

(19) (KR)  
 (12) (A)

(51) 。 Int. Cl. <sup>7</sup>  
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(30) 60/289,417 2001 05 08 (US)  
 (71) . 92648 46  
 (72) . 56.  
 (74) .

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(54)

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(C1a)

. S	(Cs)	S
1	1 (50)	1 (Q1)
HORIZONTAL)	. 2	
(iy)	) 1	1 (OFF)
1 (T1 & T2)	2 (ON)	,
2 (T1 & T2)	S	2
2	S	(Lx)
.		S
2		(Cx)

1  
 2a, 2b 2c 1  
 3a, 3b 3c 1  
 4 1  
 5a, 5b 5c 1  
 6 1  
 7 2a, 2b 2c 1

T) (CR

(resonant trace and retrace principles)

1

S

S

가

S S , S 가 0 가

S

110

CRT

가 CRT

S , - (LC) - . LC - 2  
 가



(Q1) , (ILy) 가 (V1a) (Q1) . (C1a) ,  
 (Q1) , (V1b) (C1b) .

s) . . (101) (52) (54) S (C  
 . . (Lx), (Cx) 가 (300) (66) (300)  
 (60a) . (IPcor) (60) (62) . (Fb)  
 (60a) 가 (300) . (IPcor) (101) (Ix)  
 , (63) (IPcor) (Fb) PWM(60) (63a)  
 . . 가 (60b) 가 PWM(60) . (Fb)

nF , (Lx) 150 uH (101) 1 , 1 (Cx) 330  
 . . (300) (Cs) (54) (Q2) (Cz) 680 pF , 1 (Rz) 820  
 (MOS) (Cs) (52) (Q2) (64) (Q2) (65) (Lx) (Cx)  
 . . (Q2) (64) (65) (Rz) , MOS  
 (Q2) (Cz) (Rz) 가 (62) , (DQ2)  
 . . (Q2)

3a, 3b 3c (Ix) 가 1 1  
 . . . 1, 3a, 3b 3c (ILy) (ILyt) (ILyr)  
 . . (Th) (Q2) 3c (T1) 3c (T1) 3c (T1)  
 . . 1 (T1) 3c (ILyt) (Ttc) 1 (T1) 1 (101) 3a, 1 (Ix)  
 101) 3a (VCs) 1 (Cs) 가 , 1 (101) 3a (1)

3a (T2) (Ttc) (T1) 3a  
 (DQ2) , (Ix) (Q2) (T1+T2) , 3a (1)  
 x) 3c (ILy) (Ttc) , - , 3a

1 - (60a) 1 (IPcor) 3a (Ix)

6 1 PWM(60) . . 6, 1, 3a, 3b 3c  
 (Q2) . . , 1 (DQ2) 1 (DQ2)  
 (Q2) 6 (DQ2b) 1 (DQ2)  
 (Q2) . 6 2 (DQ2) (Q2) . (DQ2a) 1  
 (DQ2) . . , 6 (DQ2b) (DQ2a) (Q2)

(IPcor)  
 $(60b)$ , , , , , 2  
200 V - - 1 (T3a) . 2 (T3b) 가 . (62) (T3) (I)  
x) (101) (Ix) (DFb) (VCFb)  
b) (101) (CFb) (T3b/T3a) (T3)  
(CFb) (DFb) 100 (T3) 1 (T3a)  
(DFb) 가 (DFb), (101)

(VCFb) (Rpi1) (Opa) (6) . (Opa)  
          (6) (DC) (Opa) (6)  
 (IPIN) . PWM(60) (OPa) - (IPcor) (full wave)  
 (VCFb) (VOPa)  
          (OPa) (Cpi) (RPi2)

(Q6)	(103)	(C12)	가	(R8)		
(R7)	(60b)	.	(60b)	(C12)	(C11)	(C10)
(Q6)	(C12)	.	.	(C10)	(D11)	(D11)
(Q6)	.	가	.	(Q6)	(C10)	1
2	.	가	.	(Q6)	(ringing)	.
(D1a, D1b)	.	(Q6)가	.	.	.	.

