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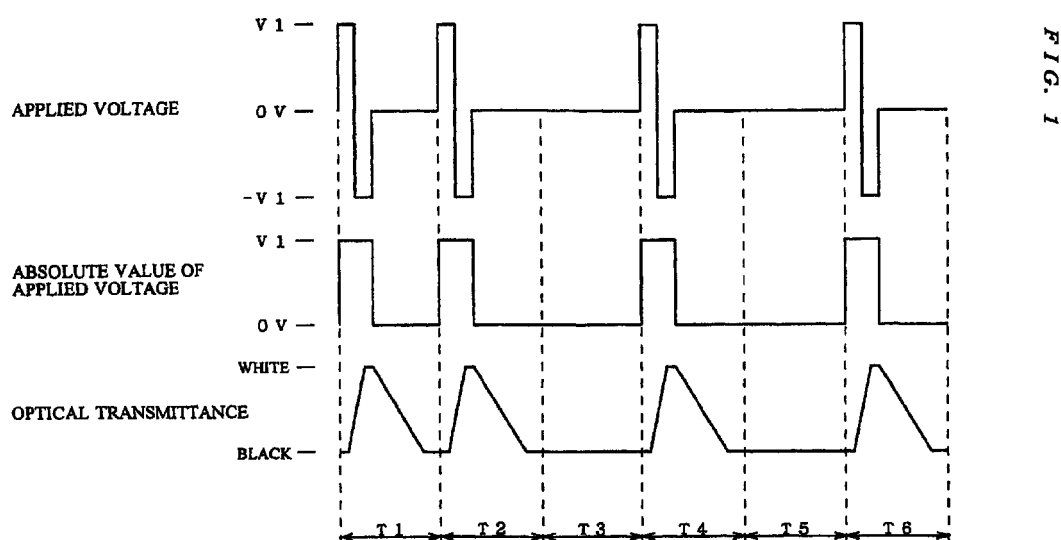
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(54) **Method for driving a nematic liquid crystal**

(57) In a liquid crystal display device combining a nematic liquid crystal confined between two electrodes with polarizing plates, a voltage applied between two electrodes to drive the nematic liquid crystal is maintained in a predetermined value for a predetermined

duration of time in predetermined intervals to increase the response speed and to realize color images by tri-color back-lighting or moving images equivalent to or more excellent than those by CRT displays.



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# EUROPEAN SEARCH REPORT

Application Number  
EP 98 11 3183

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	DE 23 46 974 A (COMMISSARIAT ENERGIE ATOMIQUE) 3 April 1975 * page 14, line 12 - page 17, line 11; figure 3 *	1,2	G09G3/36
A	EP 0 424 030 A (MATSUSHITA ELECTRIC IND CO LTD) 24 April 1991 * page 4, line 54 - page 5, line 38; figures 8-9B *	1,2	
A	EP 0 438 093 A (HONEYWELL INC) 24 July 1991 * abstract; figure 5 *	3	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			G09G
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 31 May 1999	Examiner Van Roost, L
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p> <p>&amp; : member of the same patent family, corresponding document</p>			

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

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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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31-05-1999

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
DE 2346974	A	03-04-1975	CA	1006939 A	15-03-1977
EP 0424030	A	24-04-1991	JP	3132692 A	06-06-1991
			KR	9401360 B	19-02-1994
			US	5162932 A	10-11-1992
EP 0438093	A	24-07-1991	US	5088806 A	18-02-1992
			JP	7072459 A	17-03-1995