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10-2004-0041622
2004 05 17

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(22) 2004 03 25

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(86) 2002 10 09

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2003 05 15

(30) JP-P-2001-00345260 2001 11 09

(JP)

(71) 가 가

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(72) 1

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(54)

(T) (R) (V) (I) (S100 S108)
(VN - VN + 1) , 2 (S110, S112). 2 (IN - IN + 1) 2
(R) 가 (V) (S116), (V) (Vmax)
(Vref) , (S122, S124, S128).

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1 (B1 Bn) (V1 Vn) (I1 In) (R) (N)
 가 (S114), (1) (V) (S116), (N)
 (S118).

$$\Delta V = | (V_N - V_{N+1}) + R * (I_N - I_{N+1}) | \quad (1)$$

(N) 가 (n-1) (B1 Bn) (V) 가 S
 116 S118 (S120), (Vmax) (Vmax) (Vmax) S
 (S122), (Vmax) 가 (Vref) (10) (S124).
 (S126), (Vref) (Vmax) 가 (Vref) LED (50) (10)
 (S128), (Vmax) (10) (Vmax)
 S116 (V) (Vref) (Vmax)

4 (V) (I) (R) 4
 (V) (I) (R) (R · I) 가

(R) (B1 Bn) (V1 Vn) (I1 In) (B1 Bn) (V1 Vn)
 (20) (20) (12) (10) (10)
 (20) (24) (23) 가

(B1 Bn) (V1 Vn) (20) (24) (23) 가
 (10) (B1 Bn) (20) (30)

5 6 (30) CPU (32) 2
 S100 106 (N) 1 (S200), (N)
 (IN) (S204), (24) (S202), (BN) (VN)
 (N) 가 (S208), (N) 가 n RAM (36) (S206).
 (V1 Vn) (I1 In) (B1 Bn) S202 S208
 (S210).

(B1 Bn) (V1 Vn) (I1 In) 가 S200 S210 가
 (S212), (S200 S210)
 (V1 Vn) (10)
 In) 가 (B1 Bn) (V1 Vn) (I1 In)
 (B1 Bn) (R1 Rn)

(OCV1 OCVn) (S214). 7 (V) (I) (OCV) (R)

(V), (I), (R) (OCV) 7

(B1 Bn) (,)

(B1 Bn) (OCV)

(R)

(B1 Bn) (R1 Rn) (OCV1 OCVn) (N)

1 (S216), (2) (3) (R) (O

CV) (S218), (N) 가 (S220).

$\Delta R = R_N - R_{N+1}$ (2)

$\Delta OCV = OCV_N - OCV_{N+1}$ (3)

(N) 가 (n-1) (B1 Bn) (R) (OC

V) 가 S218, S220 (S222). (R) (OC

(: Rmax) (OCV) (: OCVmax) (

S224), (Rmax) (OCVmax) 가 (Rref) (O

CVref) (S226). (Rmax) (OCVmax) 가 (S228),

(Rref) (OCVref) (10) (OCVmax) 가

(Rmax) 가 (Rref) (10)

(S230), (OCVmax) 가 (OCVref)

(10) (S232), (Rmax) (OC

Vmax) (OCVmax) (10) (Rmax) (OC

(Rmax) (OCVmax) (Rref) (OCVref) S224 (R)

(OCV)

(20) (B1 Bn) (V1 Vn)

(11 In) (B1 Bn)

(B1 Bn) (V1 Vn) () (10) (V1 Vn)

(B1 Bn) (23) (B1 Bn) (V1 Vn)

(B1 Bn) 가 (B1 Bn)

(20) (10)

(20) (B1 Bn)

(OCV1 OCVn) (R) (B1 Bn) (R1 Rn)

(V) 2 (B1 Bn) (V1 Vn) 2 (: lave)

(R) (OCV)

5 6 (R) 8 9

(30) CPU (32) 2 S100 S10

8 (S302), (N) 1 (S300), (N) (S304), (

N) 가 (S306), (N) 가 n (BN) (VN) (IN) (B1 Bn) (V1 Vn)

(I1 In) S302 S306 (S308). S300 S308

가 (S310),

S300 S308

(10)

가 (10) (R) (S312), (T) (S314), (R) 2 (T)

S110 S112

(N) 1 (S316), (1) (V) (S318),
 (4) (V) (lave) (S320).

