(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 1 772 848 A3

(12) EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
25.04.2007 Bulletin 2007/17

(43) Date of publication A2:
11.04.2007 Bulletin 2007/15

(21) Application number: **06126624.3**

(22) Date of filing: **17.11.2004**

(51) Int Cl.:
G09G 3/36 *(2006.01)*

(84) Designated Contracting States:
DE FR GB

(30) Priority: **17.05.2004 KR 20040034678**

(62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC:
04090445.0 / 1 600 927

(71) Applicant: **Samsung SDI Co., Ltd.**
Suwon-si
Gyeonggi-do (KR)

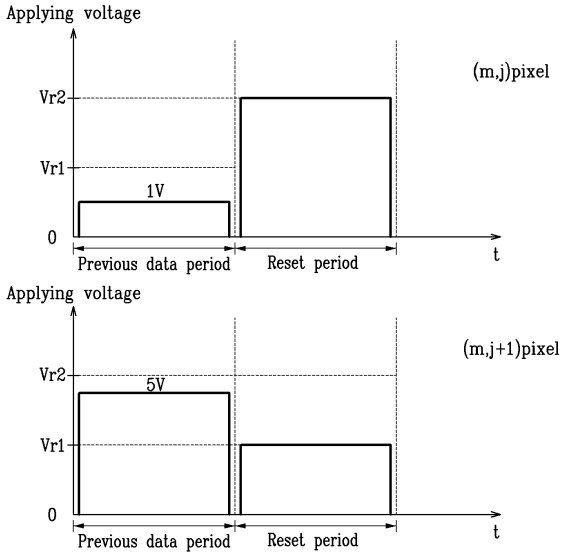
(72) Inventor: **Park, Jun-Ho**
Legal & IP Team
Kiheung-Eup
Yongin-City
Kyeonggi-Do (KR)

(74) Representative: **Hengelhaupt, Jürgen et al**
Anwaltskanzlei
Gulde Hengelhaupt Ziebig & Schneider
Wallstrasse 58/59
10179 Berlin (DE)

(54) Liquid crystal display device and method of driving such a display device

(57) A liquid crystal display is disposed between a first substrate and a second substrate, and first, second, and third color lights are sequentially transmitted for each of a plurality of pixels. A first waveform corresponding to first gray data is applied to a first said pixel, and a second waveform corresponding to second gray data is applied to a second said pixel. A first reset waveform corresponding to the first gray data is applied to the first said pixel after applying the first waveform , and a second reset waveform is applied to the second pixel after applying the second waveform. The second reset waveform corresponds to the second gray data and has a voltage level which is different from that of the first reset waveform.

FIG. 6



EP 1 772 848 A3

European Patent Office

EUROPEAN SEARCH REPORT

Application Number
EP 06 12 6624

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	US 6 304 239 B1 (MCKNIGHT DOUGLAS [US]) 16 October 2001 (2001-10-16) * column 1, line 61 - line 65 * * column 9, line 33 - line 52 * * column 15, line 64 - column 16, line 2 * * column 17, line 65 - column 18, line 18 * -----	1-15	INV. G09G3/36
A	US 2003/098836 A1 (TAKEI JIRO [JP]) 29 May 2003 (2003-05-29) * paragraph [0006] * * paragraph [0063] * -----	1-15	
D,A	US 6 567 063 B1 (OKITA MASAYA [JP]) 20 May 2003 (2003-05-20) * column 1, line 51 - line 54 * * column 2, line 65 - column 3, line 33 * * column 4, line 34 - line 57 * -----	1-15	

TECHNICAL FIELDS SEARCHED (IPC)

G09G

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	23 February 2007	Petitpierre, Olivier

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
O : non-written disclosure
P : intermediate document

T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons

& : member of the same patent family, corresponding document

EPO FORM 1503 03.82 (P04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 06 12 6624

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

23-02-2007

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6304239 B1	16-10-2001	AU 5513798 A	15-07-1998
		EP 1008131 A1	14-06-2000
		JP 2001506376 T	15-05-2001
		WO 9827538 A1	25-06-1998
		US 6104367 A	15-08-2000
		US 6144353 A	07-11-2000
US 2003098836 A1	29-05-2003	CN 1432847 A	30-07-2003
		JP 3804502 B2	02-08-2006
		JP 2003107426 A	09-04-2003
		KR 20030028386 A	08-04-2003
		TW 564394 B	01-12-2003
US 6567063 B1	20-05-2003	CA 2268357 A1	10-10-1999
		CN 1232243 A	20-10-1999
		EP 0949605 A1	13-10-1999
		JP 11296150 A	29-10-1999
		TW 440808 B	16-06-2001

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

专利名称(译)	液晶显示装置和驱动这种显示装置的方法		
公开(公告)号	EP1772848A3	公开(公告)日	2007-04-25
申请号	EP2006126624	申请日	2004-11-17
申请(专利权)人(译)	三星SDI CO.，LTD.		
当前申请(专利权)人(译)	三星移动显示器有限公司.		
[标]发明人	PARK JUN HO LEGAL & IP TEAM		
发明人	PARK, JUN-HO LEGAL & IP TEAM		
IPC分类号	G09G3/36 G02F1/133 G09G3/20 G09G3/34		
CPC分类号	G09G3/3648 G09G3/2011 G09G3/2014 G09G3/3688 G09G2310/0235 G09G2310/0251 G09G2310/061 G09G2330/021 G09G2340/16		
代理机构(译)	hengelhaupt，Jürgen		
优先权	1020040034678 2004-05-17 KR		
其他公开文献	EP1772848B1 EP1772848A2		
外部链接	Espacenet		

摘要(译)

液晶显示器设置在第一基板和第二基板之间，并且对于多个像素中的每个像素依次传输第一，第二和第三颜色光。对应于第一灰度数据的第一波形被施加到第一所述像素，并且对应于第二灰度数据的第二波形被施加到第二所述像素。在施加第一波形之后，将对应于第一灰度数据的第一重置波形施加到第一所述像素，并且在施加第二波形之后将第二重置波形施加到第二像素。第二重置波形对应于第二灰度数据，并且具有与第一重置波形的电压电平不同的电压电平。

FIG. 6