

(19) (KR)  
(12) (B1)

(21) 10 - 1994 - 0034891 (65) 1995 - 0018387  
(22) 1994 12 19 (43) 1995 07 22

(30) 93 - 345046 1993 12 20 (JP)

(73) 가 가

2 5 5

(72) 가 50 - 22

(74)

(54)

1.

2.

+36.07 n -

3.

1,1,1,2 - n - , n - 1,1,1,2 -  
0.1 % 7.3 %

4.

n -

가

1

1

2

2

3

R - 134a n -

4

5

6

7

2

\*

1 2,15 3

4 5 6

7 8 9

10 11 12

13 14 2

16

2 1.1 - ( R - 152a ) R - 500 . R - 12 - 29.65  
 , R - 500 - 33.45 , . 가  
 가 , R - 12

( R - 134a ) ( R - 32 ). ( R - 125 ) 1,1,1,2 -  
R - 32 - 51.7 , R - 125 - 48.5 , R - 134a - 26.0  
R - 32, R - 125 R - 134a  
가

+36.07 n =

n - , 가

+36.07 n -  
,

2 , n - 1,1,1,2 -  
n - 0.1 % 14 %

3 . 1.1.1.2 - n = 14 %

4 , 1,1,1,2 - n - , n -  
 1,1,1,2 - 0.1 % 7.3 %

, 5 , ,

6 1,1,1,2 - 6 % n -

, 7 , 가

8 ,

n -  
 가 , R - 32 R - 125 n - R - 134a  
 R - 32 R - 125 , R - 32 R - 125 n -  
 n - 14 % , R - 32 R - 125

R - 134a 0.1 % 7.3 % ,  
 가 , 2 , , ,  
 가 , , ,

, , n - ,  
 n - ,

, , n - ,

( )

1				2			
(1)		(3)	(2)		(4)		(3)
	(8)		(3),		(4)		(2)
(5),	(6)	(7)가					
2	R - 32, R - 125, R - 134a	n -				R - 32가 20	
% 30 % ,	25 %, R - 125가 10	n -	% 20 % ,	%,	15 %, R - 134a	10 %	
가 40 % 60 %	50 %, n -	0.1	% 14 %	,			
R - 32 20 % ,	(cop)가		, 30 %				
가 , 20 %	R - 125	10 %			(2)	(GWP) 가	
R - 134a 40 % ,		가			, 60 %		
가							
n - R - 134a 14 %	R - 32 R - 125 , R - 32 R - 125	14 %	n - R - 13		14 %	n - R - 13	
4a							
(7) n - R - 134a 14 %	가 , , R - 32 R - 125		R - 32 R - 125				
, n - R - 32 R - 125 , R - 134a							
n - 10 %							
2 R - 134a 0.1 % 7.3 %							
3 가 1 , , 2 , 2							
4 (3), (4) (8)							
n - 1,1,1,2 - (3), 0.1 % 7.3 %							
n - 1,1,1,2 - (8)							

n - 0.1 % 7.3 %, 0.2 % 7.3

n - 0.1 % . n - 7.3 %  
, 2 가

$$5 \quad . \quad (9) \quad , \quad (10) \quad . \quad (11) \quad , \quad (11) \quad , \quad (10)$$

$$6 \quad (9) \quad , \quad (10) \quad (11) \quad , \quad (11) \quad , \quad (10)$$

$$16) \quad (12) \quad 1 \quad (13) \quad 2 \quad 7 \quad (14) \quad , \quad 2 \quad . \quad (16)$$

가, n-, , 1,1,1,2-, , 1,1,1,2-, n-

n - 1,1,1,2 -  
n - 0.1 % 14 %  
n -  
가 가 n -

, n - 1,1,1,2 - , , , 가 n -

(57)

1.

20 % 30 % , 10 % 20 % , 40 % 60 % 1,1,1,2 -  
0.1 % 14 % n - .

2.

n - 1,1,1,2 -  
n - 0.1 % 14 %

3.

2

1,1,1,2 -

n -

14 %

4.

1 3

,

,  
,

5.

4

,

1,1,1,2 -

6 %

n -

6.

4

,

가

7.

5

,

가

8.

7

,

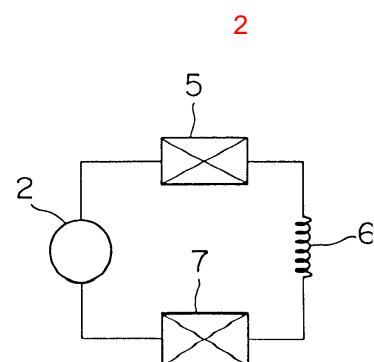
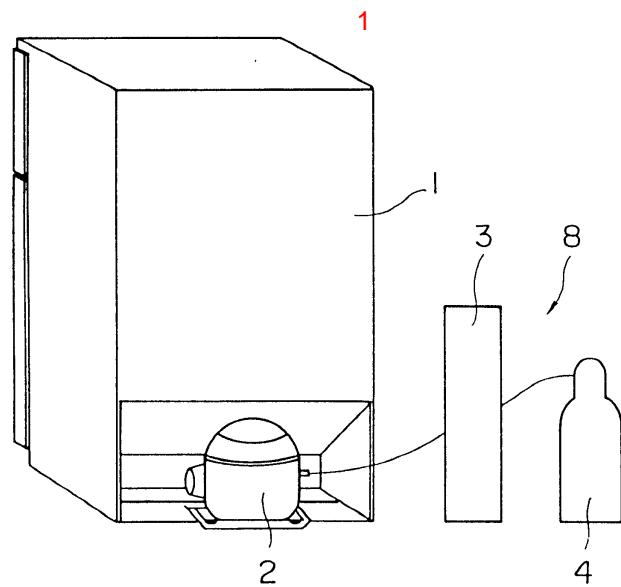
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9.