(60b) (OPb) (VSW)  
(ipw)† (LED) (OPTOA) . LED OPTOA (OPb)  
(7) (3) .

(OPb) (7) 가 , LED OPTOA (ipw) 0  
 (OPTOB) (6) (Q5) 가 . (R4)  
 (OPTOB) (Q5) 가 . (R4) , LED OPTOA 가  
 (Q2) (66) (Q5) 가 . (R2)  
 (Q5) (R3) (Q5) (Q2)  
 (D6) , (Q3) (D6) (Q5) (Q3)  
 (Q4) (OPb) (7) 가  
 (ipw) 가 LED OPTOA (Q2) (R2) (Q3) 가 . (R3)

3a (Th) (T1) , 6 (Q2) 가  
 3a (t1a) (t1b) (Q2) (DQ2b) 가  
 6

(R3), (Q3) , (R4) (OPTOB) (VFS)  
 (C8) (VFS) (Cs) (54) (VFS)  
 (C9) (D8) S (Cs) (VCS) (A  
 C) (D8) (D9)  
 (VFS) (C8) (C7) (R5) (D10)  
 (OPTOB) 5V V5V (VFS)

2 1 , (Q4) 가 (C6) (C5)  
 (Q2) , (Q5) (Q2)  
 (Q2)

(D12), (D13), (D14) (C13) (V13) (C13)  
 1 (D12) (D13) (D14) (D12) 가 2 , LED OPTOA (ipw)  
 0 (OPTOB) (6) (6) (6) (600a) (600a)  
 (Q2) 가 (Q5) (Q5) (Q5) (Q5)

(OPa) (6) 가 (IPIN) (Lx) (Cx)  
 (Ix) (600) (600a) (600) (600a) (600a) (IPIN) (Cx)  
 (600) (600) (600) (600) (600) (600) (Cx)  
 (Cs)

2c (ILy) (ILyt) (ILyr) . 7 (Q2')  
 2a (T1') (T1') 2c (ILyt) , 2c  
 (ILyr) (Trc)

2a (T1') , 1 (101) 가 (Cs) (VCs) 가 , 1 (101)  
 2a (Ix) . (Trc) (T1') 2a  
 (T2') , 2a (Ix) (Q2')  
 (DQ2') . 2a (Ix) 2c (ILy) , (Trc)

1	(60a)	1	(IPcor)	2a	(T1')	.	1
.	,		(Q2')	.	.	,	
(101)	(Ix)			.	.	.	
(ILy)	2c		(T1' + T2')	.	.	.	

, , 2a (|x) . E/W - (|x) . ,

3 , 1 (Cx) 470 nF , (Lx) 130 uH  
 , (Cz) 680 pF , (Rz) 820 . 1 가 (300)  
     (Q2) , 4 MOS (Q2a) MOS (Q2b)  
     (Q2a) , (Q2a) (67) (Q2b)  
     . (Q2a) 1 (64) . 1 (Q2b)  
     . , 4 (Q2b) (65) . 4  
     . (Q2a, Q2b) 1 (66) . .

5a, 5b 5c 1 (100) 3  
 가 . 1, 2a, 2b, 2c, 3a, 3b, 3c, 4, 5a, 5b 5c  
 (Ix) 가

3 , 4 (Q2a) (Q2b) (DQ)  
 2b) , 5a (T1") (T2") . (T1")

(T2") 5c (ILy) . (T2") 5c (ILy)  
 (Ttc) . 4 (Q2b) (Q2a)  
 (DQ2c) , 5a (T3") (T4") . (T3")  
 (T4") 5c (ILy) (T2") (T3")  
 (T5") 4 (Q2a) (Q2b) (T2") , (T3") 5c  
 (ILy) (Ttc) (T4") 5c (ILyt)

5a	(T1'', T2'')	,	1	(101)		(Cs)	(VCs)	가	.	,
1	(101)		5a	(Ix)	.	(Ix)	.	5a		(T1'',
T2'')		180	360		.		.	가	,	(
Ttc)	(T1'', T2'')				5a	(T3'', T4'')	,	5a		(Ix)
		.	(Ix)		5a	(T3'', T4'')		0	180	
		.			(Ttc)				(T5'')	,
		.								4
(Q2a, Q2b)		,	5c	(Ix)	0	.	.	.	.	.

