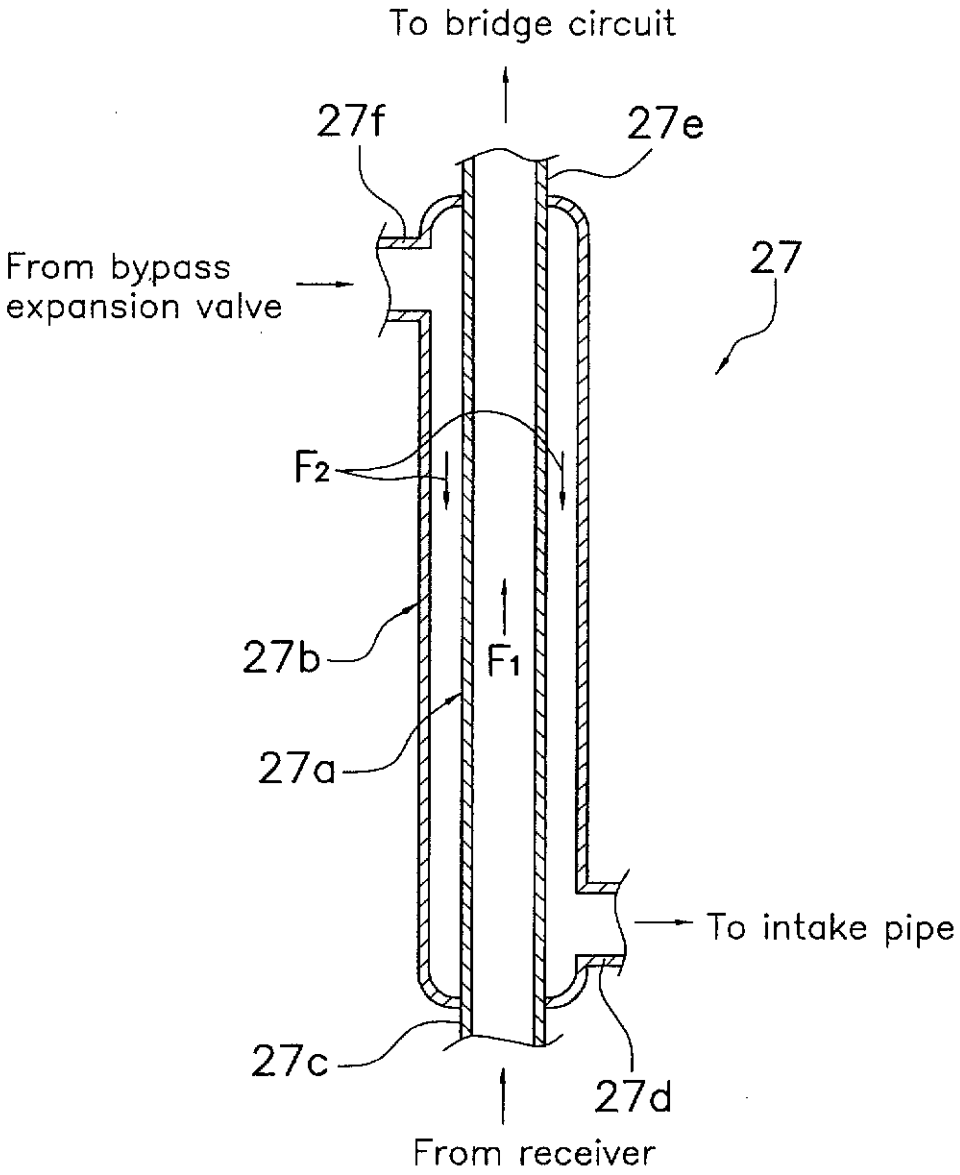