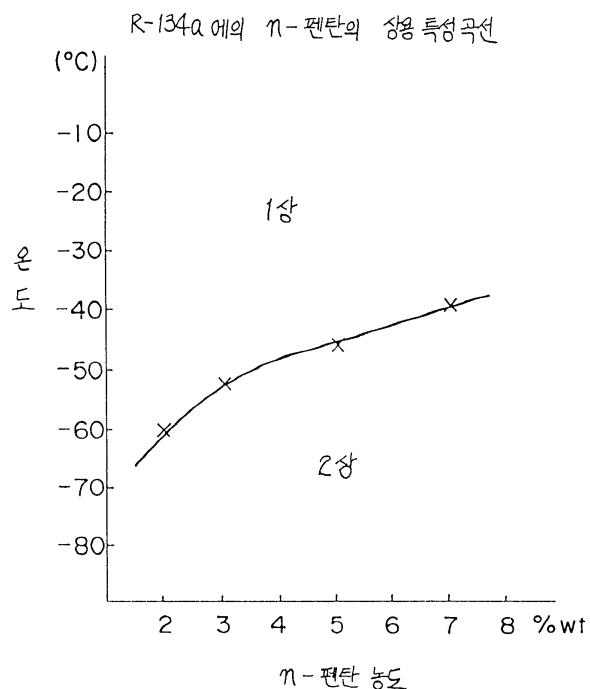
8

,

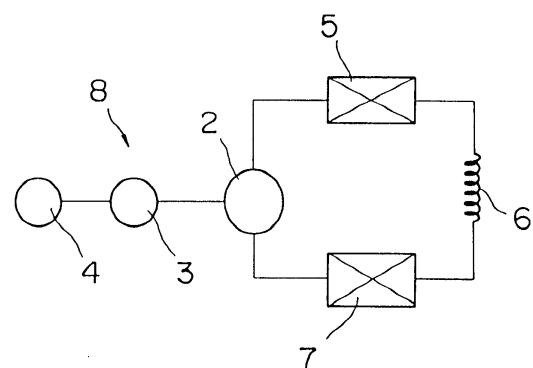
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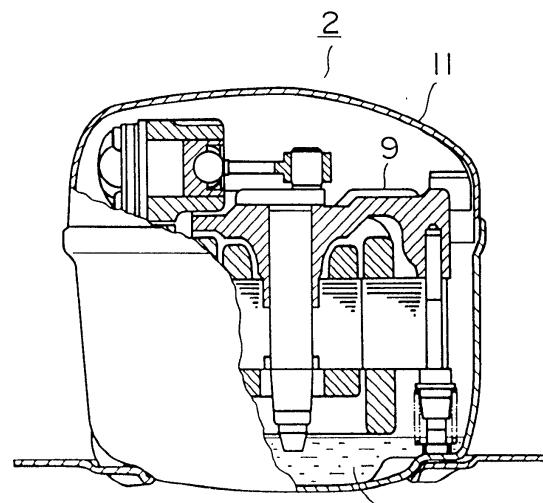
3



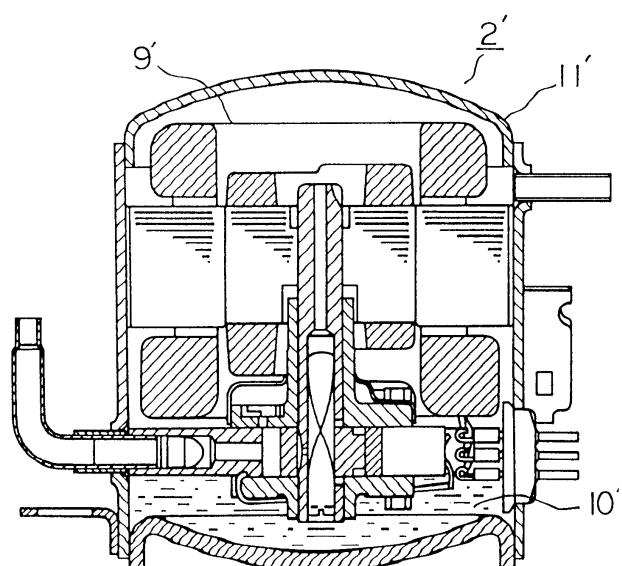
4



5



6



7