$I_{ave} = (I_N - I_{N+1}) / 2$ (4)

(N) 가 (S322), (N) 가 (n-1) (B1 Bn) 2
 (B1 Bn) (V) 가 S318 S322 (B1 B2, B3 B4 S324).

(B1 Bn) (V) (lave) 가
 S310 (S326),
 가 S324

(lave), (R) (OCV) (S328). (B1 Bn) (V),
 (B1 Bn) (OCV) 10 (lave)
 (R) (V) (lave)

(R) (OCV) 가 (R) (OCVmax)
 (Rmax) (OCV) (OCVmax) 가 (Rref)
 (S330), (Rmax) (OCVmax) 가 (Rmax) (OCV)
 (OCVref) (S332). (Rmax) (OCV)
 Vmax) 가 (Rref) (10) (OCV)
 S334), (Rmax) 가 (Rref) (10)
 (S336), LED (50) (OCVmax) 가 (OCVref)
 (10) (S338),

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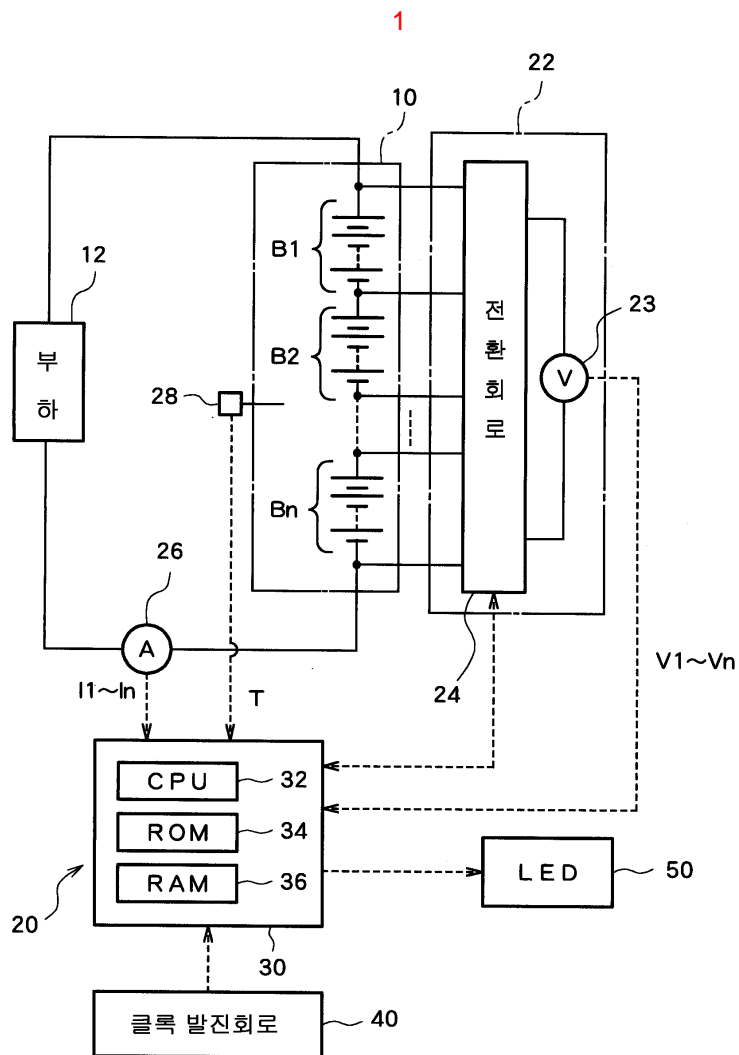
8