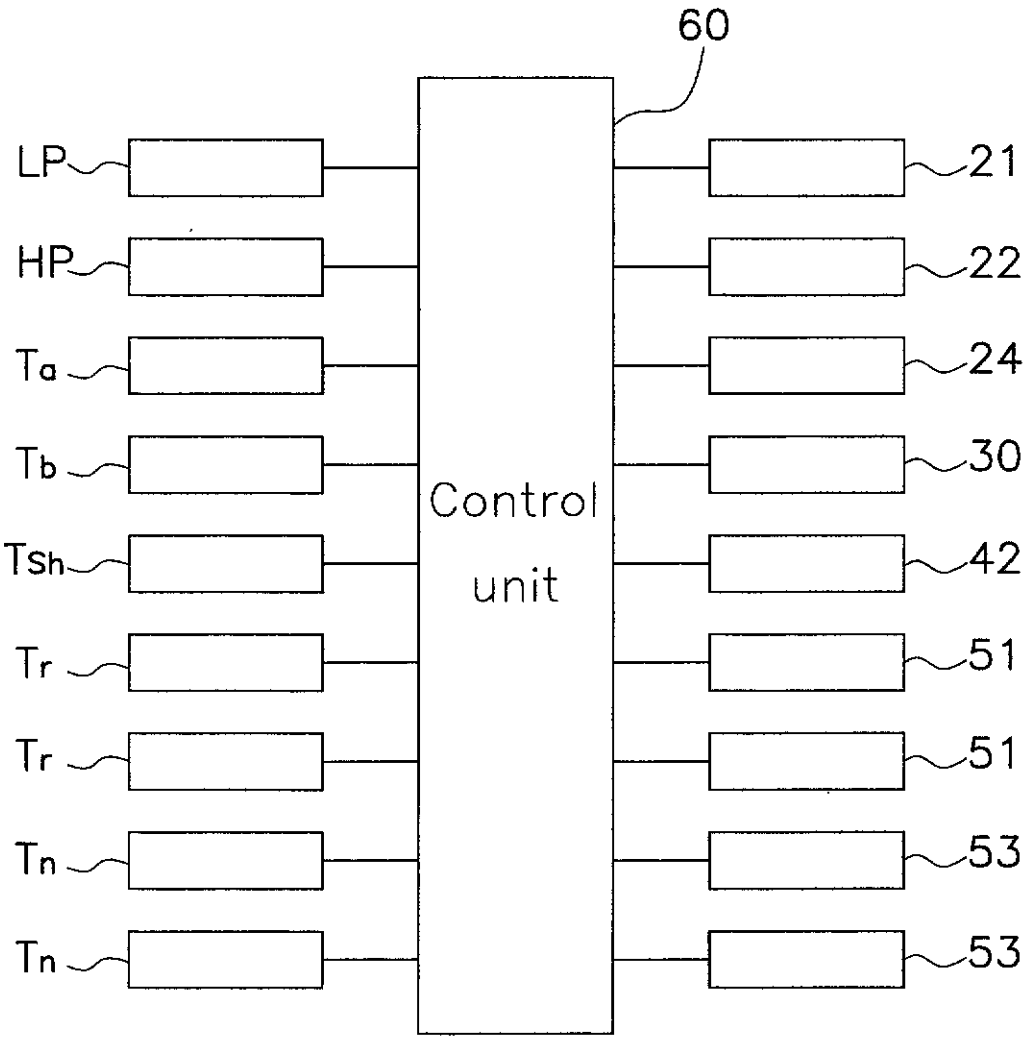

