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2004 12 03

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10-2003-0033342

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2003 05 26

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LCD

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12 /

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, LCD

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11

21

32

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64

PWM

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가

PWM , 1 2 PWM

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1 2 ,

1 2

1 1 , SMPS(Switching Mo
de Power Supply)(100), (101) LCD (102) (101)
(101-1), (101-2), RF (101-3), (101-4), (101-5), (101-6)
(101-7) LCD (102) (102-1), (102-2)
(102-3)

2 1 (102-1) , PWM (102-11), (102-12)
(102-13)

3 2 (102-12)

, 1 3

SMPS(100) (101) 1 (Vin) (102-3)
(102-13) 2 (Vin(DC)) (101) 5V 12V
, (102-3) 120V . SMPS(100) 1 2

(101)

(101-1) SMPS(100) 1 (101)

3) (101-2) (101-5) , PC , DTV , RF (101-
R/G/B RF CVBS

(101-4) (101-5) (101-2) R/G/B
RF CVBS

(101-6) (101-5) (101-5)
(101-4) R/G/B (up) (down)

(101-5) (101-2) 가 , (101
-2)

(101-4) 가 (101-6) 가 ,
 (101-2) 가 (101-5)
 / (Inverter On/Off) .
 (101-7) (101-6) R/G/B LVDS(low voltage differential signal)
 LCD (102) (101) .
 (102-1) (101-6) PWM , PWM
 (102-3) , SMPS(100) 1 2 /
 .
 GB (102-2) (101-7) LVDS(low voltage differential signal) R
 LCD (102-2) (On/Off Switching)
 .
 2 3 , PWM (102-11) (101) (101-6)
 PWM(Pulse Width Modulation) (100) (140)
 / (Inverter On/Off) / ,
 PWM (102-11)
 (102-3) PWM (102-11)
 (102-12) .
 (102-12) (101) 1 (102-3) SMPS(1
 00) (102-13) 2 (102-12) 1
 .
 3 (102-12) . Comparator R3 R4 1 (Vin)
 R1 R2 2 (Vin(DC)) , PWM (102-11)
 / .
 1 2 , Comparator Q1 . Q1 , 1
 PWM (102-11) , PWM (102-11) 가 , 1
 2 , Comparator Q1 . Q1 , 1
 PWM (102-11) , PWM (102-11) 가 .
 2 PWM (102-11)가 PWM (102-11)가 , (102-3)
 , PWM (102-11) PWM 가 Shut-down
 11) LCD가 , 2 1 PWM (102-
 (1) .
 , 2 1 , 가 , PWM (102-11) (102-3) (2)
 가 , PWM (102-11)가 , Q1 , 2
 (102-3)
 .
 (102-13) SMPS(100) (Vin(DC)) 2 ,
 PWM (102-11) PWM DC .
 (102-3) (102-13) 가 .
 4 2 , SMPS(Switching Mo
 de Power Supply)(400), (401) LCD (402) (401)
 (401-1), (401-2), RF (401-3), (401-4), (401-5), (401-6),
 (401-7) (401-8) . LCD (402) (402-1),
 (402-2) (402-3) .

5 4 (401-7) .

6 4 (402-1) , PWM (402-11) (402-12)

4 6 .

SMPS(400) (401) 1 (Vin) (402-3)
 (402-12) 2 (Vin(DC)) (401) 5V 12V
 , (402-3) 120V . SMPS(400) 1 2

(401)

(401-1) SMPS(400) 1 (401)

3) (401-2) (401-5) , PC , DTV , RF (401-
 R/G/B RF CVBS

(401-4) (401-5) (401-2) R/G/B
 RF CVBS

(401-6) (401-5) (401-5)
 (401-4) R/G/B (up) (down)

(401-5) (401-2) 가 , (401
 -2) , 가 ,

(401-4) (401-6)
 (401-2) 가 .