(60a" ) 5b . 4 (Q2a) 5b (60a" )가 (HIGH) (LOW)  
 , . , 4 (Q2b) 5b (60a" )가 , 5a (Ix)가  
 . . 0  
 1 (Ix) , . . . . . . . . . .  
 60a" ) (60a" (A)) . . . . . (60a" ) (60a" (B))  
 (Ttc)

CRT

1,    2      3		가      S		2
.	1		.	4
	가      S		3	
가	S		가 CRT	
.		.		
	CRT			

, - (LC) - 가 . LC - 2  
S . 2 . 가 . , LC -  
. . . LC - 가 S

(57)

1.

(C1a) ,  
1 (Cs)  
(Ly) ,  
1 (HORIZONTAL) 1 (50) , 1 (Q1) ,  
2 (Lx, Cx) (Lx) ,  
2 (VERTICAL) 2 (IPcor)

, , , , ,  
1 2 (OFF) , 1 2 (3a - 3c (T1 & T2) )  
, 1 2 (T1 & T2) 2 (ON)  
2 (Ix) , 2 , ,  
(Ix) .  
(VCs)

2.

1 , (VCs) S

3.

1 , 2 (Q2) 1 (60b)  
2 (IPcor) - (60)

4.

1 , 2 (3a - 3c (T1 & T2) ) 2 (C)  
(Cx, Lx) (Cs) (Lx) (C)  
x)

5.

1 , - , 3 (QEW, Lew)  
E/W - ) - (QEW, Lew)

6.

5 , - (QEW, Lew)

7.

1 , 2 (Q2) 2 (IPWR)  
 (Fb) (60)

8.

7 , (Fb) (62)

9.

1 , 2 (Q2) (T1 & T2) 2 ( )  
 (Lx) (Cs) , 1 ((T1 & T2))

10.

9 , ( 3a - 3c (T1 & T2) ) 2

11.

9 , 2

12.

9 , 2 (T1" , T2" , T3" , T4" )

13.

1 , 1 1 (Q1) , 2 (Q2)  
 2

14.

(C1a) (Ly) ,

1 (HORIZONTAL) 1 (50) , 1 (Q1) ,  
 (iLy)

(Lx, Ly)

1 , , 1 ( 3a - 3c (T1 & T2) 2 ( ) , 1  
 (OFF) 2 , 2 (T1 & T2) 2 (ON) ,  
 2 (Ix)  
 2 (Q2) ,

2 (VERTICAL)

2 (IPcor)

2

2

(Fb)

(60)

2

15.

14

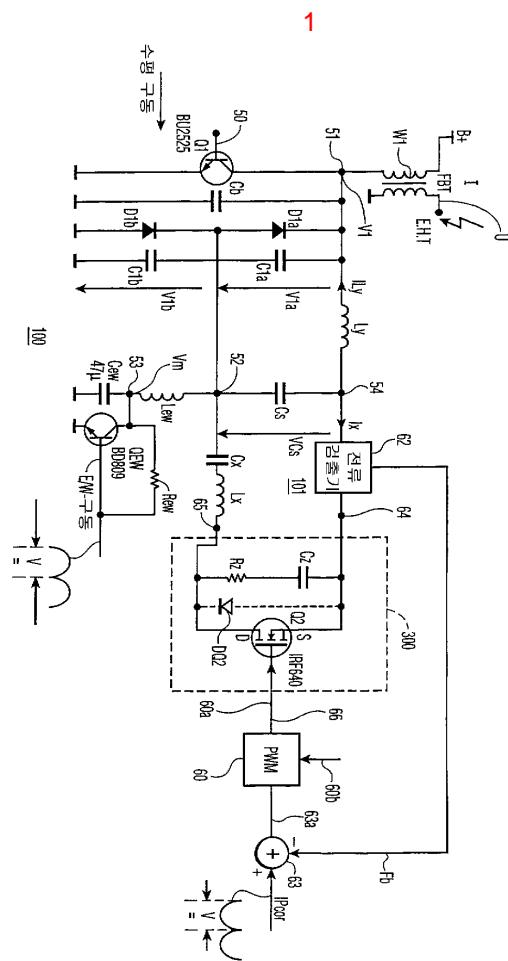
(Cs)