To bridge circuit
27f
27e
From bypass
expansion valve
27
F2
27b
F1
27a
To intake pipe
27c
27d
From receiver

Fig. 3


60
LP
HP
Ta
Tb
Tsh
Tr
Tr
Tn
Tn
Control unit
21
22
24
30
42
51
51
53
53

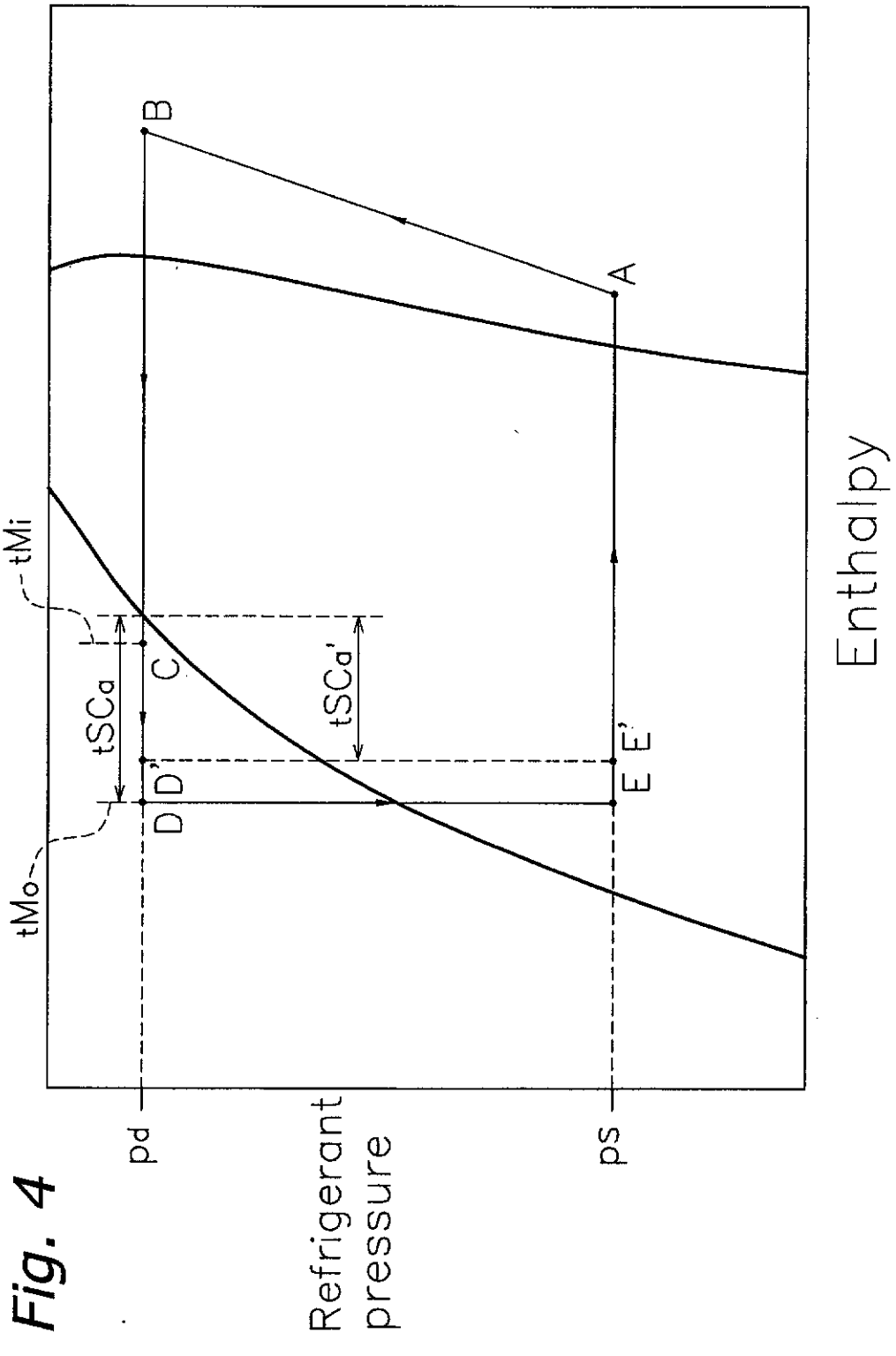

B
A
tMi
tSCa
C
tSCa'
D
D'
E
E'
tMo
pd
ps
Refrigerant pressure
Enthalpy

Fig. 4

Fig. 5

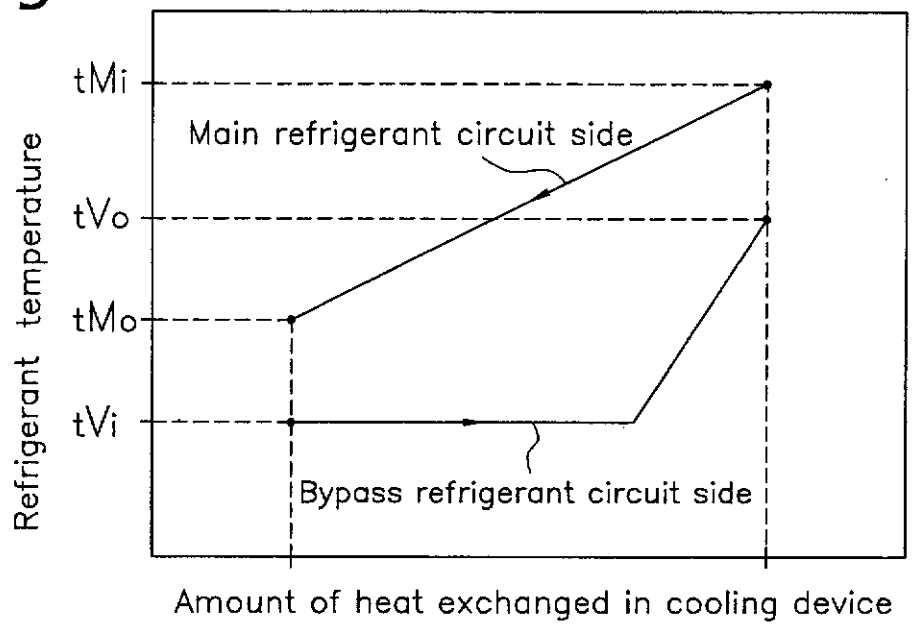
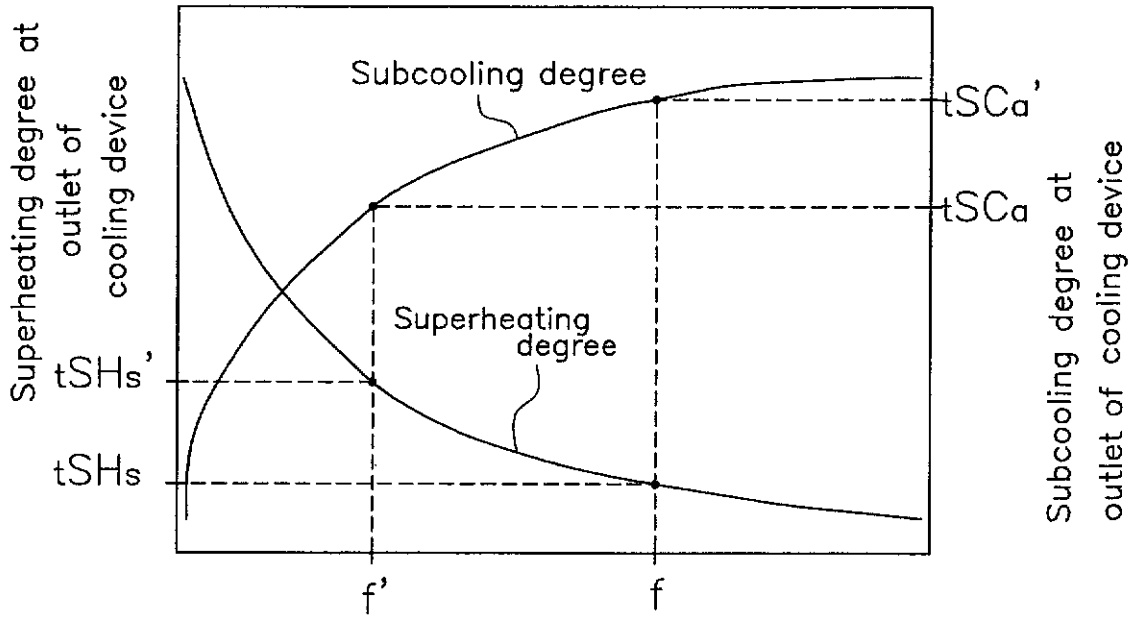

tMi
Main refrigerant circuit side
tVo
tMo
tVi
Bypass refrigerant circuit side
Refrigerant temperature
Amount of heat exchanged in cooling device

Fig. 6


Subcooling degree
tSCa'
tSCa
Superheating degree
tSHs'
tSHs
f'
f
Superheating degree at outlet of cooling device
Subcooling degree at outlet of cooling device
Flow rate of refrigerant in bypass refrigerant circuit