Off) (401-5) (401-7) / (Inverter On/
 (401-7) 4 (401) 1 ,
 (402-3) SMPS(400) (401-7) (401-1) 2 .
 (401-7) 1 (402-13)

5 (401-7) . Comparator R3 R4 1 (Vin)
 R1 R2 2 (Vin(DC)) , (402-1) /
 . 1 2 , Comparator가
 , (401-5) (402-1) , 1 2 , C
 omparator . Comparator가 , (401-5)

(401-8) (401-6) R/G/B LVDS(low voltage differential s
 ignal)

LCD (402) (401)

(402-1) (401-6) PWM , PWM
 (402-3) , (401-5) /

(402-2) (401-8) LVDS(low voltage differential signal) R
 GB (402-2) (On/Off Switching)
 LCD /

6 , PWM (402-11) (401) (401-6)
 PWM(Pulse Width Modulation) (400) (140)
 / (Inverter On/Off) / . , PWM (402-11)
 PWM (402-3) .
 2 , PWM (402-11)가 (402-3)
 , PWM (402-11) PWM 가 Shut-down
 . PWM (402-11) (401-5) LCD가 , 2 1
 (1) .
 , 2 1 , 가 , (401-5) (402-3) (2) . P
 WM (402-11) (402-1) 가 , PWM (402-
 11) (402-3) .
 (402-12) SMPS(400) (Vin(DC)) 2 ,
 PWM (402-11) PWM DC .
 (402-3) (402-12) 가 .
 가 .
 , LCD .

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 1 2 , ;
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PWM PWM ;