2

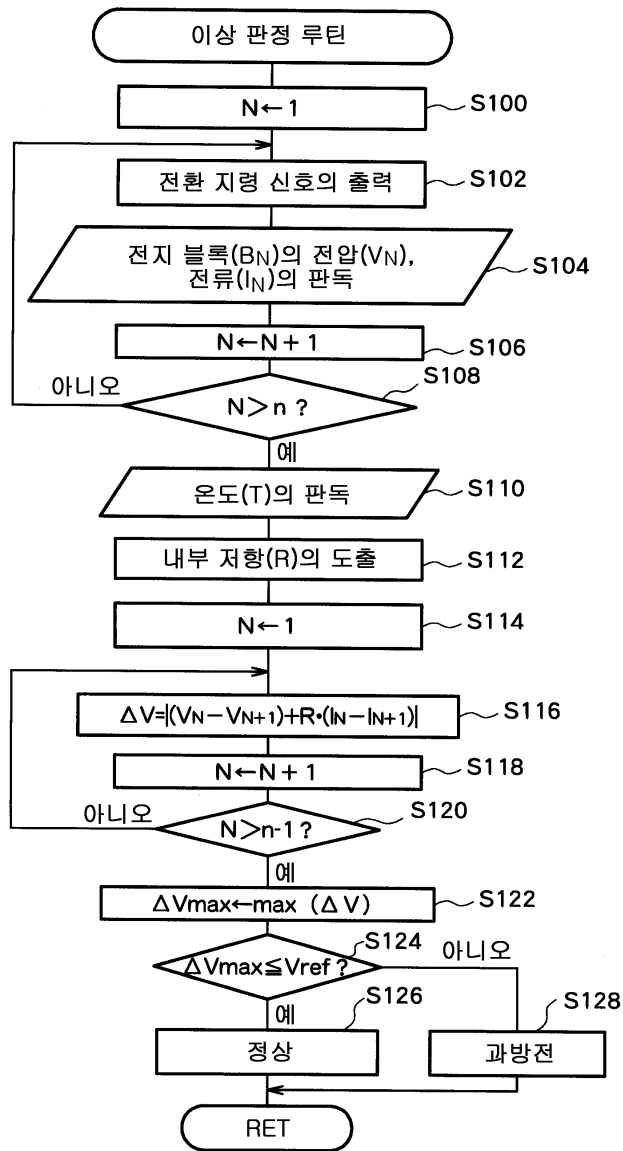
가 1

2

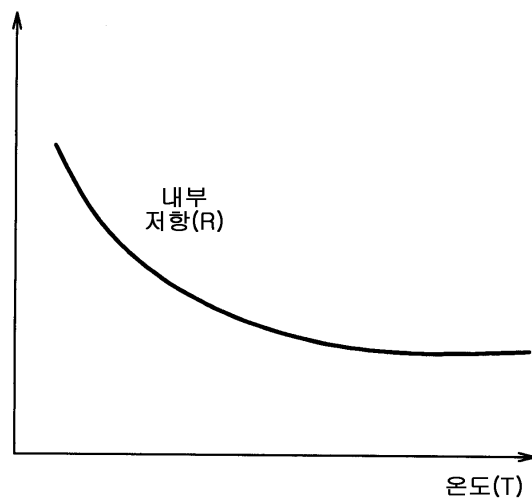