(Lx, Ly)

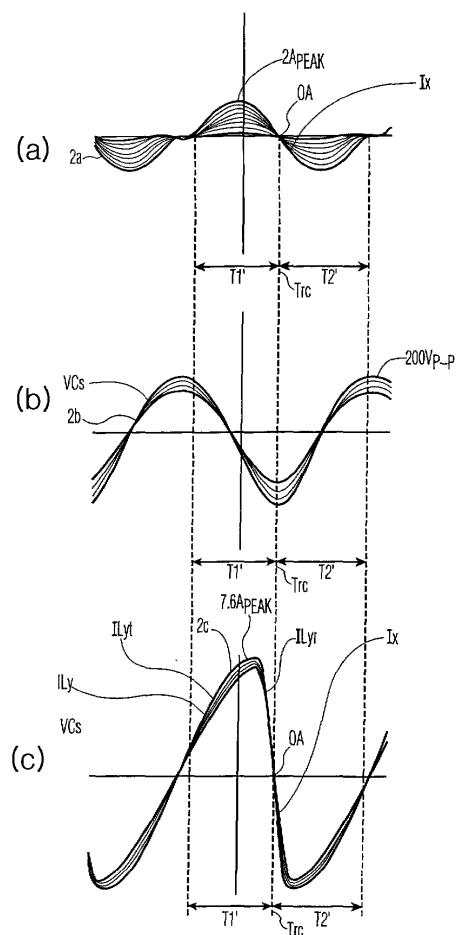
S

(Lx)