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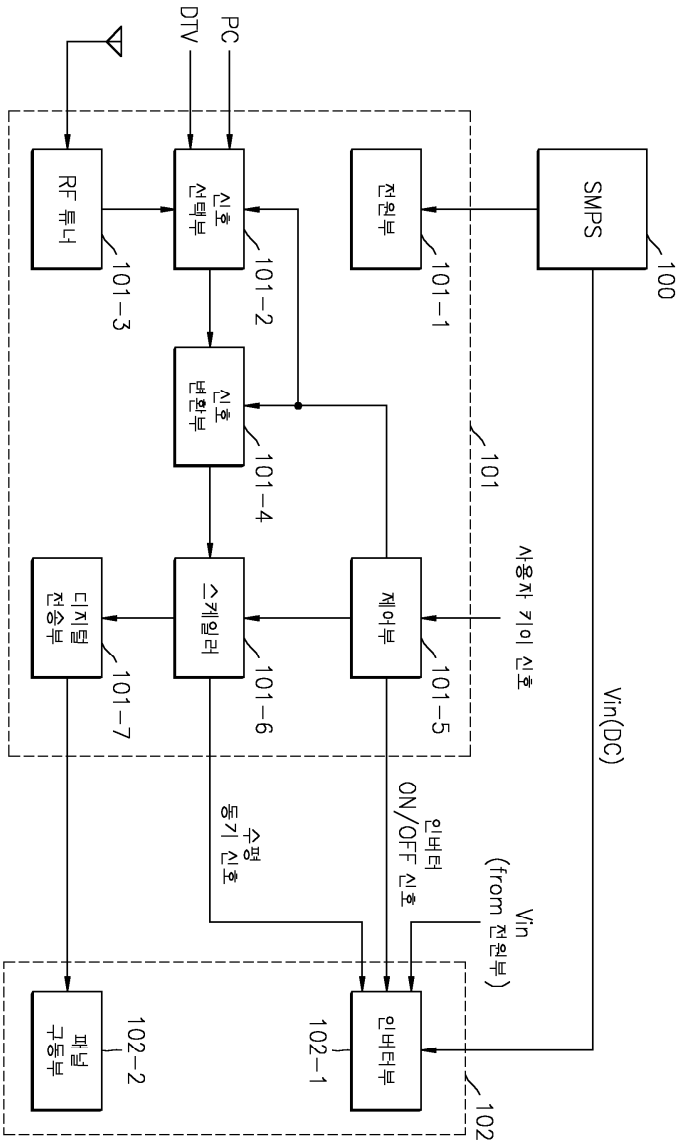
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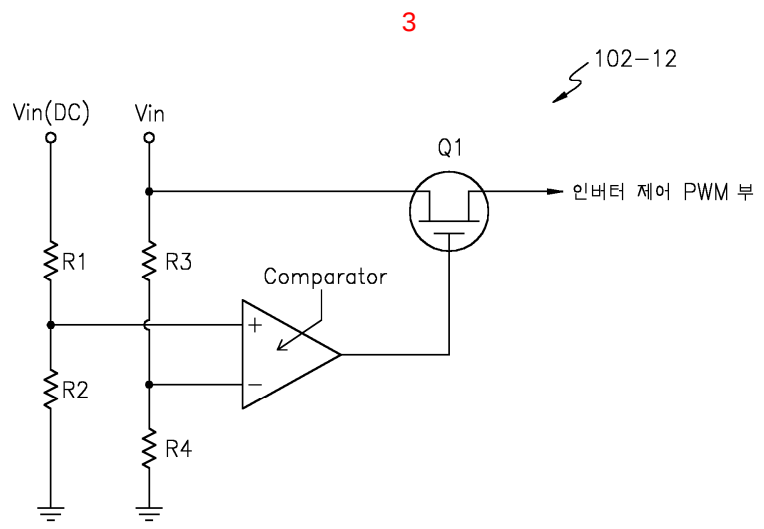
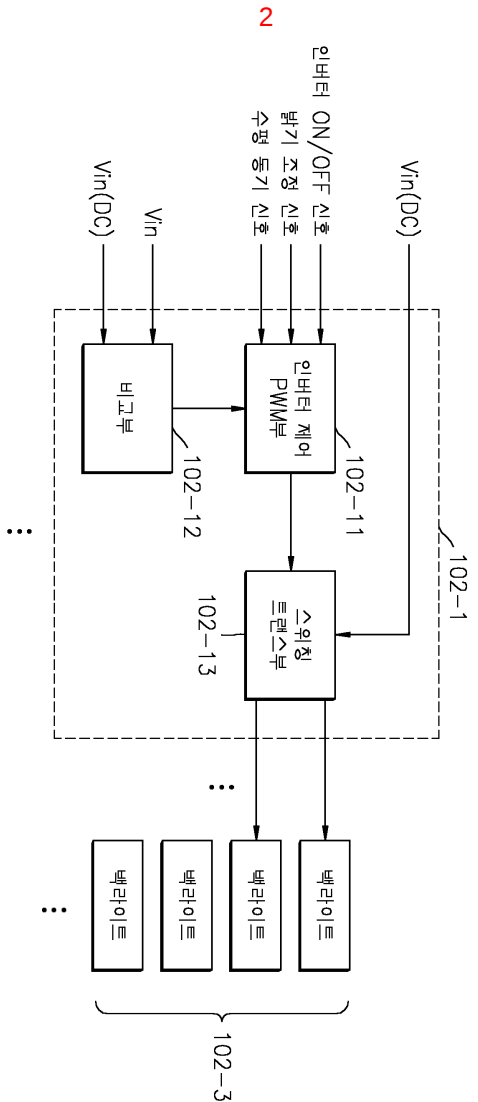
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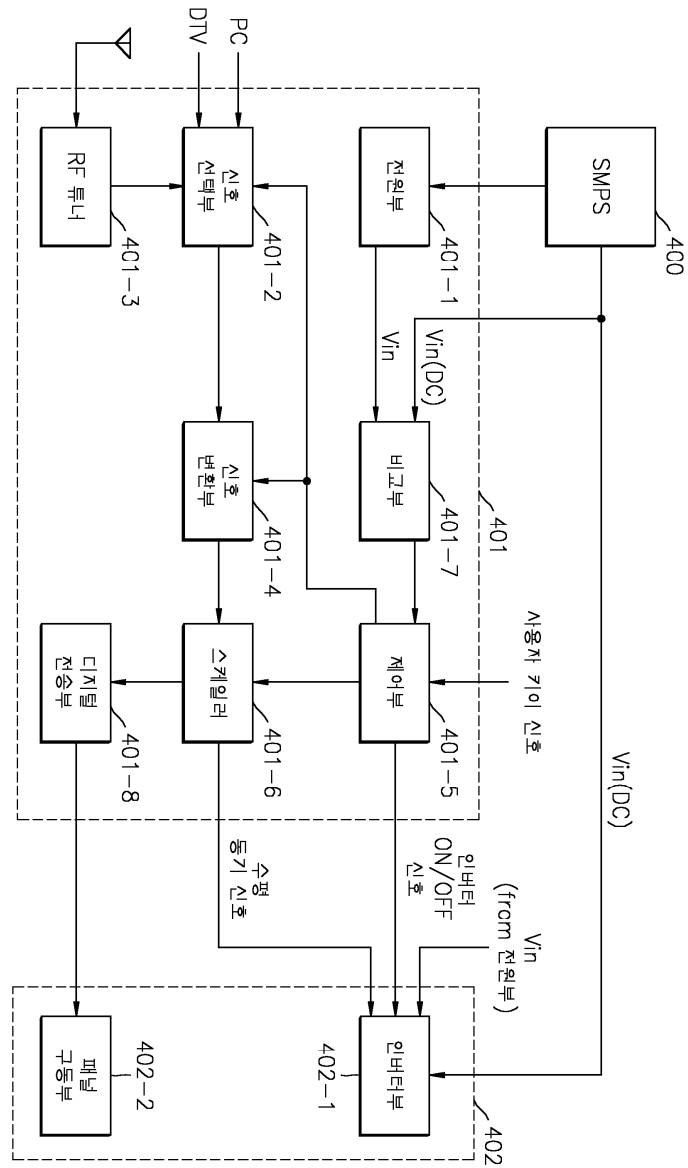
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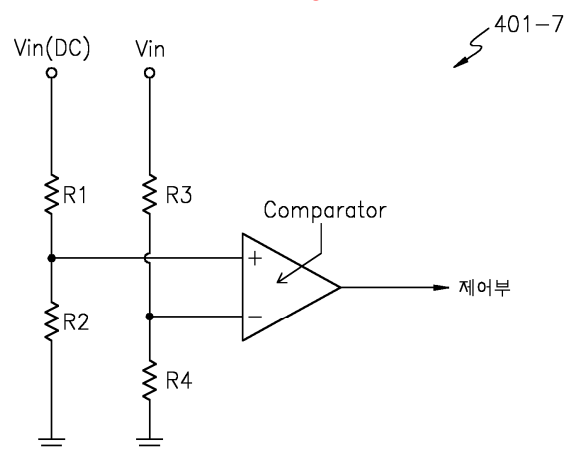