가 2



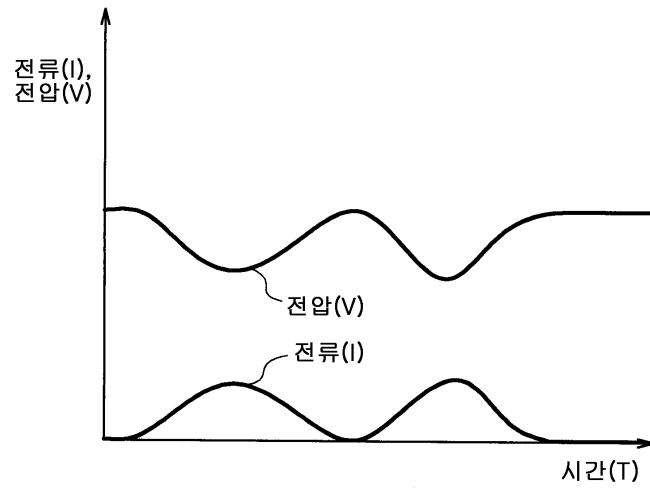
2



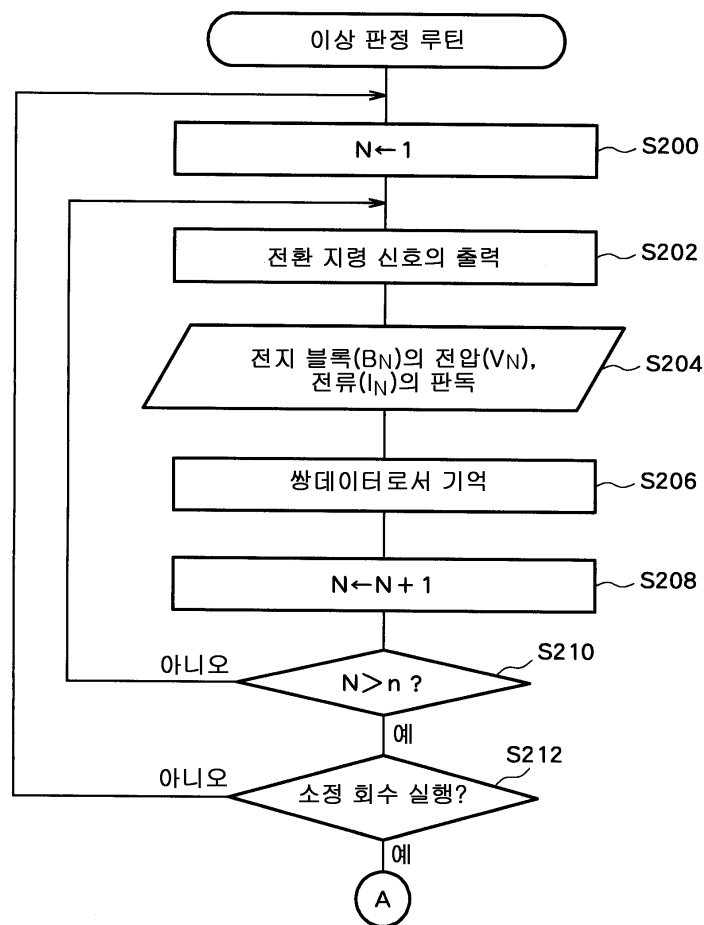