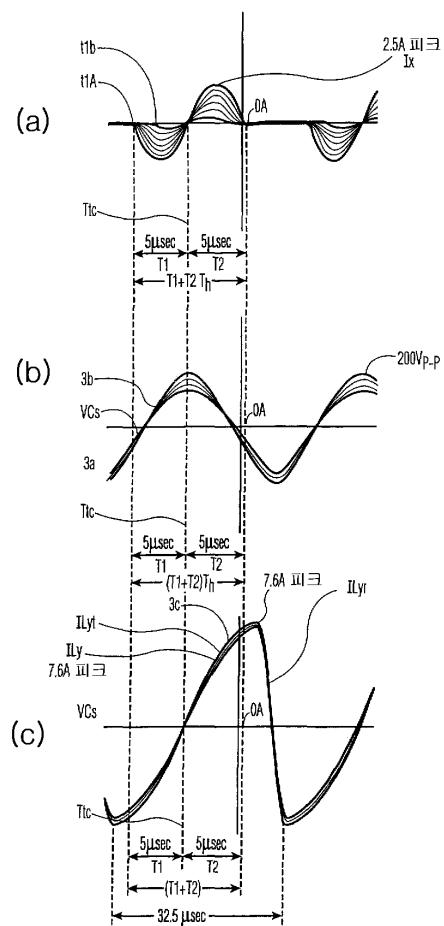
S



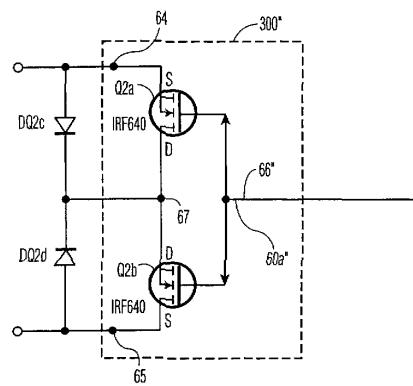
2

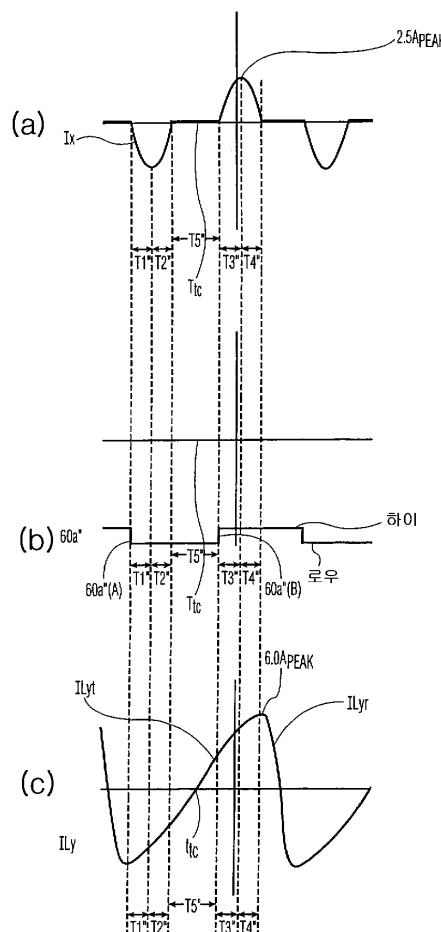


3

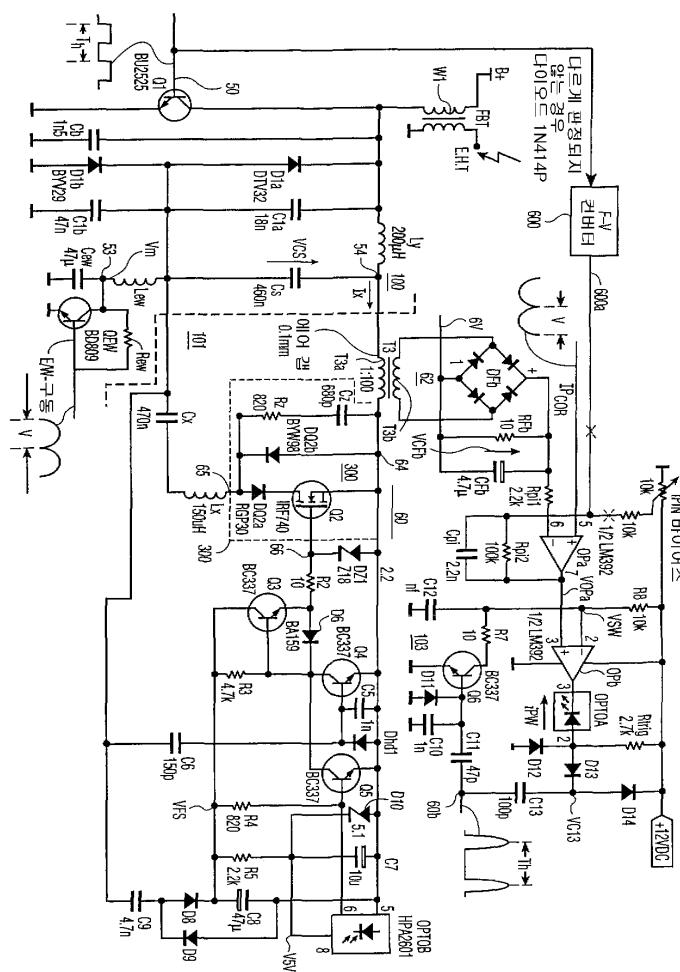


4





6



7