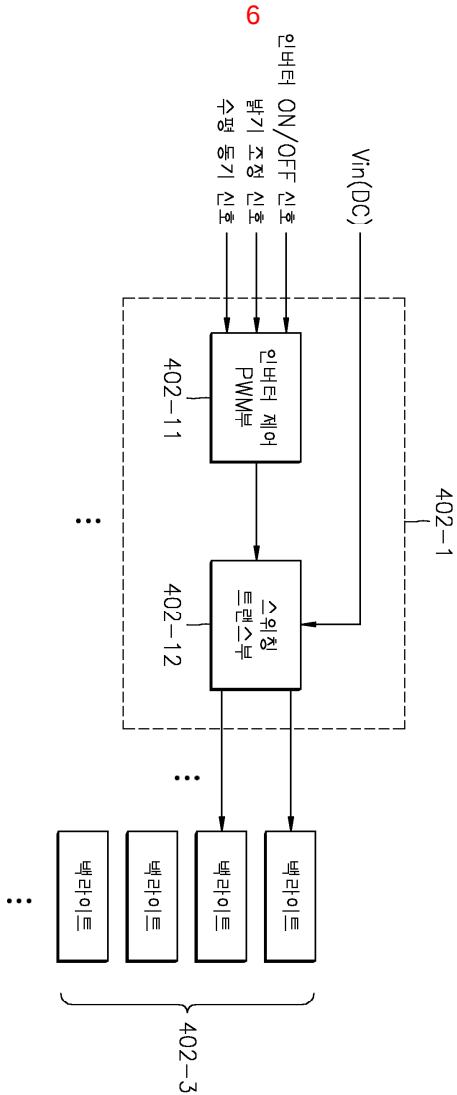


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专利名称(译)	液晶面板显示装置		
公开(公告)号	KR1020040101654A	公开(公告)日	2004-12-03
申请号	KR1020030033342	申请日	2003-05-26
[标]申请(专利权)人(译)	三星电子株式会社		
申请(专利权)人(译)	三星电子有限公司		
当前申请(专利权)人(译)	三星电子有限公司		
[标]发明人	KIM EUNSUP 김은섭		
发明人	김은섭		
IPC分类号	G09G3/36 G09G3/34 G09G3/00 G02F1/133		
CPC分类号	G09G2330/026 G09G3/3406 G09G2330/021 G09G3/3611 G09G2320/064 G09G2330/02		
代理人(译)	李，杨HAE		
其他公开文献	KR100509501B1		
外部链接	Espacenet		

摘要(译)

本发明涉及一种液晶面板显示装置相比，其控制所述背光的操作，更具具体地，电源和视频处理板驱动电源用于驱动背光被单独在LCD显示单元上提供。一种液晶面板，显示装置包括信号转换部，缩放器单元，控制单元，在与来自定标器单元的采样信号同步的驱动单元产生用于驱动背光的脉冲信号，其中，逆变器单元比较提供给面板驱动单元的第一电源和单独提供的第二电源，并根据比较结果打开/关闭操作。根据本发明，将用于驱动单独提供的背光的功率与用于视频处理板的驱动功率进行比较，以连续地控制背光的开/关，从而提高LCD的效率。度2