3

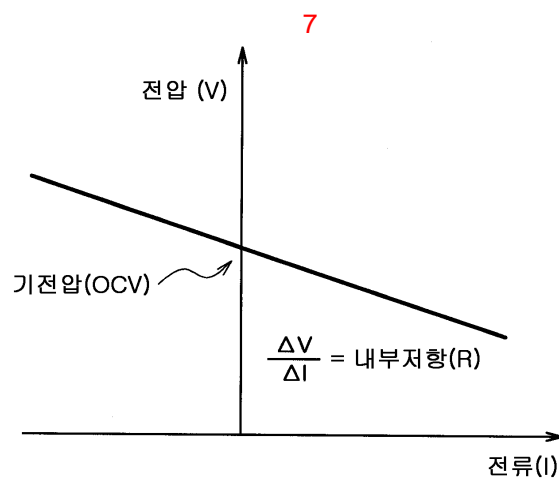
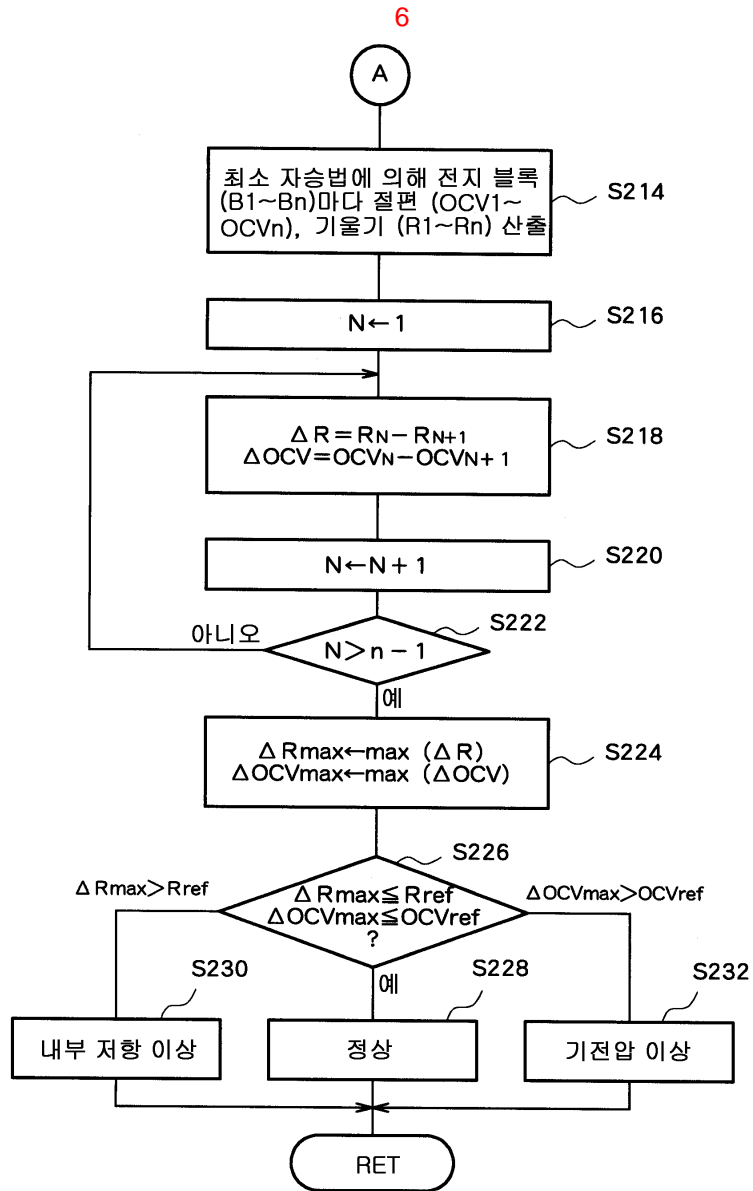


