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(72) Inventors:  
• **Takahashi, Kenichi  
Shinagawa-ku,  
Tokyo (JP)**  
• **Isozaki, Tadaaki  
Shinagawa-ku,  
Tokyo (JP)**

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(71) Applicant: **SONY CORPORATION  
Tokyo (JP)**

(74) Representative: **Müller - Hoffmann & Partner  
Patentanwälte,  
Innere Wiener Strasse 17  
81667 München (DE)**

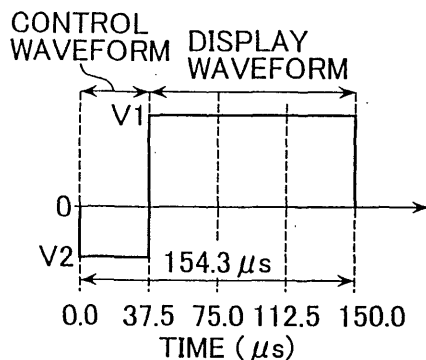
(54) **Liquid crystal display drive method**

(57) There is provided a liquid crystal display drive method that uses a drive voltage waveform consisting of a display signal period (display waveform 32 bits) and a control signal period irrelevant to display (control waveform 2 bits) in a given time or a period of plural frames or one frame. This method suppresses generation of internal DC voltage and thus prevents impurity ions from deteriorating the quality of displayed pictures.

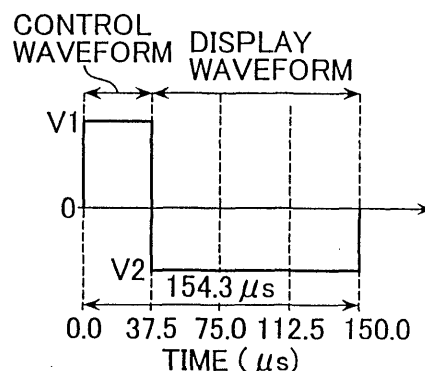
**FIG.19A**

**FIG.19B**

$$V_2=V_4, V_1=V_3, t_1=t_2=37.5 \mu s, t_3=112.5 \mu s$$



**1 BIT PLANE WAVEFORM FOR DISPLAY WITH POSITIVE VOLTAGE**



**1 BIT PLANE WAVEFORM FOR DISPLAY WITH NEGATIVE VOLTAGE**



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	EP 0 552 886 A (SHARP KABUSHIKI KAISHA) 28 July 1993 (1993-07-28) * column 15, line 36 - line 57; figure 9 * * column 16, line 38 - line 42; figure 10 * * column 19, line 42 - column 20, line 38; figure 19 * -----	1-19	INV. G09G3/36
			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
The Hague		27 July 2006	Amian, D
CATEGORY OF CITED DOCUMENTS		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	
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			

1  
EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 01 11 2401

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  
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27-07-2006

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EP 0552886 A	28-07-1993	JP 2977356 B2	15-11-1999
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		KR 9616726 B1	20-12-1996
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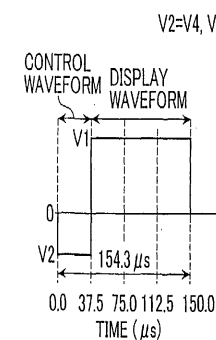
For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

专利名称(译)	液晶显示器驱动方法		
公开(公告)号	<a href="#">EP1160758A3</a>	公开(公告)日	2006-09-06
申请号	EP2001112401	申请日	2001-05-21
[标]申请(专利权)人(译)	索尼公司		
申请(专利权)人(译)	索尼公司		
当前申请(专利权)人(译)	索尼公司		
[标]发明人	TAKAHASHI KENICHI ISOZAKI TADAAKI		
发明人	TAKAHASHI, KENICHI ISOZAKI, TADAAKI		
IPC分类号	G09G3/36 G02F1/133 G09G3/20 G09G3/34		
CPC分类号	G09G3/3629 G09G3/2018 G09G3/3614 G09G3/3637 G09G3/364 G09G2320/0204		
优先权	2000159265 2000-05-29 JP		
其他公开文献	EP1160758A2		
外部链接	<a href="#">Espacenet</a>		

摘要(译)

提供一种液晶显示器驱动方法，其使用由给定时间或多个周期中的显示信号周期（显示波形32位）和与显示无关的控制信号周期（控制波形2位）组成的驱动电压波形。帧或一帧。该方法抑制了内部DC电压的产生，从而防止杂质离子劣化显示图像的质量。

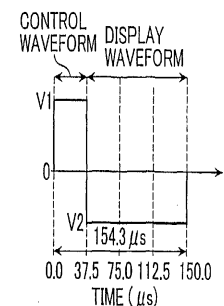
FIG.19A



1 BIT PLANE WAVEFORM FOR DISPLAY WITH POSITIVE VOLTAGE

FIG.19B

$V_2=V_4, V_1=V_3, t_1=t_2=37.5 \mu s, t_3=112.5 \mu s$



1 BIT PLANE WAVEFORM FOR DISPLAY WITH NEGATIVE VOLTAGE