4

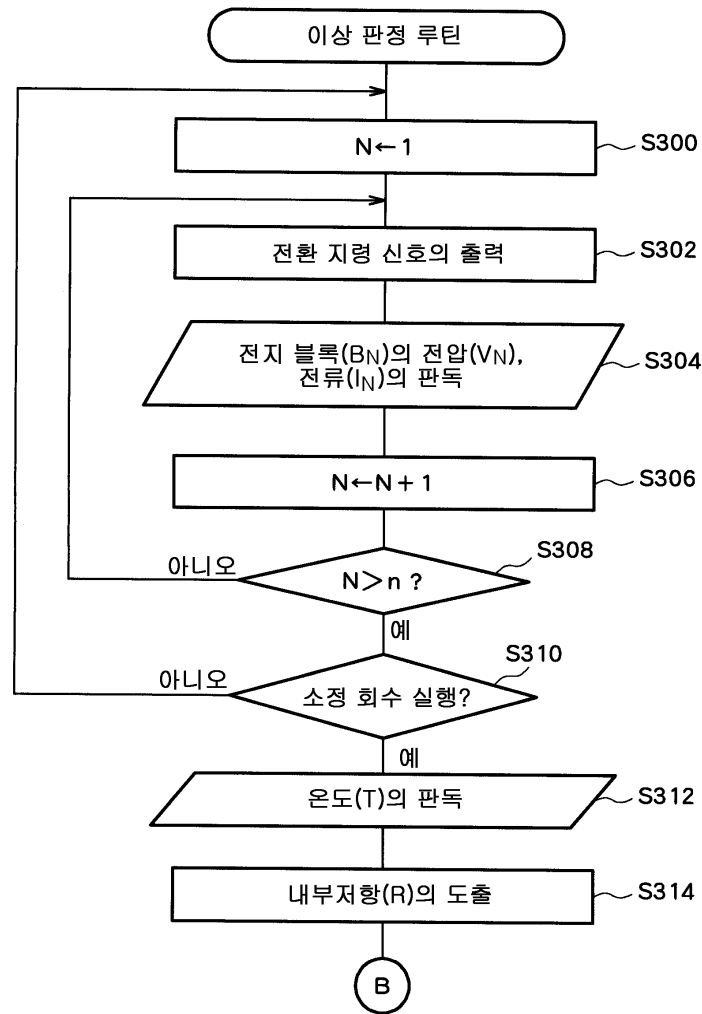


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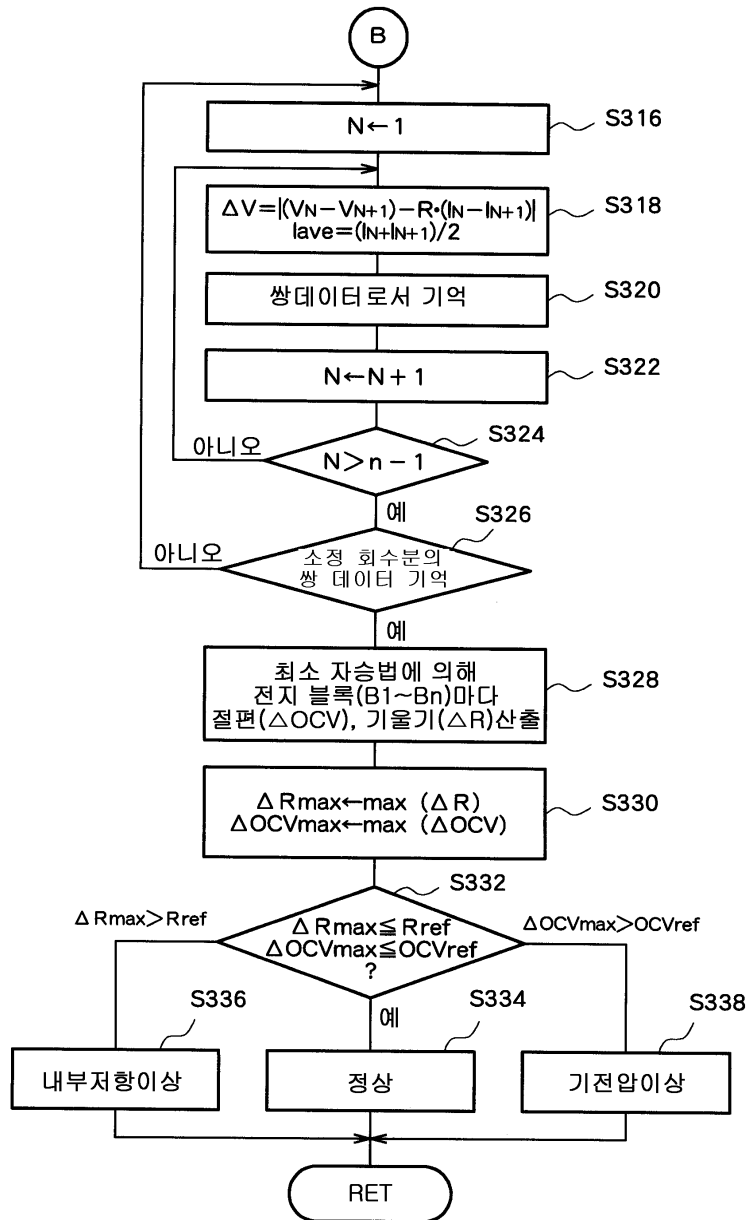




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